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# FAMINE EARLY WARNING SYSTEMS NETWORK TECHNOLOGY SUPPORT CONTRACT (FEWS NET TSC)

FEWS NET DATA WAREHOUSE (PRICES & SURVEY) END USER MANUAL  
VERSION 5.1

November 25, 2015

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## **DISCLAIMER**

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## 1. INTRODUCTION

### 1.1. WHAT IS THE FEWS NET DATA WAREHOUSE – FDW?

The FEWS NET Data Warehouse (FDW) is an online information tool that provides a framework for enhanced data management, accessibility and security for the key data sets routinely used in the FEWS NET Project’s food security and early warning analysis. Currently, FEWS NET has integrated its extensive market price data set into the FDW. Other data sets to be added include: (a) crop and livestock production statistics, (b) statistics on the cross-border trade of agricultural commodities, (c) data on livelihoods and maps of livelihood zones, (d) data on nutritional status, (e) emergency needs estimates, and (f) population statistics for each FEWS NET country.

The FDW provides users with both online, and—through easy data downloading capabilities—offline access to FEWS NET price data and, eventually, to the complete FEWS NET data set. Built-in analytical tools allow for automated routine analyses and enable tabular and graphical data visualizations. The FDW also provides the capacity to import data from key external sources into the FDW itself, to be integrated with FEWS NET’s own data to further enhance food security analysis capabilities. Through common metadata and geospatial references, the FDW database structure will eventually allow FEWS NET to more readily integrate all of its key datasets into a rigorous, multi-dimensional analysis of food security conditions in FEWS NET countries.

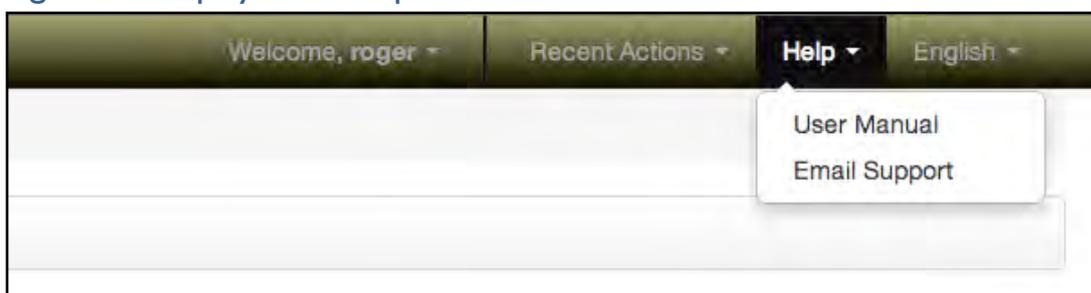
## 2. GETTING STARTED

### 2.1. ACCESSING THE DATA WAREHOUSE

#### 2.1.1. Helpdesk Contact

- Email: [helpdesk@kimetrica.com](mailto:helpdesk@kimetrica.com)
- Telephone: +254 20 201 8156 (Jennifer Karuri)
- Online: links to the User Manual and Support are available from the Help Menu in the top navigation bar of the Data Warehouse (See Figure 1).

Figure 1: Displays the Help Menu Online



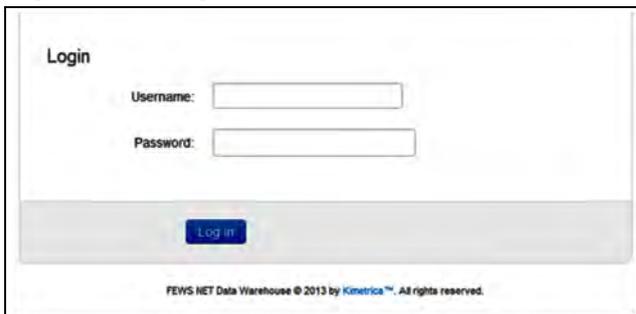
### 2.1.2. URL

Enter the URL <https://fdw.fews.net/en/admin/> into your web browser. The Data Warehouse works with most recent web browsers<sup>1</sup>. The Login screen will appear. Follow the instructions in this manual for logging in.

### 2.1.3. First Time Login

To set up your account, contact the Data Warehouse User Administrator at [FEWSITADMIN@fews.net](mailto:FEWSITADMIN@fews.net). You will receive a username and a temporary password. After logging in, you can change your password by accessing the Welcome dropdown menu on the top navigation bar.

Figure 2: Login



1. Enter the URL <https://data.fews.net/en/admin/> into your web browser
2. Enter your *username* – as created for you by the System Administrator. Normally this is your first initial and your last name and will match the first part of your FEWS NET email address
3. Enter your *password* – as emailed to you by the system during account creation
4. Click on the *login* button
5. The system will load the admin home page listing the areas you have been authorized for.

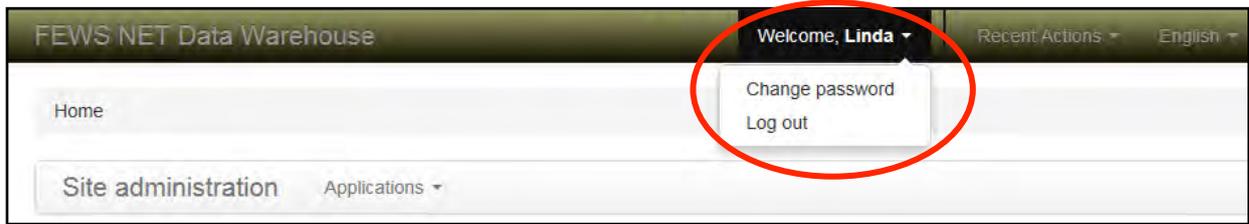
### 2.1.4. Changing Your Password

If you are changing your password for the first time, or are logged in and prefer to change it, the procedure is the same. If you lose your password, please contact the Data Warehouse User Administrator for a temporary password.

---

<sup>1</sup> The requirements for accessing the Data Warehouse are Windows 7 or later, together with a recent Firefox or Chrome browser. Internet Explorer 10+ will probably work, but is not supported and we strongly recommend Firefox or Chrome. Refreshable spreadsheets required Excel 2007 or later, and you need to enable editing and macros in Excel when prompted, the instructions for which vary from version to version. Note that refreshable spreadsheets do not work on Mac versions of Excel.

Figure 3: Change Password. Log Out



Using the top menu;

1. After logging in, click on the *Welcome* dropdown menu on the top navigation bar
2. Select change password
3. Enter the *old password* in the first field
4. Enter the *new password* in the second field
5. Enter details to *verify your new password*
6. Click on *save*
7. A verification message confirming the change will appear

### 2.1.5. Forgot Your Password

If you lose your password, please contact the Data Warehouse User Administrator for a new password.

### 2.1.6. Logging Off

1. Click on the *Welcome* dropdown menu at the top of any screen
2. Click on *log off*

### 2.1.7. Security Protocol

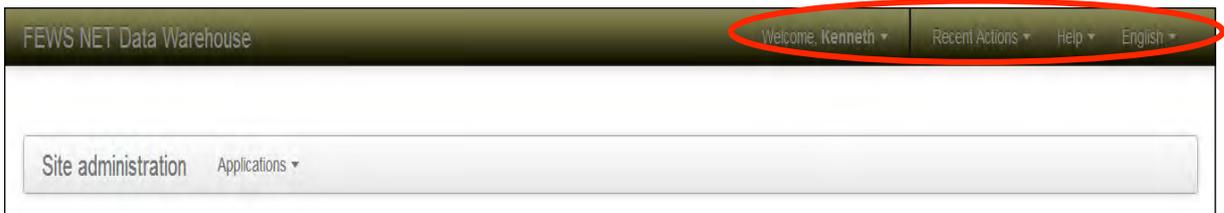
SSL certificates are installed on the data warehouse. This encrypts data in transit to/from the data warehouse server so that only staff with password access can read it.

## 2.2. BASIC NAVIGATION

### 2.2.1. Home Page Menu and Actions

After logging into the Data Warehouse, you will arrive at the Homepage where you will see a list of categories you can select for analyzing, changing or adding data. You can always access the Homepage by clicking on the word *Dashboard* in the top navigation bar of any page on the website. The top navigation bar on each page has the same dropdown menus as the Homepage. There are three dropdown menus on the top right side of the screen.

Figure 4: Dropdown Menus at Top of Screen



- Welcome menu for changing your password or logging off.
- Recent actions displays a list of all the recent actions/updates done
- Language menu for selecting English, Español or Français. The current language you last selected will appear on the tab.

Home page dropdown lists:

- Welcome:
  - Change password
  - Logout
- Recent actions
- Help:
  - User forums: for tips and tricks on how to use FDW and the solutions to problems commonly encountered
  - User manual
  - Email support
- Select preferred language:
  - English
  - Español
  - Françoise

Note: Each page in the Data Warehouse has sorting and filtering features located at the top, right side and bottoms of pages.

### 2.2.2. System-Wide Menu Bar

There is a menu bar, which covers all modules of the system. This menu is accessible from any page in the system and appears at the top.

The sub menus can be viewed by hovering over the main module names using the mouse.

Figure 5: System Wide Menu Bar



### 2.2.3. Adding and Changing Data

These are the existing categories, modules and sections within the Data Warehouse:

#### Data Entry

- Add a new Data Collection (manually or by uploading a file)
- Add a new Survey (define metadata, optionally enter the 1st Survey Collection)
- Edit a Survey (including adding a new Survey Collection)

#### Data Processing

- Display or edit an existing Data Collection (including Submit, Review and Publish)
- Display or edit the data for an existing Collection Period
- Change a Survey Collection Status (Submit Review and Publish)

#### Data Analysis (Display and Export Data)

- Single Data Series
- Multiple Data Series using a Price Data Set
- Trade Flow Data Set
- Download Survey Data (Survey Indicator Values)

#### Calculated Data Series

##### Price

- Calculated indices
- Relative Prices

#### Data Series Management

##### Price

- Exchange rates
- Market products
- Price indices, e.g. CPI

##### Trade

- Trade flow quantities

#### Metadata Management

##### Common

- Classified products
- Countries
- Country groups
- Currencies
- Unit of measure conversions
- Units of measure

##### Price

- Markets

### Spatial

- Administrative units
- Geographic unit set versions
- Geographic unit set
- Geographic unit type
- Geographic units
- Livelihood zone types
- Livelihood zones
- Seasons

### Survey

- Indicator groups
- Indicators
- Localities
- Survey types
- Surveys

### Warehouse

- Data usage policies
- Source Documents
- Source organizations

### Systems Administration

#### Admin

- Log entries

#### Auth

- Groups
- Users

#### Common

- Field offices

#### Sessions

- Sessions

Most modules have Add and/or Change icons located on the far right side of the screen across from its title. You can select the name of the module on the left side of the screen to access the information in that area or click on the Add or Change button. The exact combination of modules and icons that are displayed will depend on the roles and privileges assigned to you. If you cannot see a Home screen entry that you should have access to, please contact the User Administrator to check that your user account has the necessary roles assigned to it.

If there are more records matching the criteria than fit on a single page, there will be a paginator at the bottom of the page that allows you to select other pages.

The first column in the list contains a checkbox that you can use to select one or more records for further action. The action list at the bottom of the screen will always contain the Delete action, if you have permissions to delete records:

- Field Officers (FO) can delete their Draft Data Collections
- National Technical Managers (NTM) can delete Submitted Data Collections
- Home Office (HO) can delete Under Review Data Collections

**Figure 6: NTM Can Delete Submitted Data Collections**

Source document: UPLOADS: TESTING

Collection date: 2014-10-31 Today | 📅

File: Currently: warehouse/datacollection/successful\_data\_collection\_upload.xls Clear

Change: Browse... No file selected.

Status: Submitted

Status changed: July 16, 2015, 10:19 a.m.

Collection periods

Start date	Period date
2014-10-01 Today   📅	2014-10-31 Today   📅

[+ Add another Collection Period](#)

**Delete**

On the Add/Change form screens, required fields have bold prompts.

Dates should be entered in the format YYYY-MM-DD. Date fields also have a pop-up calendar to enable to select the correct date easily.

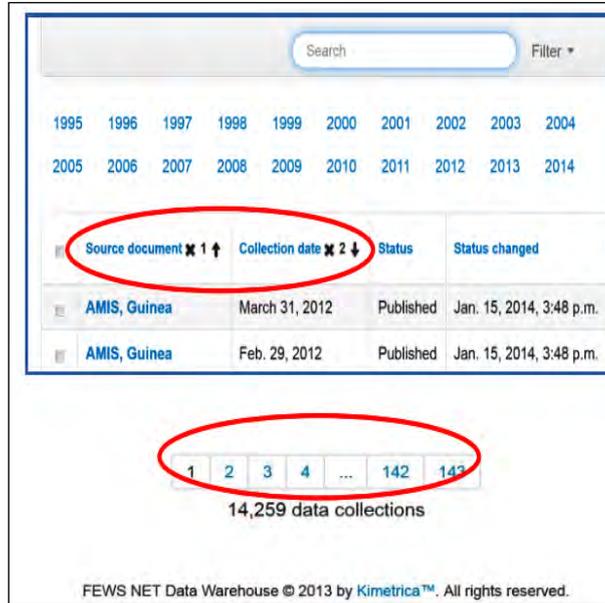
After any attempted action, such as saving a new entry or deleting an existing one, you will see a message at the top of the screen telling whether the action was successful. Messages with a red background indicate an error and an unsuccessful transaction. Messages with a green background indicate success. A message with a yellow background indicates a warning message that may require further action.

#### 2.2.4. Sorting Options

When viewing tables of data, you will see an arrow, X and number above the columns. These allow you to reorder the data. You can also eliminate a column of data from the sort.

- Sort by toggling with the arrow above a column.
- Remove a category from the sort option by clicking on the X above the column.
- Reorder the Sort by changing the numbers in the middle of the X and arrows.
- Click on one of the numbers at the bottom of the screen to move forward or backward through the list of data.

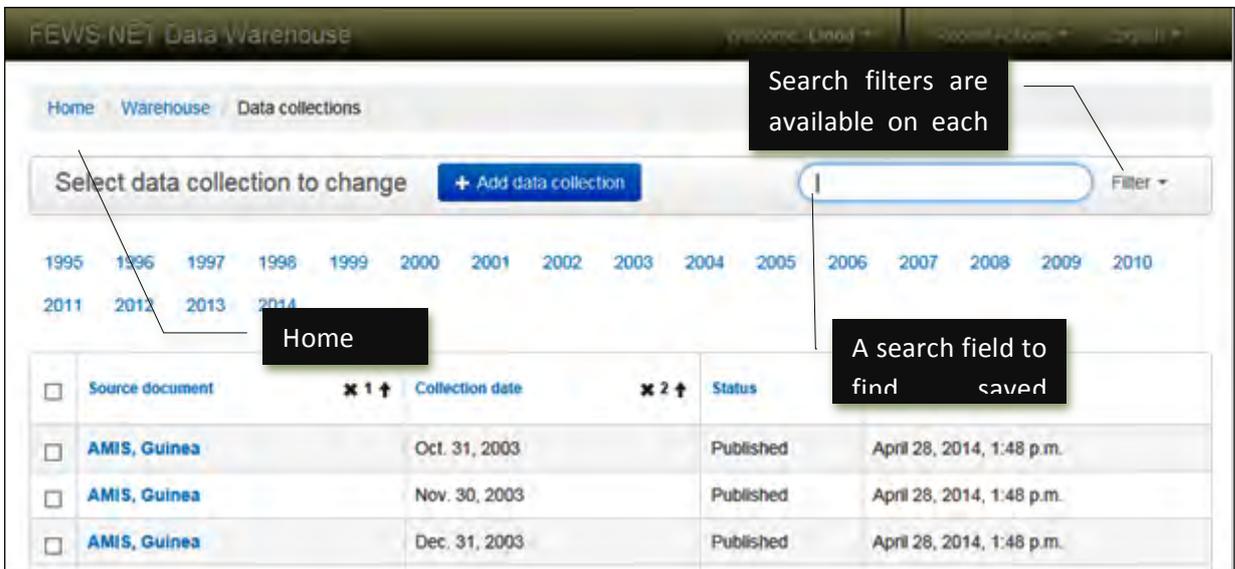
Figure 7: Sorting Options



### 2.2.5. Search and Viewing Options

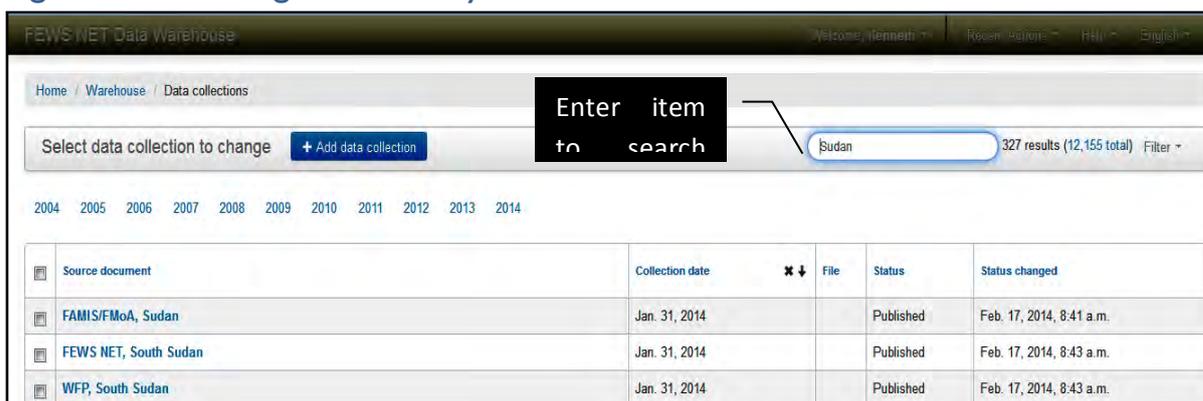
There are several ways to navigate through the Data Warehouse. Each web page section has a search bar, filter option and sorting features for locating the information you need.

Figure 8: Search and Filter Navigation Examples



To search within the Data Collection module, click on *Display or edit an existing Data Collection (including Submit, Review, and Publish)* on the Homepage. The Search feature is located at top of screen.

Figure 9: Searching for a Survey Collection



To search for a calculated data series, enter details (the name) and press on the *enter* button. This will display results of the search.

- The system allows for partial product matches when importing market prices. Example; if there is no matching *Market Product*, (White Maize) the system will try to find a similar one by looking for a *Market Product* (perhaps Maize) within the *Data Series* for the *Data Source Document* that will match the supplied product.
- During *Market Product* import, the system previously did not show *Product Names* for products that did not have a *Common Name*.

This has been changed and now the system can display all products name that are imported through the market import function.

- FOs can import data point data i.e. *Market Price*, *Price Index Value* and *Exchange Rate Values*, to work with a non- integer month column. E.g. instead of using '10' (as month) in the date, a user can now enter 'October' as a month name (31-Oct-2008).

### 2.2.6. Detail Audit Trail

Clicking the 'History' button on market product screen from the current production system on the right hand corner now provides an audit trail as follows:

I. It shows:

- Who made a change to the record and
- When they made it
- What field they changed
- Without knowing:
  - What they actually changed or
  - If the change happens on the database itself or this front end.

It only works for changes that are made through this admin screen. Therefore for much of the historic data we do not have a trail.

It used to be the case that:

- Changes as a result of an import, for example, did not get registered here.
- Changes that were the result of submit or review also did not get logged.

- From historic changes we do not have any more information.
2. From this month onwards the 'Historic' feature will change slightly for those changes made under the column 'Record' once the change has been made.
    - If you hover over the change, it will pop up a small window that shows the full record and highlights the field that was changed and much more usefully will tell you what the new value was.
    - By comparing this month with last month you can see what was changed each month.
    - There is no automatic undo functionality, but we do have the data to do and undo. I.e. by looking at the previous value, you may go back into the edit screen and set the old value back again.

Figure 10: Audit Trail Example

Date/time	User	Message	Record
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 11:46 a.m.	jkaruri (Jennifer Karuri)	Changed period_date for collection period "Togo Training: 2015-05-31". Changed period_date for collection period "Togo Training: 2015-04-30".	1
Nov. 27, 2014, 11:47 a.m.	jkaruri (Jennifer Karuri)	Changed collection_date.	1

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Figure 11: Audit Trail Pop-up after Clicking 'I'

Date/time	User	Message	Record
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 7:42 a.m.	jkaruri (Jennifer Karuri)		1
Nov. 27, 2014, 11:46 a.m.	jkaruri (Jennifer Karuri)	Changed period_date for collection period "Togo Training: 2015-05-31". Changed period_date for collection period "Togo Training: 2015-04-30".	1
Nov. 27, 2014, 11:47 a.m.	jkaruri (Jennifer Karuri)	Changed collection_date.	1

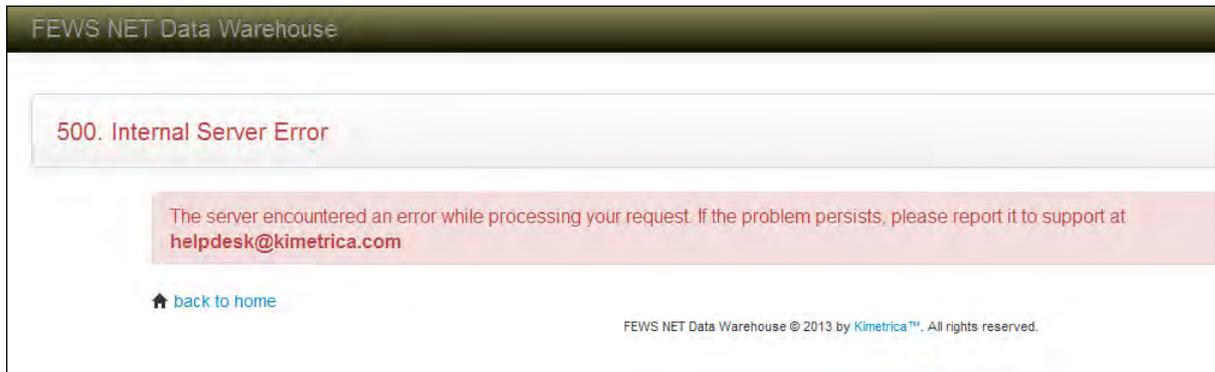
status: Draft  
 datastoredocument\_id: 281  
 created: 2014-11-27 07:42:01.582648+00  
 collection\_date: 2015-04-30  
 modified: 2014-11-27 07:42:01.810962+00  
 file: warehouse\data\collection\test.xlsx  
 status\_changed: 2014-11-27 07:42:01.582679+00  
 id: 18\_269  
 import\_log:

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### 2.2.7. Error Messages

- Error messages will inform the user that there was a problem processing their request and an email to report the issue has been provided.

Figure 12: Error Messages



### 2.2.8. Export Functionality

Field office users can also export metadata. They will be able to;

- Export markets
- Export market products
- Export source organizations
- Export Source Documents

## 3. FEWS NET DATA WAREHOUSE RATIONALE

### 3.1. BACKGROUND

FEWS NET, the Famine Early Warning Systems Network, is a leading provider of early warning and analysis on acute food insecurity. Created in 1985 by the US Agency for International Development (USAID) after devastating famines in East and West Africa, FEWS NET provides objective, evidence-based analysis to help government decision-makers and relief agencies plan for and respond to humanitarian crises.

Analysts and specialists in 22 field offices work with US government science agencies, national government ministries, international agencies, and NGOs to produce forward-looking reports on more than 36 of the world's most food-insecure countries. The "NET" in our name represents our vast network of partners, ranging from collaborators in data collection and analysis to consumers of our reporting. Our products, published here on our website, include:

- Monthly reports and maps detailing current and projected food insecurity
- Timely alerts on emerging or likely crises
- Specialized reports on weather and climate, markets and trade, agricultural production, livelihoods, nutrition, and food assistance

We are active players in the humanitarian and development communities, participating in global committees to improve classification, remote sensing, and other aspects of food security analysis. We also support and conduct training and capacity-building for national early warning systems, weather services, and other agencies. We also work in collaboration with our

partners on initiatives such as crop production and market evaluations as well as surveys on nutrition and other themes.

The FEWS NET team comprises five US government agencies and two private contractors. Led by USAID, FEWS NET also draw on the expertise of: the National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), US Department of Agriculture (USDA), and US Geological Survey (USGS). The USGS team includes four regional scientists located in Botswana, Guatemala, Kenya, and Niger. Chemonics International Inc. manages FEWS NET's field offices and Washington, DC technical office. Information technology partner Kimetrica provides tools for knowledge and data management.

## 3.2. DEVELOPMENT IN PHASES

FEWS NET Data Warehouse is in constant development.

### Phase I: Focused on Prices

With Prices available functionalities, the system can gather prices from commodities and products in all existing markets from over 36 developing countries in the world. It is thanks to collecting this data that we can conduct the relevant analysis for FEWS NET purposes.

### Phase II: Focused on Surveys

With Survey available functionalities, the system can gather data deriving from surveys to provide indicators results from over 36 developing countries in the world. This phase has been focusing on Nutrition and Crop Production indicators and data.

### Phase III: Focused on Cross Border Trade

This phase is complete. This functionality is useful for all types of trade, including maritime. Cross Border Trade works like for Data Series in Prices. You can create Data Sets to compare trends; you can Import, Export and Download Quantity Values, as well as use Cross Border Trade Data Series for different data analysis purposes. Bear in mind you have Price functionalities for Cross Border Trade, such as Charts and Table formats in the system to visualize data.

### Overall Approach

This involves developing crosscutting applications that will be useful for more than one component within the Data Warehouse. So far the spatial application has been developed for mapping the data in situ. Flexible metadata settings have been built to gather the data consistently in time and space. A schedule process is in place. In addition there is a workflow process so that Field Offices and the Home Office can work efficiently and effectively.

The overall aim is to deal with data from the following sectors components:

- Population
- Relief needs estimates and actual deliveries
- Market Prices (complete)
- Agricultural Production (complete)
- Nutrition (complete)
- Cross Border Trade (complete)
- Livelihoods

- Others

The set up in the interface is laid out within a structure that is in constant evolution. This means that FEWS NET is at its innovation stage. Therefore your constructive remarks whilst using the system, are very valuable information you can provide when reporting on the usefulness and functioning of the system in place. Particularly, you can be helpful when making comments about issues you may encounter with the data you are dealing with as well as when you are reporting other issues with the Helpdesk.

### 3.3. WORKFLOW

In FDW the system allows F.O to enter the data accordingly to the requirements the H.O has set. No matter what FEWS NET Data Warehouse component, the workflow process is the following:

- a. Enter data
- b. FO Submit the data
- c. HO and specialists Review the data
- d. Comments can be made
- e. FO can correct and make comments when the data is set 'Under Review'
- f. Data can be submitted as many times it is required
- g. When data has been through quality control it can be Published

In addition to the general rationale, there is specific components rationale:

Prices:

1. Add a Data Collection, which involve the Metadata values from a product price in a given market with additional related information for that product as required by the HO.
2. Enter the collection periods according to a schedule (i.e. monthly) to ensure the Data Collection for a product has enough Data Points to conduct the analysis that will lead us to make further decisions.
3. You may upload data in bulk or manually.
4. Publish it (please consider the workflow process involved as explained above/before).
5. Use it for Data Analysis
  - Download Data Series individually or in Data Sets
  - Build Multiple Data Series using a Price Data Set with a predefined purposes
  - Calculate Data Series for Calculated indices or Relative Prices

- Download data for other type of analysis outside the Data Warehouse
6. Data Series Management and Metadata Management
- Set Exchange Rates so that Data Analysis can reflect real prices calculations
  - Predefine market products, so that users can add the relevant data for the relevant product and a list is provided with commodity names and codes.
  - Establish price indices that have been calculated outside the Data Warehouse. I.e. CPI

Surveys:

1. Before entering data you must add a survey. Adding a survey means that you need to define the survey metadata. It concerns:
  - Data Domain
  - Source Organization
  - Survey Type
  - Name
  - Usage Policy
  - Survey Populations
  - Indicators
  - Schedule
2. Enter the 1<sup>st</sup> Survey Collection. This implies uploading a file with the actual values according to the survey metadata that has been defined when adding a survey.
3. Edit your Survey or access it to change the status after submitting. This implies entering the system so that you can see/edit the uploaded values when adding the 1<sup>st</sup> Survey Collection.
4. Download the data to work with pivot table templates for further analysis outside the Data Warehouse.
5. Use the metadata management settings to classify Survey information according to (only HO):
  - Spatial classification in geographic units, types, zones etc.
  - Indicators groups
  - Indicators
  - Localities
  - Survey types
  - Surveys

## 4. DATA ENTRY

Data entry implies entering data from outside the Data Warehouse. This category is at the top because the first thing when accessing the Data Warehouse is usually to enter the data so that a first draft can be submitted. Depending on your rights and the components you are dealing with, you may be able to see one or more sections.

## 4.1. ADD A NEW DATA COLLECTION (MANUALLY OR BY UPLOADING A FILE)

Types of Data Collections:

- **Price Data Collection:** Price Collection Periods represent the Data Points within a Price Data Collection. A Price Data Series is the result from a number of Collection Periods within a Data Collection. Practically it is the price change (increase or decrease) or evolution in time (monthly, weekly, etc.) of a product or commodity, in a given market (spatial), in a specific measure (weight and volume) at the selected currency (provided thanks to exchange rates entered in the Data Warehouse).

Figure 13: Spreadsheet Upload vs. Manual



Two ways to enter data:

### 1. Excel Spreadsheet-Upload:

- Data is entered from a Spreadsheet upload for price recognition
- For Price Data, Exchange Rates and Price Indices
- Spreadsheet formats must adhere to meta-data and column format requirements

### 2. Manual:

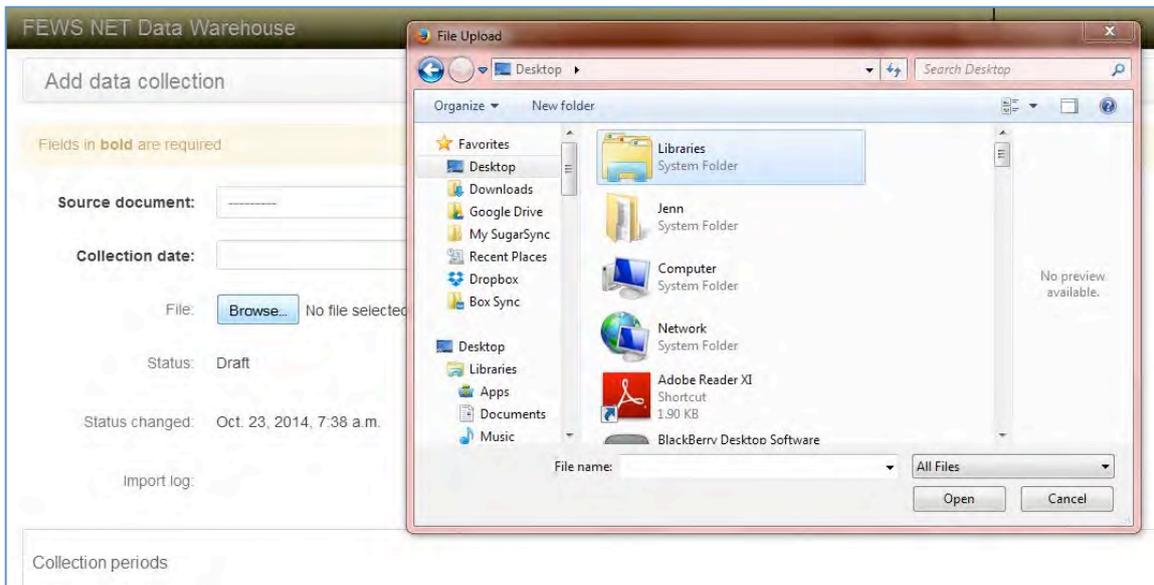
- Meta-data and column format requirements are set by the H.O
- The F.O. can enter prices manually or
- If uploaded, change them manually as part of Data Quality Control



Window: Add Data Collection

- **Source Document:** Specify the Data Source Document that you are attaching with the Excel Worksheet you are uploading
- **Collection Date:** Enter the collection date for the data collection you are uploading
- **File:** Upload your excel worksheet by clicking Browse. If you do not upload a file and save, you will be taken to the screen from where to enter data manually.

Figure 14: Excel Worksheet Upload



How to format the Spreadsheet (Tips):

- The Spreadsheet format should adhere to the Meta-data and Column Heading Guidelines
- Issues to watch out for:
  - Spelling
  - Blank spaces at the end of text strings
  - Missing data codes
  - The file contains multiple Data Source Documents
  - A spreadsheet format that is not identical to previous months and may have new errors

Figure 15: Spreadsheet with One Collection Period

A	B	C	D	E	F	G
Market	Product	Price_Type	Price	Unit	Period	Data Source
Abomsa	Fava Beans	Retail	410	KG	Monthly	WFP
Ajeber	Fava Beans	Retail	411	KG	Monthly	WFP
Bati	Fava Beans	Retail	412	KG	Monthly	WFP
Debark	Fava Beans	Retail	413	KG	Monthly	WFP
Deder	Fava Beans	Retail	414	KG	Monthly	WFP
Dire Dawa	Fava Beans	Retail	415	KG	Monthly	WFP
Fhinat	Fava Beans	Retail	416	KG	Monthly	WFP

Figure 16: Spreadsheet with +2 Collection Periods

A	B	C	D	E	F	G	H	I	J
country	market	product	product_source	price_type	price	unit	data_source_doc	data_source_org	period_date
Liberia	Buchanan	Cassava	imported	Retail	25,00	50 KG	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Buchanan	Palm oil (refined)	imported	Retail	110,00	Gallon	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Gbarnga	Cassava	imported	Retail	5,00	50 KG	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Gbarnga	Palm oil (refined)	imported	Retail	125,00	Gallon	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Tubmanburg	Cassava	Local	Retail	15,00	50 KG	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Tubmanburg	Palm oil (refined)	imported	Retail	137,50	Gallon	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Voinjama	Cassava	Local	Retail	17,50	50 KG	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Voinjama	Palm oil (refined)	imported	Retail	22,50	Gallon	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Zwedru	Cassava	imported	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Zwedru	Palm oil (refined)	imported	Retail	212,50	Gallon	WFP, Liberia	WFP, Liberia	30/04/06
Liberia	Buchanan	Cassava	imported	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Gbarnga	Cassava	imported	Retail	5,00	50 KG	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Gbarnga	Palm oil (refined)	imported	Retail	250,00	Gallon	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Voinjama	Cassava	Local	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Voinjama	Palm oil (refined)	Local	Retail	262,50	Gallon	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Zwedru	Cassava	Local	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Zwedru	Palm oil (refined)	Local	Retail	262,50	Gallon	WFP, Liberia	WFP, Liberia	31/05/06
Liberia	Buchanan	Cassava	Local	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Buchanan	Palm oil (refined)	Local	Retail	122,50	Gallon	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Gbarnga	Cassava	Local	Retail	5,00	50 KG	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Gbarnga	Palm oil (refined)	Local	Retail	125,00	Gallon	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Tubmanburg	Cassava	Local	Retail	15,00	50 KG	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Tubmanburg	Palm oil (refined)	imported	Retail	162,50	Gallon	WFP, Liberia	WFP, Liberia	30/06/06
Liberia	Voinjama	Cassava	Local	Retail	22,50	50 KG	WFP, Liberia	WFP, Liberia	30/06/06

- Status: At this stage the status will always be Draft. This means your draft will be reviewed before it can be published.
- Status Changed: At this stage the time that will be appearing will be the exact time when you entered this window.
- Import Log: When trying to find out what goes wrong, we have access to the import log file. A log file is created after the creation of every data collection.
  - Warnings are displayed for the HO M&T to make the relevant corrections, i.e. ensure the Alias Market name is specified correctly.
  - It enables to look in the Log File and see which Data Series were supposed to be there but were not identified. This will be helpful when looking at the issues that FO are having with the import of market prices. The logging informs about what loaded and what things in the file were not recognized.
  - If further advice is required to identify causes of errors or problems deriving from the information in the Import Log file, Kimetrica will be available to provide support to the HO M&T directly.
- Collection Periods: As Opposed to a Collection Date, here you can include as many collection periods as you need to. It all depends on the collection periods within one data collection.
  - Start date: The start date of a collection period, usually the first day of a month
  - Period Date: it refers to the last day of a Collection Period. If set to monthly it will be the last day of that same month
  - Notes: In terms of the requirements to be able to capture additional data to help us explain context, this notes field will be useful without having to be too specific.
  - Add Another Collection Period: If you click here you can enter the dates of other collection periods

- **Save:** Save the draft when you are ready to Submit. It is from Data processing that you will submit your draft.
  - **Save and add another:** it implies adding another data collection and when you click on Save, the system will take you to a similar window that is empty so that you can repeat the process as many times as you want.
  - **Save and continue editing:** this is for unstable Internet connection to ensure you don't lose the data. When you click here the system will allow you to enter more data from the same window. It saves the data that you already entered and you may continue entering data.
- **Save:** when you finished entering data you can click on save.

#### Window: Manual Data Entry

- You can enter the values and set the status manually after saving directly if a Spreadsheet was not uploaded.
- Previous Price and % Change will only be recognized or appear automatically if values were entered for the previous period (the last day of the previous month). There is no need to enter values here.
- **Status:** You can change the status from the dropdown list of available options.
  - **Collected:**
    - The most common status
    - It means there is a value for the Data-Point in the Data Series for this Data Collection Period
  - **Not Collected**
    - The Enumerator did not attempt to collect the price (a value for the Data Series) this month (for this Data Collection Period), and we do not know whether the product was available
  - **Not Available**
    - The Enumerator attempted to collect the data (a value for the Data Series for this Data Collection Period) but the product was not on sale / available in the Market
  - **Missing Historic Data**
    - Should not be used by F.O because this status does not involve any new data.
    - Concerns missing prices from historical data uploaded in bulk by HO: The data is not present in FEWS NET's historic data; Unclear whether was
      - Not Available or
      - Not Collected.

## 4.2. ADD A NEW SURVEY (DEFINE METADATA, OPTIONALLY ENTER THE 1<sup>ST</sup> SURVEY COLLECTION)

To add a new survey you must first define the relevant metadata when clicking here. After this, if you press click on Save and continue editing you will be able to enter the 1<sup>st</sup> Survey Collection.

### Window: Add Survey

Adding surveys will be helpful to customize how the data for your survey is going to be collected or what metadata will be compiled. If you click on '+Add Survey' in Surveys from the Dashboard under Metadata Management, the system will also take you to the screen where to enter the following:

1. Data Domain: has a dropdown list with available Data Domains.
  - Nutrition
  - Crop Production
2. Source Organization: must be specified to select the organization providing the data for your survey.
3. Survey Type: Users must select one from the dropdown list with all available survey types:
  - 30 \* 30
  - DHS
  - Exhaustive
  - MICS
  - Needs and Livelihoods Assessment
  - Rapid MUAC Assessment
  - Rapid SMART
  - Representative MUAC Assessment
  - SMART

In terms of crop production, there are different survey types to allow for different types of data, e.g.

- FEWSNET estimated crop production
  - Final government crop production
  - Preliminary government crop production
  - USDA crop production
4. Name: When adding a survey it means you are creating a survey, therefore you must write a name which will identify the survey.
  5. Description: You may want to describe the purpose or content of the survey, however it is non-required.

6. Usage Policy: has a drop down list
  - FEWS NET only: this will be the initial choice when adding a survey
  - Public: When data is public this will be the selected choice.
  - You may want to write usage notes, however it is non-required.
  
7. Survey populations:
  - Locality: These are the localities (more generally the populations) that will be surveyed or tracked by our survey. A locality may be specified from a list of existing localities. When typing inside the given field, a wide selection will appear. You must select the relevant locality from the given list.
    - Add another Survey Population by clicking below. You may add as many localities as it is required.
    - Add another Locality by clicking on the +. For more detailed information please see Metadata Management Category.

Important Note: The specific meaning of a locality, in the FEWS NET Data Warehouse, is a geographic unit occupied by a certain population group and/or is the scene of particular activities (e.g. farming, fishing, pastoralism, etc.). Particularly, it comprises of the Geographic unit, the Population group, and the dominant livelihoods zone.

8. Survey indicators: By default, after selecting the relevant 'Data Domain' there will be a list of indicators coordinates.
  - There is an exhaustive list of nutrition survey indicators.
  
  - The FDW data warehouse supports four indicators for the crop production domain. These are
    - Area planted
    - Area harvested
    - Yield
    - Quantity produced
  
  - If any are not in the survey they can be deleted from the list before saving by clicking on the circled greyed X on the left hand side of the indicator coordinate name.
  
  - Add indicator: You can add an indicator by clicking on the + on the right hand side of the indicator coordinate name. For more detailed information on how to add an indicator please see Metadata Management Category.
  
  - Confidence interval: The list of indicators by default will have 'Confidence Interval' selected or not selected. You may change the default setting by unchecking or checking the tick; it depends on your survey.

- The order of indicators during data entry is sorted by their group. These are the available groups in the system.
  - anemia,
  - chip,
  - crop,
  - gam:a,
  - gam:b,
  - morbidity,
  - mortality,
  - stunting

Figure 17: Spreadsheet Indicator Group Example

Who conducted the survey		Where the survey was conducted				Mortality					Prevalence of morbidity among children < 5 years in the past 2 weeks					Coverage of health interventions			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lead agency	Contact person	Admin level 1 Country	Admin level 1 Region	Admin level 2 Zone	Admin level 3 Woreda	Crude Death Rate (deaths/100,000 people/yr)	Infant Mortality Rate (IMR)	Under-5 Mortality Rate (U5MR)	Diarrhea	Measles	Upper Respiratory Infection	Malaria Fever %	Other, specify %	Measles vaccination among children under 5 years	Vitamin A supplementation among children 6-59 months %	Deworming among children under 5 yr %	Non-holic acid supplementation among pregnant women %		
BVE	www@bve.org	Ethiopia	SNRP	Wolayitta	Sofa Zuria														
BVE	www@bve.org	Ethiopia	SNRP	Wolayitta	Humblo														
BVE	www@bve.org	Ethiopia	Ambara	South Wollo	Timba														
MSF Holland	msf@msf.org	Ethiopia	Oromiya	Borena	Arero														
GDAL	gdal@gdal.org	Ethiopia	Oromiya	Borena	Faberia Toltra	0.40	0.60												
CONKERN	conkern@conkern.org	Ethiopia	SNRP	Wolayitta	Demsa Woreda	0.60	1.10												
GDAL	gdal@gdal.org	Ethiopia	Ambara	South Wollo	Meskelia	0.09	0.38												
ICMPP/INCCU	icmpp@icmpp.org	Ethiopia	SNRP	Guraghe	Marebo														
GDAL	gdal@gdal.org	Ethiopia	Zone Borena			0.04	0.20												

Each color represents a group, with the top heading being the actual group name, i.e. Mortality in purple. Below the group title there are a number of indicators belonging to such group.

9. Schedule: It specifies the frequency for the Survey Collection.
  - If you know the Start and End dates (i.e. the total lifetime) of your survey it's good practice to enter them for the schedule.
    - In crop production, the Start and End Date for the Data Collection is based on the Production Period, which is be stored per Season. I.e. for each Season in a Country, in addition to the normal, typical Start Month and End Month, it stores a Production Start Month and a Production End Month.
    - The Start Date in the system is defaulted to the first day of the Production Start Month, for the Year of the Collection Period. This will only happen after the first collection period has been defined I.e. not applicable for new data collections. The person doing Data Entry will be able to override this to provide an exact date, if required.

Note: that Crop production data can be uploaded without any season defined. This is because some of the external data sources for Crop Production data only provide annual rather than seasonal figures.

When data that contains a Crop and a Year but not a Season or a Month, it is assumed that the figures are annual and automatically set the Start Date to 1 Jan and End Date to 31 Dec for the relevant Year.

- The Schedule or frequency of the Survey Collection can be set to:
  - Daily: every day
  - Weekly: once a week
  - Fortnightly: once every two weeks
  - Monthly: once a month and the usual option
  - Quarterly: once every 3 months
  - Semi-Annual: twice a year
  - Annual: once a year
  - Ad Hoc: When the frequency of the Survey Collection is unknown.
    - Non-specific schedule with unknown start/ end dates allowing the system to enter survey data at any time. You may know the start date or the end date; in that case you can also enter it.
    - Only one single survey will be required.
  
- You may define multiple schedules in one survey:
  - For example the survey can start with a monthly schedule but you can change it to another frequency by clicking on '+Add another Schedule'.
  
  - You will need to ensure that there is no date overlap between the various frequency options you have chosen and set the schedule accordingly. I.e. if a survey has a monthly schedule with start date the 1<sup>st</sup> of Jan 2015 and the end date the 31<sup>st</sup> of October 2015. If you want to change the schedule thereafter to weekly, to avoid date overlap, the start date will be the 1<sup>st</sup> of November 2015

10. Save: When saved, the system will take you to another screen where you can add your 1<sup>st</sup> Survey Collection.

#### Window: Add 1<sup>st</sup> Survey Collection

- Survey Period: You will have to specify the 'Survey Period' for which you're entering data. For example, if the schedule was set to monthly, the start date will be the first day of a month and the end date will be the last day of the month.
  
- Create: The system will take you to the spreadsheet style page to enter the data manually.

Note that in order to upload data in bulk you need to upload the data from a spreadsheet through the available import button.

Window: Spreadsheet style page to enter data manually

The system also has data entry functionality for entering data manually for surveys, nutrition, and crop production. The system has a spreadsheet layout which allows users to enter data more easily.

11. After clicking on 'Create' the system will create a Survey Period and a 'Spreadsheet-Style' grid will be created for data entry.

If you try to enter a word when the system expects a number, the field at stake will highlight in red to give you a warning.

- From the combination of survey population and survey indicators a spreadsheet is created in the system. There is one row for every survey population where to specify:
  - Geographic Unit and Population Group are static fields and you can slide the bar below to move on to the other fields. This is useful to compare the data in terms of Geographic Unit and Population Group to facilitate data entry. The fields are sizeable and you can adapt it to your visualizing needs.
  - The sample size, namely the 'Household sample size', the 'Adult sample size', and the 'Child sample size'.
  - The 'Season' at the locality during the Survey Period.
  - The indicator value for every survey indicator
  - The confidence intervals (high/low) for the indicator value (if an indicator has a confidence interval under the 'ci95: Low' / 'ci95: High' headings) are immediately after its indicator

12. Save: If you press 'Save' it means you finished entering the data and that you are ready to 'Submit' the survey. The following screen will allow you to submit the survey. (Please follow instructions for Change a Survey Collection Status (Submit, Review and Publish)

- Save and continue editing: If you press 'Save and continue editing' to avoid losing your work you can continue editing.

### 4.3. EDIT A SURVEY (INCLUDING ADDING A NEW SURVEY COLLECTION)

Window: Select Survey to Change

1. To edit a survey: Click on the relevant survey from the list provided.
  - Name: The name of the survey is displayed under the Name column
  - Data Domain: The relevant Data Domain corresponding to the Survey Name is displayed under this column
  - Source Organization: The corresponding Source Organization from where the Survey Data derives is under this column
  - Survey Type: This column shows the Survey type of each survey on the list

2. To search for a survey: enter the relevant words from the Survey Name on the Search box and find it from the list provided. To narrow your searches use the filter and select Nutrition or Crop Production.
3. You can access the window to add a survey from here, but there is a direct shortcut when clicking on Add a new Survey (define metadata, optionally enter the 1<sup>st</sup> Survey Collection)
4. By clicking on the relevant Survey Name you will be able to access the next screen:

#### Window: Change Survey

You can edit and change the defined metadata of a Survey

- Data Domain: You can change the Data Domain
- Source Organization: You can delete the existing Source Organization or add a new one. To add a new one please see Metadata Management.
- Survey Type: You can change the survey type or add a new one. For more information to add a new Survey Type, please see Metadata Management.
- Name: You can edit the Survey name
- Description: You can edit the description field
- Usage Policy: You can change the usage policy or add a new one. For more detailed information to add a new data usage policy, please see Metadata Management
- Usage Last Changed: The time when the usage policy last changed will be appearing
- Usage Notes
- Current Schedule: The predefined setting is monthly. For the majority of surveys, the schedule is set to Ad Hoc, unless there is a repetition of a Survey, which means the schedule must be recurrent: quarterly, monthly, weekly, etc.
- First Period Date: The date when the Survey Collection Period data starts
- Last Period Date: The date when the Survey Collection Period ends
- Collection Period Count: This refers to the data points within a Survey Collection. In other words, each Survey Collection Periods represent one collection period count.
- Collection Period List: from here you can access the Survey Collection or Add a Survey Collection.
- Survey Populations: You may Delete displayed Localities, Add Localities or Add Another Survey Population

- Survey Indicators: You may delete displayed indicators, add indicators or add another Survey Indicator. You can check or uncheck the confidence interval box.
- Schedule: You can change or add another schedule.
- Save or Delete the entire Survey Collection

## 5. Import surveys

### Window: Import

This functionality will be useful to get the data from a spreadsheet outside the system into the Data Warehouse.

- Depending on the selected format:
  - Xls
  - Csv
  - Tsv
  - Json
  - Yaml
- Ensure you have all the data in the corresponding file in your computer accordingly with the metadata columns listed below and save it in your computer.
  - data\_source\_organization:
  - data\_source\_document:
  - country:
  - id:
  - created:
  - modified:
  - datasourceorganisation:
  - name:
  - description:
  - datausagepolicy:
  - datausagepolicy\_changed:
  - datausage\_notes:
  - source\_type:
  - display\_order:
- Under File to import click Browse and select the saved file.
- Then click on Submit if you are sure this is the Draft you want to present for review.

## 6. Export surveys:

### Window: Export

This functionality will be useful to download the data from the Data Warehouse into your computer.

## 5. DATA PROCESSING

Data processing implies the process for data approval so that it can be published. In this process, after data entry, the different users from the FO and the HO, interact when Submitting, Reviewing and Publishing the Data by clicking the corresponding buttons (Submit, Review, Publish) and making comments. In order to do this the corresponding application you are working with will display the data so that you can access it to view and/or edit the data.

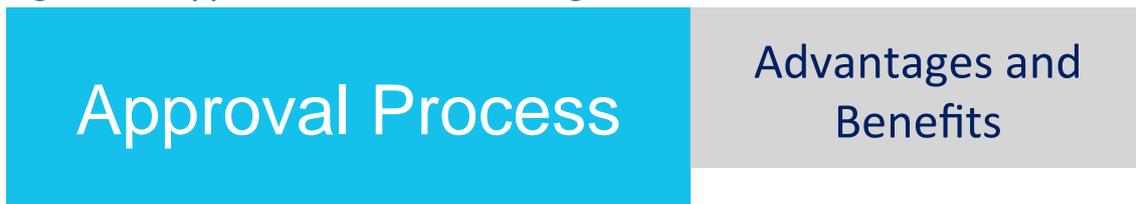
### 5.1. DISPLAY OR EDIT AN EXISTING DATA COLLECTION (INCLUDING SUBMIT, REVIEW AND PUBLISH)

At present this access can be used for Prices data display and edit as well as giving you access for Data entry to add a data collection. Bear in mind the direct access to Add a data collection is in Data Entry. The direct access to select collection periods to edit the data is under Display or edit data for an existing data Collection Period.

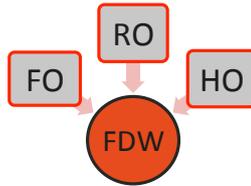
You may access the data by selecting a Source Document. You can find the relevant Source Document by entering key words on the search box or narrow your search by clicking on the relevant year at the top of the page or with the Collection Status Filter:

- Draft: F.O enters Data Collection in the system
- Submitted:
  - NTM Submits the Data
  - RMS and H.O will review the data
- Under Review
  - RMS or H.O. have any queries on the data they set it as 'Under Review' and add a comment
  - F.O will receive a notification e-mail and will correct/ answer queries
  - NTM will submit the Data Collection again
- Published
  - When H.O. reviews and accepts the data, the Status is set to 'Published'
  - Data can no longer be modified by the F.O or R.O unless the H.O places it under review

Figure 18: Approval Process Advantages and Benefits



- The aim is to improve data, information and knowledge management between all offices:



- FDW-P will be useful / helpful for:
  - Data entry and submission
  - Data review and analysis



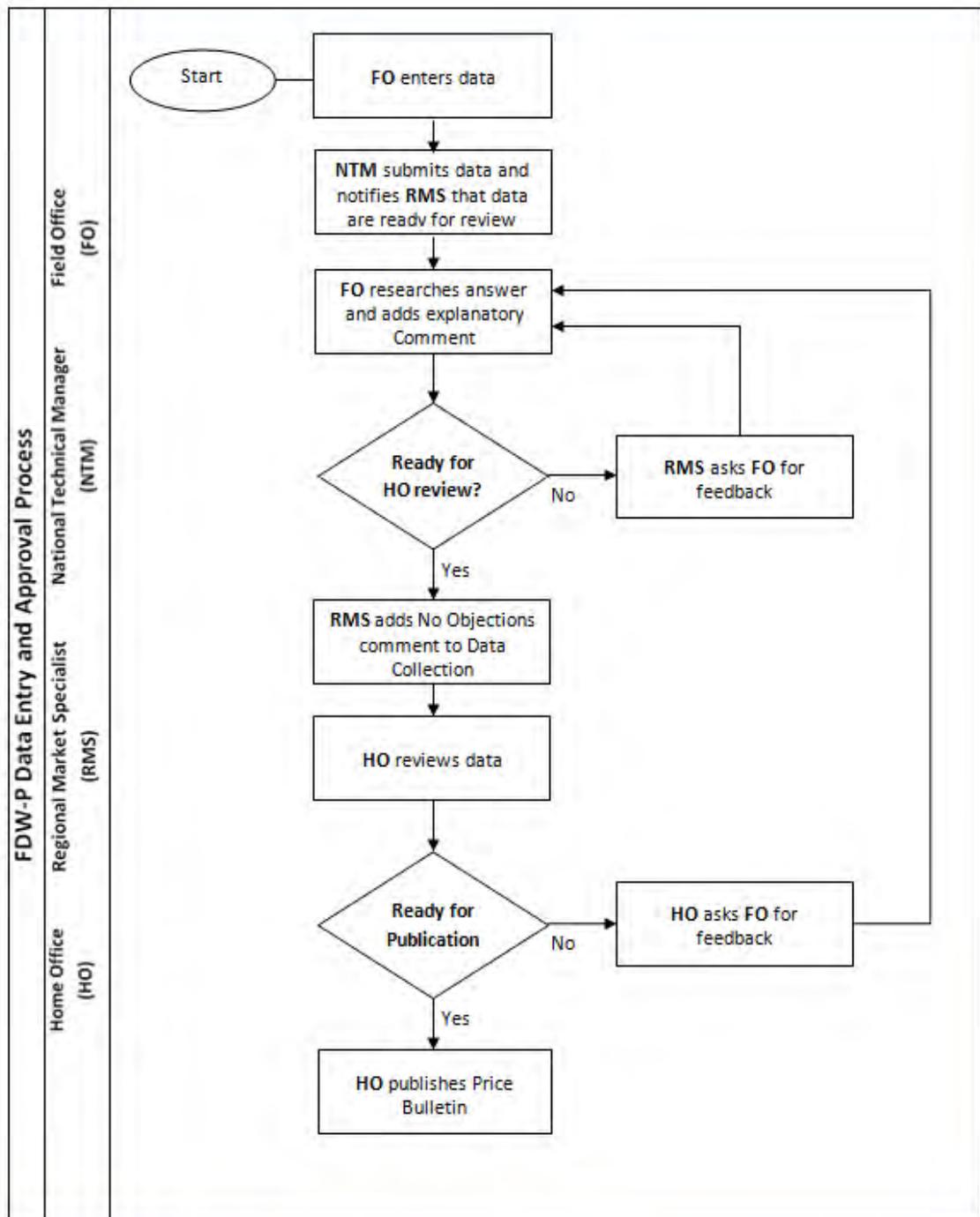
#### Window: Select Data Collection to Change

- Source Documents: You can click any Source Document to visualize available Collection Periods and change data collections.
- Collection date: It is usually the last day of a month because it has been predefined under the monthly schedule.
- File: If there is an upload you will see a black file icon that you can click to access by downloading the uploaded data for that Source Document.
- Status: If you narrowed your search from the filter you will only see the relevant status you selected relating to the listed Source Documents. Otherwise you will be able to see different Source Document data collection(s)' status from the default list.
- Status Changed: Here you can see the last time the collection Status Changed.
- Data Point Count: refers to the number of instances within a Time Data Series.

#### Window: Change Data Collection (Submit)

After data entry it is from here that you can submit your draft to change the status to 'Submitted' provided you have the rights to do so and if the Submit button shows on your screen.

Figure 19: Data Collection and Review Flowchart



1. The data is entered or uploaded by the Field Office (FO).
2. The data is reviewed and then Submitted by the National Technical Manager (NTM).
3. The FO advises the Regional Market Specialist (RMS) that the Data Collection is ready for review; alternatively, the RMS will use the Filter on the Data Collection screen to find Submitted Data.

4. The RMS reviews the data and adds a Comment to the Data Collection. The Comment will be a No Objection if they are satisfied that the data are complete and accurate. If the RMS has a comment, a question will be entered and the data collection will be marked as Under Review.
5. The Home Office (HO) Markets and Trade (M&T) team reviews the data and Publishes it if they are satisfied that it is complete and accurate. If M&T have a comment to make they will add a question and mark the Data Collection as Under Review.
6. When a Data Collection is Published or placed Under Review, the FO Distribution list will receive an email notifying the FO that there is an outstanding comment. The FO can review the question within the system and then the NTM can submit the Data Collection and the process resumes at Step 3, above.

Note that Draft and Under Review data are not included in any extracts or reports, because it is of unknown quality.

In order to prevent accidental edits, a *Published* dataset cannot be altered. In the rare situation where a correction is required to data that are already *Published*, the M&T team must change the data from *Published* to *Under Review* and then wait for the Field Office to correct the data and Submit it again. It can then be re-Published.

Data must be submitted by the NTM or a designated user with the NTM role assigned to them in the system. The easiest method is:

7. From the Homepage click on the module Display or edit an existing Data Collection (including Submit, Review and Publish) under the Data processing category.
8. Use the filter next to the Search box to find all the Draft Data Collections
9. Click on the Data Collection that you want to Submit
10. Click on the Edit icon for the first Collection Period

Window: Change Collection Period

11. You will be taken to the manual data entry screen to review and correct the data.
  - Compare the data on the screen to the data in the original document and ensure that the prices are correct.
  - You may add some notes. In terms of the requirements to be able to capture additional data to help us explain context, this notes field will be useful without having to be too specific.
  - You can change the Status and edit the Price Value.
12. If any corrections are necessary, make them and then press Save or Save and continue editing.

Window: Change Data Collection (Submit)

13. Once you are satisfied that the data are correct, press the Back button in the web browser to return to the Data Collection screen.
14. In some countries there may be multiple Data Collection Periods for a Data Collection. If so, then review the other Collection Periods in turn.
15. If any of the prices need additional explanation, then write a Comment in the box at the bottom of the screen and press Post; for example, if one of the prices has changed significantly from the previous month and the reason is known.
16. Press the Submit button.
17. Once the data have been submitted it will be included in any reports or extracts.

Dealing with Comments:

After you Submit the data, the RMS and the HO M&T team will review the data before marking it as Published. If they have any comments with regards to the data, for example any missing data or prices with unexplained large changes from the previous month; they will mark the Data Collection as Under Review and add a Comment to it.

You will be notified that the data are Under Review by an email sent by the Data Warehouse to the distribution list email address for the FO.

Once data are Under Review, the FO must correct the data, and/or answer to the comments and then the NTM can submit it again. The easiest method is:

1. From the Homepage, click on the module Display or edit an existing Data Collection (including Submit, Review and Publish) in the Data processing category.
2. Use the filter next to the Search box to find all the Under Review Data Collections
3. Click on the Data Collection that is Under Review
4. Read the comment from the RMS or M&T team in the Comments section at the bottom of the page
5. Click on the edit icon for the Collection Period to examine and, if necessary, correct the data. If you make any correction then press Save and continue editing once you are finished.
6. Once you are satisfied that the data are correct, press the Back button in the web browser to return to the Data Collection screen.
7. Write a Comment in the box at the bottom of the screen in response to the comment and explaining any changes you have made and then press Post.

8. Press the Submit button.

## 5.2. DISPLAY OR EDIT THE DATA FOR AN EXISTING COLLECTION PERIOD

### Window: Select Collection Period to Change

If you want to view and/or change/edit the status and data or values for an existing Price Data Collection Period, you can access it from here directly by accessing the Collection Periods from the list.

- Collection: Here you will find the available Collection Periods
- Start Date: The start date of the Collection Period
- Period Date: In accordance to the schedule, the end date of the period date. In other words, up to the point that data is valid.
- Schedule:
  - Daily: every day
  - Weekly: once a week
  - Fortnightly: once every two weeks
  - Monthly: once a month and the usual option
  - Quarterly: Once every 3 months
  - Semi-Annual: twice a year
  - Annual: once a year
  - Ad Hoc: When the frequency of the Survey Collection is unknown.
    - Non-specific schedule with unknown start/end dates allowing the system to enter survey data at any time. You may know the start date or the end date; in that case you can also enter it.
    - Only one single survey will be required
- Collection Status: If you narrowed your search from the filter you will only see the relevant status you selected relating to the listed Source Documents. Otherwise you will be able to see different Source Document data collection(s)' status from the default list.
- Status Changed: Here you can see the last time the collection Status Changed.
- Data Point Count: refers to the number of instances within a Time Data Series.

### Window: Change Collection Period

- Collection: you may access the Collection Period from here to edit and submit.

- Market Prices:
  - Status: you can change the status from the available dropdown list.
  - Price: You can edit the price.
  - Previous price / change: The information provided in these fields can help you realize if you need to edit prices to correct values.
  - Other fields: They represent the details of the data you are dealing with.
- Save: Click to save the data.
- Save and continue editing: You may save and continue editing to ensure you do not lose the data when Internet is unstable.

### 5.3. CHANGE A SURVEY COLLECTION STATUS (SUBMIT, REVIEW AND PUBLISH)

If you want to view and/or change/edit the status and data or values for an existing Survey Collection, you can access it from here.

Window: Select Survey Collection to Change

- Collection Date: Usually the last day of the month when the survey data was collected.
- File: If there is an upload you will see a black file icon that you can click to access by downloading the uploaded data for that Source Document.
- Status: If you narrowed your search from the filter you will only see the relevant status you selected relating to the listed Source Documents. Otherwise you will be able to see different Source Document data collection(s)' status from the default list. You may narrow your search by selecting the Data Domain: Nutrition or Crop Production.
- Status Changed: Here you can see the last time the collection Status Changed.
- Data Point Count: refers to the number of instances in each Survey Collection periods under each Survey Collection for the Source Document at stake.
- Source Documents: when you click on a Source Document you will have access to the Survey Collection that is made up from one or more Survey Collection Periods.

Window: Change Survey Collection (Submit/ Review/ Published)

- **Submit Button:** If the Source Document you are accessing is a draft you will have the submit button visible.
- **Review/ Published:** If the document is submitted then you will have the Review / Publish buttons visible.  
Note the buttons you can see depend on your rights.
- **Source Document:** You can change the Source Document or add a new one. For more detailed information to Add a Source Document please see metadata management
- **Collection Date:** when the data stops being available
- **File:** The access to download the uploaded file
- **Status:** Depending on the Status and your access rights you will be able to see the Data Processing buttons (Submit, Review, Publish)
- **Status Changed:** The last time the Data Processing changed Status.
  - From Draft to Submitted: When the FO presents the data
  - From Submitted to Under Review: When the data is presented to the HO and they made a comment, the FO must comment back to reply and if necessary must make the adequate corrections.
  - From Submitted to Published: When the HO is ok with the data that was submitted, and then they can publish it.
  - From Under Review to Published: when corrections have been made or a comment in response to the HO request has been made, the HO can publish the data.
- **Import Log:** When trying to find out what goes wrong, we have access to the import log file
- **Survey periods:**
  - **Dates:** You can change the start and end dates
  - **Data point count:** refers to the number of instances within a Time Data Series
  - **Edit:** If there is an edit icon, it means you may access the Survey Collection period data to edit correspondingly
- **Delete:**
  - FO can delete their Draft Data Collections
  - NTM can delete Submitted Data Collections
  - HO can delete Under Review Data Collections

Window: Change Survey Period

- **Collection:** You may access the collection from where that precise period belongs.

Note: In terms of the requirements to be able to capture additional data to help us explain context, this notes field will be useful without having to be too specific.

- Survey Collection Details:
  - Season: there is a dropdown list from where to select the season at the locality when the Survey was taken. (You may add a Season from Metadata Management)
  - Sample size: You may enter or edit the values accordingly where relevant
    - Households
    - Adults
    - Children
- Population indicator values
  - Status:
    - Collected:
      - The most common status
      - It means there is a value for the Data-Point in the Data Series for this Survey Collection Period
    - Not Collected:
      - The enumerator did not attempt to collect the data (a value for the Data Series) this month (for this Survey Collection Period), and we do not know whether the informant was available
    - Not Available
      - The enumerator attempted to collect the data (a value for the Data Series for this Survey Collection Period) but the informant was not available or could not provide the relevant information.
    - Missing Historic Data
      - Should not be used by FO because this status does not involve any new data.
      - Concerns missing survey data from historical data uploaded in bulk by HO: The data is not present in FEWS NET's historic data; Unclear whether it was
        - Not Available or
        - Not Collected.
      - Value: You can either enter the value or change it
      - 95%CI: low / high: You can enter the confidence interval if known.

## 6. DATA ANALYSIS

After the Data Entry reached the desire quality standards so that data is reliable, the system can be used for further analysis once the data has been published. This means that Data Analysis will only occur with data that is inside the Data Warehouse. However, since data can be downloaded and exported, the data can be used outside the system and be compared with other data.

## 6.1. SINGLE DATA SERIES

This section provides a list of all Single Data Series in the system regardless of the component. There are six types of Data Series that can be accessed from this window.

### Window: Select Data Series to Change

- **Name:** Depending on the type of Data Series, the metadata that make up the name varies. This will be explained under each data series type below.
- **Data Series ID:** Each Data Series has an ID Number. When you access the system, under data series URL ([https://fdwdev.fews.net/en/admin/warehouse/dataseries/68161/?\\_changelist\\_filters=q%3Dmaize](https://fdwdev.fews.net/en/admin/warehouse/dataseries/68161/?_changelist_filters=q%3Dmaize)), you can change the Id. Number to the one you are looking for and when you press enter, the system will take you to the Data Series you require.
- **Source Document:** After selecting the relevant Data series, when you click the Source Document, the system will take you to where you may access or add another source organization as well as revise other related details: Usage policy, usage last changed, current schedule, first and last period date, collection period count and a list of Data Series within that Source Document. In other words, the Source Document where your data series belongs. Note the Display order is only relevant for prices data series to set up what goes first in the excel spreadsheet (market then product) so that the system can recognize the data. In addition you may edit the schedule as well as add another schedule.
- **First/ Last Period Date:** It refers to the first period when data was entered and the last period when data was entered. In other words, the timeframe for that data series or the collection.
- **Data Point Count:** The number of values entered within a collection. In surveys it represents the value for each indicator within one collection or collection period(s). In prices it represents the price values that make up a tendency line. One price per period within one single data series.
- **Search Box:** You can use the search box to narrow your search by entering keywords. When you click in one Data Series, the system will take you to a different window.

In Prices:

1. Price Single Data Series
2. Calculated Price indices
3. Calculated Relative Prices
4. CPI
5. Exchange rates
6. Cross Border Trade Data Series

### Window: Change Data Series

The metadata listed on the previous window can be seen as already explained.

- **Data Sets:** you can see the data set(s) where the data series belongs under Chosen data sets box, or simply select one if required by clicking on it under Available data sets and pressing next the blue arrow. If the Data Series belongs to a large Data Collection (long timeframe), you can narrow the number of collection periods to reduce the amount of data you want to have in your data set. This can be done by selecting the start date and the end date within that data series collection. The system will select the relevant price values within the data collection periods that make up the price data series collection.
- **Excel Web Query:** You can access the URL to extract the data series data. See [Offline Analysis using Microsoft Excel](#) for more detailed information.
- **Browse:** When clicking on Browse from the chosen data series you will get a table showing the information from the chosen data series classified according to the H.O setting (defined metadata).
  - You can scroll down to see all Data points deriving from collection periods within that data series collection you selected.
  - Each row represents a data point of the data series.
- **Chart:** When clicking on Chart, it shows an interactive chart that displays the data as a line graph plotting the price for each Collection Period.
  - **Manipulating the Graph**
    - Move the mouse around the graph and see the values from the pop up window in different periods.
    - Note that if there are more than six Data Series in the Graph, you will only be able to see the average
  - You can view the data points in time all along the tendency line:
    - The legend shows the Data Series Metadata
    - The popup window shows the values for each data point from the data series in the legend
  - Percentage changes from data series collection periods can be visualized from the graph but not measured in percentages like from the manual data entry window in data collection/collection periods
  - There are two types of Zoom
    - Top left: shows the data according to years
    - Bottom: It is a flexible period selection
    - If you have selected the dates in the previous window, which if not selecting dates by default the system will gather all the available data, then the graph will only include the dates for your search. I.e. Rather than providing the data of 10 years, it will only show the data of the past 2 years (if that was your selection)
  - Chart context menu is for printing the Graph or download it in different available formats: PNG, JPEG, PDF, SVG files
- **History:** Is the Detail Audit Trail Access

In Surveys:

7. Nutrition Data Series
8. Crop Production Data Series

Window: Change Data Series

Data Series is very useful for online data exploration provided there are more than one Data Points. Otherwise offline analysis using Microsoft Excel after downloading the data will be more useful.

The metadata listed on the previous window can be seen as already explained.

- Data Sets: you can see the data set(s) where the data series belongs under Chosen data sets box, or simply select one if required by clicking on it under Available data sets and pressing the blue arrow. If the Data Series belongs to a large Data Collection (long timeframe), you can narrow the number of collection periods to reduce the amount of data you want to have in your data set. This can be done by selecting the start date and the end date within that data series collection. The system will select the relevant indicator values within the Survey Collection periods that make up the data series Survey Collection.
- Excel Web Query: You can access the URL to extract the data series data. See Offline Analysis using Microsoft Excel for more detailed information on Download Survey Data.
- Browse
- Chart
- History: Is the Detail Audit Trail access.

## 6.2. MULTIPLE DATA SERIES USING PRICE DATA SET

This is useful when analyzing trends with Data Sets and you may also:

- Search for and access a Price Data Set
- Edit the Data Set
- View the Data Set in a Graph or on a Table
- Download the Data Set
- Add a Price Data Set

A Data Set is a collection of Data Series in the Data Warehouse to be analyzed together. The starting point for analysis in most situations is the creation of a Data Set using the web application that contains the Data Series to be analyzed, (e.g., all Maize prices in East Africa, all prices in Honduras, etc.). To create a Data Set you must Add a Price Data Set:

Window: Add Price Data Set

- **Name:** Create a Name to identify the Data Set. Enter a *name* for the Data Set that represents the data it will contain, and which will help you and other users find the correct Data Set when you want to use it again in the future.
- **Data Set ID:** The identifier is set automatically. Useful for pulling data into Excel. Is a primary key, the identifier, a sequential number assigned automatically by the system? It is useful for the parameterized spreadsheets. You can take that number from there and type it into the parameter box, refresh and get all the data for the data set you just created. You can also update it, and it is thanks to the ID number appearing on the URL that the spreadsheet connects with FDW.
- **Start and End Date:** Optionally, enter Start and End timestamps for the Data Set if you want to limit the records to prices for a particular period. If you do this, you should also include the date range in the name of the Data Set so that other users understand that it does not contain all data. If you leave the Start and End blank, then the Data Set will contain all the available data.
- **Description:** Optionally, enter a description or notes about the comparisons in the Description box.
- **Reporting Schedule:** Please select the relevant schedule from the dropdown list.
- **Common Units (Weight, Volume and Item) and Common Currency:** To allow comparisons of prices. If you leave these fields as they are, everything would be converted into kg and USD. (HO always analyses in USD) If FO are trying to analyze something from a neighboring country, it would make more sense to show the results in the local currency. Note that the default values will be appropriate for most cases, but it is possible to use them to compare data to a specific local product. For example, the Kenya FO could build a dataset of all Wholesale Maize Prices and ask for them to be compared as the price in KES per 90kg bag, because that is how the prices are captured in Kenya. Also, a unit of measure can be converted through intermediate units. The system automatically converts prices where there is a Unit of Measure Conversion defined between the Data Series Unit and the desired Common Unit. This works in the same way as the exchange rate mechanism – It uses USD as a common intermediate currency if there is no direct rate for the conversion. This allows users from neighboring countries to convert a Data Set containing multiple common units into their country units; Example converting Wholesale Maize from TZS per 100 kg bag to KES per 90 kg bag.
- **Use Market Exchange Rates:** If selected, the system will use market level exchange rate if it finds it (meaning if it exists or was previously entered). I.e. This month there is a market exchange rate at this market between the currency that the price is in and the common currency for the data set. Then you will get a conversion using the market level exchange rate. If there is no market level exchange rate, it is:
  - Either because we don't have a series for this market exchange rate
  - Or because we don't have a rate for this month

- By default it will fall back for using the normal interbank rate between the two currencies
- Data Series: To create a data set you can use the filter; start typing and the system will narrow down your search (i.e. Type Maize and every Maize data series will appear) Note that Calculated data sets, and Relative Prices appear under this list as well. This can be useful only if you want the data to be exported into excel. In this case the data sets will just enable you to gather a bunch of data together and basically have a basket for it that they could re-use each month (i.e. all the important products in my country)
- Use the arrows after selecting the relevant Data Series:
  - To select all data series: press Control and the letter A and then press the arrow
  - To select one data series at a time: Select and the press the arrow
  - To select multiple data series: Hold down Control while selecting and then press the arrow
- Visibility: Owner, Group, Public

The FDW allows for a private area for personal Data Sets and calculated Data Series. This implies that:

- FOs can add and edit and use their data sets but cannot edit *Group* and *Public* data sets.
- NTM and RMS can add and edit their own data sets as above, but can change ownership within their FO/RO and change Visibility to the Group option.
- M&T can add and edit their data sets, can view everything and change the Visibility of a dataset to Public option.
- Owner: If you are adding a new Data Set, your name will be appearing. If you are accessing an already existing one, you will be able to see who added it.

#### Window: Select Price Data Set to Change

The Data Warehouse has features for analyzing trends across markets and commodities using Data Sets. After adding and saving the Data set, a screen will appear with an interactive chart that allows you to view the prices for a commodity in multiple markets over time. You can also browse the data online using a scrolling grid.

It is from this window that you can first access the data sets. You can use the search box if you already know key words from the data set name. The data set ID is also available in case you want to refresh data. The visibility and owner is listed in each row to help decide the user if a given data set can be modified or if it is accessible.

#### Window: Change Price Data Set

You may change and edit the settings. It will depend on the owner and your rights in FDW. Most importantly are the buttons at the top hand right of the screen:

- Excel Web Query URL: To get the URL to refresh the data and work offline
  - Use Microsoft Internet Explorer to log into the Data Warehouse
  - Copy the URL from the *Excel Web Query URL* link for the Data Set that you want to use to your clipboard (right-click and *Copy Link Address*).
  - Open a new Excel Worksheet
  - Select the *Data* menu and then the *From Web* ribbon button
  - Paste the URL into the Address input box and press *Go*
  - Wait for the *Import* button to become enabled (which will take up to 15 minutes depending on the size of the dataset) and then press it
  - At the dialog box asking where you want to insert the data place the data at *\$A\$1* on a blank sheet (this will be the default if you are creating a new spreadsheet)

The instructions can vary slightly for different versions of Excel – this set work for Excel 2007 and 2010. 2013 might be slightly different. If they can't see a "From Web" button then it might be under the "Other Data Sources" drop down.

For advanced users (e.g. HO) it might be better to use the From XML option and change the URL so that it says "format=xml" instead of "format=html" – that will allow formulae to be added to the end of the data table more easily, but it is more confusing to set up and so we don't recommend it for users who are not very competent with Excel already.

The *Copy Link Address* text when you right-click the Excel Web Query URL link varies with browser – e.g. in Firefox it says *Copy link location*

Figure 20: Copy Link Address

geographic_group	fewsnet_region	country	market	cpcv2	cpcv2_description	product	source_organization	source_document	collection_status	period_date
Western Africa		Benin	Benin market1	556	556 (sugar)	556 (sugar)	Benin MW	Benin source doc1	Published	2014-01-31
Western Africa		Benin	Benin market1	556	556 (sugar)	556 (sugar)	Benin MW	Benin source doc1	Published	2014-02-28
Western Africa		Benin	Benin	556	556 (sugar)	556	Benin MW	Benin source doc1	Submitted	2014-08-31

- Download: If you download the data by clicking this button you will get the CSV file shown below.
  - There is one column per Data Series with the original price
  - Followed by one column per Data Series with the common currency price
  - Followed by one column per Exchange Rate
  - One row per Collection Period

Figure 21: Download

	A	B	C	D	E	F	G	H	I	J
1	market	Benin market1, Benin	Benin market1, Benin	Benin market1, Benin	Benin market1, Benin	Benin market1, Benin				
2	product	555 - wheat (benin)	556 - 556 (sugar)	557 - 557 (Maize)	558 - 558 (Beans)	559 - 559 (Peas)	555 - wheat (benin)	556 - 556 (sugar)	557 - 557 (Maize)	558 - 558 (Beans)
3	price_type	Retail	Retail	Retail	Retail	Retail	Retail	Retail	Retail	Retail
4	unit	12 kg	20 litres	50 kg	700 g	Tonne	Litre	Litre	Litre	Litre
5	currency	KES	KES	KES	COP	CNX	USD	USD	USD	USD
6	product_source	Local	Local	Local	Local	Local	Local	Local	Local	Local
7	is_staple_food	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
8	datasourcedocume	Benin MW: Benin	Benin MW: Benin so	Benin MW: Be	Benin MW: Be	Benin MW: Benin MW: E	Benin MW: E	Benin MW: B	Benin MW: B	Benin MW: B
9	1/31/2014	300	100	150	200	250	0.294	0.0588	0.03528	
10	2/28/2014	65	55	105	265	125				
11	8/31/2014	545	150	214	231	691				
12	10/31/2014	600	200	300	400	500				

To extract the data you can right click the Download button:

- Select Copy link
- On the new Macro excel sheet provided, click on the View Tab, then select macros,
- The excel prompts “Create new Html table” then click Run
- Paste the URL
- Press Ok

To refresh the downloaded data extract;

- Using the spreadsheet containing the data,
- Place your cursor on a cell and right click on it,
- Click on the Refresh option
- The data is refreshed in less than a minute

The figure below shows an example of the data once it has been refreshed.

Figure 22: Refreshable Microsoft Excel from the New FDW Web Query URL

geographic_group	feawsnet_region	country	market	cpcv2	cpcv2_description	product	source_organization	source	
1	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
2	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
3	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
4	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
5	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
6	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
7	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
8	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
9	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
10	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
11	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
12	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
13	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
14	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
15	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
16	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
17	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
18	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
19	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
20	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
21	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
22	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
23	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
24	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
25	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
26	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
27	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
28	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
29	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
30	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
31	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/
32	Caribbean	Central America and Caribbean	Haiti	Cap Haitien	01701C	Beans, dry, black	Dry Beans (Black)	CNSA/FEWSNET, Haiti	CNSA/

- Browse: From the chosen data series within the selected data set, when you click Browse, you will get a table showing the information from the chosen data series classified according to the HO setting (defined metadata). I.e.: a table with the first Market Series from the different collection periods shown under 'Date'
  - You can scroll down to see the other Data Series
  - Each row represents a data point of the data series
- Chart: useful tool for analyzing commodities across markets and time where a graph line to represent each product price is generated against a time period. In the case of the data set, when such time periods are comparable, you will be able to visualize the differences.
  - For a Data Series whose schedule is Monthly if one uses the overview map (small chart at the bottom) to zoom to the smallest range possible, the smallest it goes is a month e.g. Jan '13, Feb '13, Mar '13 etc. The smallest range

one can zoom into is equal to the Schedule of the Source Document - in this case monthly.

- For mixed Data Sets (those that contain monthly and non-monthly series) the minimum range one can zoom into is set equal to the smallest schedule of any of the data series. For example, if one has a dataset that contains data series with a quarterly schedule, another with a monthly schedule and the last with a weekly schedule, then the minimum range possible will be set to a week.
  - On a weekly schedule, weekly data will be visible on the chart data points throughout the trend line. The tables will also indicate when there has been a change of schedule by looking at the dates.
  - When clicking on 'Chart' there is a loading message "Loading"
  - The system displays a message that there is no data to display when no data is found in the price data set selected.
  - When there is a missing data point, the value of the line just stops and there is a gap until data is again available.
  - Date pickers have drop down calendars where a user can select a date without having to worry about the required date format.
  - The Y-axis is labelled with currency or unit of measure, e.g. a label might be the price in USD per Kg.
  - A user can view the common currency when hovering over items.
  - There are values on the y-axis and major and minor tick marks to help judge values.
  - You can change the time period displayed on the screen by using the Zoom buttons, or by entering the *From* and *To* dates directly, or by dragging the edges of the window in the overview map underneath the main chart.
  - Hovering over a point in the chart will display the full details for that Collection Period, including the prices in the *Common Unit* and *Currency*.
  - You can export the Chart as an image by clicking *chart context menu* in the top right corner above the *From* and *To* date fields.
- History: Is the Detail Audit Trail Access

### 6.3. TRADE FLOW DATASET

Window: Add Trade Flow Data Set

- Name: Enter a name that can identify the Data Set. I.e. Potatoes Cross Border Data Set
- Common Units of Measure: Select where relevant. I.e. In this case it will be the weight unit Kg.
- Data series: From Available Data Series narrow your search by typing, i.e. potatoes and select with the arrows those that are relevant for your data set.
- Visibility and Owner must be selected as required
- Data Set Parameters: Select the valid choice from a dropdown list provided in order to set the required schedule.
- You will be able to access your Data Set from the Trade Flow Data Set screen list from where to click to access it.
- You may copy the link into your browser URL box and you will be able to see the data under the relevant columns, where the values will already be converted into the common units selected when defining the metadata.

#### Window: Change Trade Flow Data Set

- Excel Web Query URL: you can copy the link provided to post it in Excel in the Web Query Download. If you pull the data from the Data Warehouse into your excel sheet, this will be helpful to populate the spreadsheet. This can then be used as a refreshable spreadsheet.
- Download: You can also download the data and this will be done in CSV format
- Browse: If you browse, the data will be displayed as a data table
- Chart: If you click on Chart the data will be displayed in a graph.

## 6.4. DOWNLOAD SURVEY DATA

Downloading survey Data is very useful for Data Analysis because you will be working with a Pivot Table Template where you can refresh the Data that has been downloaded from the Data Warehouse.

Window: Survey Indicator Values: Download

To Filter and then Download:

- **Data Domain:** Entering the Data Domain is not required. If you only select the Data Domain, all the survey data from that domain will be selected for download. If nothing is selected all the survey data will be downloaded.
- **Survey:** If you know the name of the survey you would like to access, please select accordingly. Note you cannot select more than one.
- **Country:** If you know the country from the survey data you want to access, type in the country. If you do not select a survey and you select the country, all surveys from that country will download. Some surveys crosscut many countries; in that case this field will not be relevant.
- **Download:** Press download and you will get the CSV downloaded file from where to access the data

This is the data on an excel spreadsheet after downloading:

Figure 23: Survey Data Download

data_source_organization	survey_name	country	geographic_unit_full_name	geographic_unit_name	admin_0	admin_1	admin_2	admin_3	admin_4	population_gr
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			
Epicentre, South Sudan	South Sudan Nutrition Survey 2007-02 (Epicentre)	South Sudan	Pibor, Jonglei, South Sudan	Pibor	South Sudan	Jonglei	Pibor			

### Excel Web Query URL

Another way for downloading the data to import data directly to your spreadsheet is as follows:

1. If you click on Excel Web Query from the top right hand corner of the Download Screen, you will get a dropdown from where to select 'copy link'
2. Open an excel workbook and access 'Data' from the ribbon to select 'From Access' at the top left hand corner of the screen.
3. Copy the link on the address field and press 'Import'

Note at the moment there is a workbook to be distributed to all nutrition users with which, by using the copied link from 'Excel Web Query', you will be able to do data analysis with specific charts and pivot tables that you can customize. Like this the process for updating data will be much easier because you will only need to refresh.<sup>2</sup>

## 6.5. CALCULATED DATASERIES

The Data Warehouse can create new Data Series calculated from other existing Data Series

- They are a query against the existing data, not new data
- There are two types of Calculated Data Series:
  - Relative Prices from existing price data series by dividing one Data Series into another
  - Calculated Indices which are averages of two or more data series
    - Weighted: it means you give a weight to each Data Series in the Index
    - Unweighted: a simple average of the Data Point values

### 6.5.1. Relative Price

A Relative Price is a calculated Data Series that calculates the ratio between two other Data Series for each Collection Period for which both Data Series have a value. The numerator and denominator are each Market Prices. Another term for Relative Price is *price ratio*, which gives you the price of one product expressed in relative terms to the price of another product. Terms of trade are a frequently used and analyzed Relative Price (price ratio) in FEWS NET, which tells you the rate at which one good or service can be exchanged for another and is typically expressed as a ratio. FEWSNET typically uses livestock to grain or daily wages to grain terms of trade, which tell you the number of KGs of grain one can purchase through the sale of a head of livestock of a day of work at the prevailing market rates.

#### Types of Relative Price

- Terms of Trade
  - The rate at which one good or service can be exchanged for another, normally in the same Market
    - When you look at the price of one good at the cost of another good.
    - I.e. Price of Goats in terms of Maize: How many Kg. of Maize (Denominator) does it costs to buy a Goat (Numerator)?
- Real Prices
  - A nominal price divided by a relevant CPI to create a real price.
- Cross Border Price
  - The ratio between two Price Data Series, normally for the same Product in Markets either side of a border

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<sup>2</sup> Refreshable spreadsheets required Excel 2007 or later, and you need to enable editing and macros in Excel when prompted, the instructions for which vary from version to version. Note that refreshable spreadsheets do not work on Mac versions of Excel.

Window: Add a New Relative Price

- Numerator is the part of a fraction that is above the line and signifies the number to be divided by the denominator. For example, when calculating terms of trade (ToT), the numerator is typically the price of a head of livestock or a day or work. Select here a data series Numerator.
- Denominator is the part of a fraction that is below the line and that functions as the divisor of the numerator. For example, when calculating terms of trade (ToT), the denominator is typically the price of a bag of grain. Select here a data Series Denominator.
- Name: Enter a Name for the Relative Price. The name should help you or others to identify what the Relative Price calculates. I.e. Garissa, Kenya, cattle for Maize.
- Common Units: To allow comparisons of prices. If you leave these fields as they are, everything would be converted into kg, litres, or individual items.
- Currency: Choose a currency to calculate the Relative Price and the system will convert the Data Series entered into that currency.
- Start and End Dates: Choose the dates for which you would like the Relative Price to account for the Collection Periods of the selected Data Series (optional). By default if left blank it will choose all the available Collection Periods.
- Description: Enter a description of the Relative Price (optional)
- Visibility: Owner, Group, Public

The FDW allows for a private area for personal Data Sets and calculated Data Series. This implies that:

- FOs can add and edit and use their data sets but cannot edit *Group* and *Public* data sets.
- NTM and RMS can add and edit their own data sets as above, but can change ownership within their FO/RO and change Visibility to the *Group* option.
- M&T can add and edit their data sets, can view everything and change the Visibility of a dataset to *Public* option.
- Owner: If you are adding a new Data Set, your name will be appearing. If you are accessing an already existing one, you will be able to see who added it.
- Save: You can click on *save and add another* to continue adding Relative Prices or *save and continue editing* to remain on the same Relative Price for editing. The Relative Price will be available when accessing Single Data Series under Data Analysis.

Window: Select Relative Price to Change

It is from this window that you may add a Relative Price as explained when under the relevant window.

When entering this window you can search for the Relative Price you are looking for. There is a list under the Name column that will facilitate your search, or enter key words from the name to narrow your search. The visibility column will allow you to see if you can have access to the Relative Price you are interested in. If you find you can't access it you may ask the owner or the HO for permission.

If you click on the name of a Relative Price the system will take you to the following window.

Window: Change Relative Price

- Numerator and Denominator will have a selection that you can change by deleting it first and adding another one instead.
- Name: here you may edit the name if you require.
- Units of Measure and Currency can also be changed.
- Start and End dates: You can narrow the data you are querying the system if you enter the date range when you would like the data values to count.
- Visibility / Owner: If you have been contacted to make a specific Relative Price available, it is from here that you can give access to others.
- Delete: If you want to delete a Relative Price it will be from here that you can do so, provided you have the rights. The click on Go.
- Save: If you made any changes click on Save.

Note: To add a Relative Price to a Data Set, please access the Relative Price from Single data series and follow the instructions from there.

### 6.5.2. Calculated indices

- Similar to a CPI, but using a custom basket of prices
- A Calculated Index can be:
  - Weighted: more accurate but requires appropriate weights to be determined manually.
  - Unweighted: Simpler but less accurate
- The values are calculated automatically from the underlying Data Series

#### Window: Add Calculated Index

- Name: Write the Name you want the Calculated Price Index to be identified.
- Base period start and end: The base period from when the 'Base Value' will be 100 (an average).
- Base value: Average from which calculations take place to easily see trend changes.
  - Will facilitate understand the value changes throughout time in percentages
  - This is relevant when a big change occurs and the data must be re-based (i.e. in countries with high inflation it rises to up to 400-500). It is relevant because when data was collected all the historic data was loaded and throughout the years price changes are big and so it must be re-based to make sense of the data in an easy way.
    - Such re-base average (100) will be between the base period start and the base period end.
    - Bear in mind the start and end dates of the base period are obligatory, otherwise the system will not work.
- Currency: When you select the currency, the system will automatically convert the individual price series from any currency to the currency that is selected.
  - If the Price index value is calculated from data series with secondary rates ensure that you have entered the exchange rate to the currency in which you want the calculation to be made.
  - I.e. SOS: One of Somalia's currencies which is not part of the international financial system will always be a secondary rate and therefore if one of the Price Series is in SOS and your selected currency is USD, you will then ensure the exchange rate for SOS-USD exists in the system for the period dates you would like such calculation to be made.
  - Exchange rates must be entered from Price under Dataseries Management.
- Weighted? To create an Unweighted Price Index, please do not select this option.
  - Unweighted: When only selecting the price index components
  - Weighted: When after selecting the price index components you add a weight to each of them
- Start and End Dates: Optional. By default it will select all the available data within the selected time data series

- Description: Optionally you can explain the purpose of the calculated index you are creating.
- Visibility / Owner: If you have been contacted to make a specific Calculated index available, it is from here that you can give access to others
- Calculated index components: To create an Unweighted Price Index, please select the Data Series you will need but do not add the weights.
  - Data Series: Select the data series you will need.
  - Weighting: Include the weighting values
  - Add another Calculated Index Component: You may add as many components as you like. If weighting, you must ensure the weightings add up to 1.

Weighting Example:  $[X+Y+Z = 1]$

- Nairobi Sales ÷ [Sales in Nairobi + Kampala + Arusha] = X
- Kampala Sales ÷ [Sales in Nairobi + Kampala + Arusha] = Y
- Arusha Sales ÷ [Sales in Nairobi + Kampala + Arusha] = Z

An unweighted price index is a calculated index created by FDW-P

- At the moment there are some calculated indexes on an excel workbook that both F.O. and H.O. use (unweighted)
- These are a straight average: i.e. East African Maize Prices based on three components (Nairobi, Kampala, and Arusha): the cost of each converted into USD/ per Kg added and then divided by 3.
- This is not the ideal way of doing it because is not proportionate to the population size of each component.
- But it is done as such because excel does not have the capacity in terms of the difficulty in maintaining the formulas in excel.
- In reality when creating an index should almost always be weighted

Note: To add a calculated index to a Data Set, please access the calculated index from Single data series and follow the instructions from there.

## 7. DATASERIES MANAGEMENT

This is relevant for managing data series that require entering more data from outside the Data Warehouse so that analysis can be done in different ways.

Prices: So far the system only manages prices data series. In order to do that the HO will usually be in charge to set up the Metadata as explained next.

### 7.1. PRICE

#### 7.1.1. Exchange Rates

Market exchange rates are an essential part for managing prices data in the system. After the Metadata management of currencies under the Common, where currencies have been entered, entering the following information is required to set up Exchange rates:

- From currency xxx to currency xxx
- Rate type:
  - Interbank: the monthly averages from OANDA
  - Government: i.e. official fixed exchange rates
  - Secondary: i.e. unofficial exchange rates

Note: The system uses Interbank then Government then Secondary rate types. Official Exchange Rates will be entered by the HO. However, E.g. for Somalia we don't have official exchange rates, so we use the secondary ones and these secondary rates are entered by the FO. Exchange Rates are part of the Data Series Management module under Price. An Exchange Rate will be a Data Series at the same level in the hierarchy as Market Product, and the actual values for each month will be in Exchange Rate Value, which will be a subtype of Data Point. The Exchange Rate Values will be entered or uploaded as a Data Collection in the same way as the other data: In Data Entry – Add a New Data Collection.

- Market
- Source Document

#### 7.1.2. Market Products

Market products are added, imported or exported from here. The metadata for Market products must be entered from Metadata Management and then set up when adding a market product here. The relevant metadata is:

- Market
- Product
- Source Document
- Unit
- Currency
- Price type
- Product source
- Staple food?

#### 7.1.3. Price Indices, e.g. CPI

This functionality is for externally provided price index, which is a Consumer Price Index. The system can calculate Price Indices; however there is an option to enter already calculated price indices such as a Consumer Price Index (CPI). You can Add a price index or import price indices by uploading an excel sheet with the following metadata:

- Data source organization and Data Source Document
- Index name
- Base period start and the Base period end
- Base value: usually 100
- ID
- Specialization type
- Created and Modified
- Description
- Datasets
- Is calculated
- Data series

A Price index is a Data Series that records the value of a Price Index for a specific Collection Period for an external price index, typically a Consumer Price Index (CPI) for a Country.

A Price index value is a Data Point that records the value of a specific calculated Price Index (calculated by FEWS NET as a “Calculated Index” or obtained from a secondary source as a Price Index) for a specific Collection Period.

To search a Price index value, enter details or keywords of the price index on the search box under Single Data Series. The system will refresh the page displaying the total search results appearing. Click on the desired result and you will have different options to view the data.

#### Window: Select Price Index to Change

If you want to view or access an already existing price index that has not been calculated by the system you can access it from here. The list provided has three columns:

- Country: If you want to see all price indices from one country this column will be very useful.
- Name: If you have price indices from the same country, the name provided will distinguish the price indices whilst informing you about the type of data it contains.
- Source Document: The Source Document is relevant because you might have the same price index from one country but belonging to different Source Documents.

If you access a price index from here you can edit or make changes. You may also add a price index.

### Window: Add Price Index

- Country
- Name: Write the Name of the Price Index you want to add.
- Base period start and end: The base period from when the 'Base Value' will be 100 (an average).
- Base value: Average from which calculations take place to easily see trend changes
  - Will facilitate understand the value changes throughout time in percentages
  - This is relevant when a big change occurs and the data must be re-based (i.e. in countries with high inflation it rises to up to 400-500). It is relevant because when data was collected all the historic data was loaded and throughout the years price changes are big and so it must be re-based to make sense of the data in an easy way.
    - Such re-base average (100) will be between the base period start and the base period end.
- Source Document: You must enter the Source Document from where the value belongs.
- Start and End Dates: Optional
- Description: Optionally you can add a description of the Price index you are adding.
- Save: press save and add another one, continue editing or finish your task.

### Window: Import Price Indices, e.g. CPI

To import a price index value you can upload a file through the importer provided your file has the data for the metadata listed here.

1. Select the Format of your file
2. Click on Browse and select the file
3. Press Submit after confirming the import preview is correct
4. The system will display a success message to indicate data has been imported. In the event the data are not complete, an error message will be displayed on this page.

## 7.2. TRADE

### 7.2.1. Trade Flow Quantities

This module deals with Data Series for the Cross Border Trade. When selecting Trade Flow Quantities, the user will be able to add, import and export trade flow quantities.

### Window: Add Trade Flow Quantity

From this window you can add a new data series.

- Reporting Country: the user must select a country from the list provided
- Border Point: It is a cross border trade point. It can be in any country at either side of the border: at the reporting country or the partner country. If it is the reporting

country (most likely), the border crossing point will be in that country. It will be the last city or the last point that you cross through before you get into the next country.

- Partner Country: the user must select a country from the list provided
- Product: you must select the product at stake in the trade flow. I.e. Maize (white). If you type it, the system will provide you with a narrowed search list from where you can pick the product ensuring the code is the correct one.
- Unit: You must select the unit of measure from the drop down list.
- Flow Type: There are three possible alternatives from which you can pick the relevant one.
  - Export
  - Import
  - Re-export
- Documentation Type: There are two possible alternatives from which you can pick the relevant one.
  - Formal: Level of documentation is fully documented
  - Informal: Level of documentation is not fully documented
- Source Document: Type in the name and the system will narrow your search with a list of the relevant options.
- Save: After saving, the system will have a Trade Flow Data Series that can be accessed when clicking on Trade Flow Quantities.

#### Window: Import Trade Flow Quantities

Bear in mind that before importing the data, the data series must be defined by setting the metadata under Add Trade Flow Quantity.

Figure 24: Excel File Example to Import

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	Country	Border	Code	Date	period d	Year	Mon	Code2	Week#	Documen	Code3	Direction	Code4	Source	Destinati	Pri	
2	Uganda	Busia	1204	1-31	Mar	31-03-2011	2011	March	3	Informal		2	Out	2	Uganda	Kenya	M
3	Uganda	Busia	1204	1-31	Mar	31-03-2011	2011	March	3	Informal		2	Out	2	Uganda	Kenya	M
4	Uganda	Busia	1204	1-28	Febr	28-02-2010	2010	February	2	Informal		2	Out	2	Uganda	Kenya	M
5	Uganda	Busia	1204	1-31	Aug	31-08-2014	2014	August	8	Informal		2	Out	2	Uganda	Kenya	M
6	Uganda	Busia	1204	1-30	Sept	30-09-2014	2014	Septembe	9	Informal		2	Out	2	Uganda	Kenya	M
7	Uganda	Busia	1204	1-28	Febr	28-02-2011	2011	February	2	Informal		2	Out	2	Uganda	Kenya	M
8	Uganda	Busia	1204	1-28	Febr	28-02-2009	2009	February	2	Informal		2	Out	2	Uganda	Kenya	M
9	Uganda	Busia	1204	1-31	Janu	31-01-2014	2014	January	1	Informal		2	Out	2	Uganda	Kenya	M
10	Uganda	Busia	1204	1-28	Febr	28-02-2014	2014	February	2	Informal		2	Out	2	Uganda	Kenya	M
11	Uganda	Busia	1204	1-30	April	30-04-2011	2011	April	4	Informal		2	Out	2	Uganda	Kenya	M
12	Uganda	Busia	1204	1-31	Dec	31-12-2014	2014	December	12	Informal		2	Out	2	Uganda	Kenya	Be
13	Uganda	Busia	1204	1-30	Sept	30-09-2012	2012	Septembe	9	Informal		2	Out	2	Uganda	Kenya	M
14	Uganda	Busia	1204	1-31	Aug	31-08-2012	2012	August	8	Informal		2	Out	2	Uganda	Kenya	M
15	Uganda	Busia	1204	1-31	Octo	31-10-2012	2012	October	10	Informal		2	Out	2	Uganda	Kenya	M
16	Uganda	Busia	1204	1-31	July	31-07-2006	2006	July	7	Informal		2	Out	2	Uganda	Kenya	M
17	Uganda	Busia	1204	1-31	Janu	31-01-2012	2012	January	1	Informal		2	Out	2	Uganda	Kenya	M
18	Uganda	Busia	1204	1-31	May	31-05-2011	2011	May	5	Informal		2	Out	2	Uganda	Kenya	M
19	Uganda	Busia	1204	1-30	Nov	30-11-2013	2013	Novemb	11	Informal		2	Out	2	Uganda	Kenya	Be
20	Uganda	Busia	1204	1-31	May	31-05-2010	2010	May	5	Informal		2	Out	2	Uganda	Kenya	M
21	Uganda	Busia	1204	1-31	Janu	31-01-2011	2011	January	1	Informal		2	Out	2	Uganda	Kenya	M
22	Uganda	Busia	1204	1-31	Aug	31-08-2012	2012	August	8	Informal		2	Out	2	Uganda	Kenya	Be
23	Uganda	Busia	1204	1-31	Aug	31-08-2006	2006	August	8	Informal		2	Out	2	Uganda	Kenya	M
24	Uganda	Busia	1204	1-29	Febr	29-02-2012	2012	February	2	Informal		2	Out	2	Uganda	Kenya	M
25	Uganda	Busia	1204	1-30	Sept	30-09-2013	2013	Septembe	9	Informal		2	Out	2	Uganda	Kenya	M
26	Uganda	Busia	1204	1-31	Dec	31-12-2013	2013	December	12	Informal		2	Out	2	Uganda	Kenya	M
27	Uganda	Busia	1204	1-30	June	30-06-2012	2012	June	6	Informal		2	Out	2	Uganda	Kenya	M
28	Uganda	Busia	1204	1-31	Dec	31-12-2014	2014	December	12	Informal		2	Out	2	Uganda	Kenya	M
29	Uganda	Busia	1204	1-31	Janu	31-01-2010	2010	January	1	Informal		2	Out	2	Uganda	Kenya	M
30	Uganda	Busia	1204	1-30	Nov	30-11-2008	2008	Novemb	11	Informal		2	Out	2	Uganda	Kenya	Be

Note: A template must be provided so that FEWS NET knows the type of data that needs to be in the file.

- The file to upload must be ready and contain the relevant column names in red
- Click on Choose the file to select the relevant file
- Select the format from the dropdown list
- Submit
- A preview of data to be imported will appear and you can click on Confirm Import if you are satisfied with the results.
- The Data Warehouse will import the Data Series accordingly.
- When the Data Warehouse imported the data series, these will be listed under the relevant columns.

### 7.3. IMPORT

The import functionality will be useful to enter data in bulk from an external spreadsheet into the Data Warehouse.

Bear in mind that you will need to submit the data under Data Processing from the Dashboard.

#### 7.3.1. Import Market Prices

You may enter Market Prices into the Data Warehouse by uploading your spreadsheet ensuring that all columns headings are populated accordingly.

- Upload the relevant file
- Select the relevant format

#### 7.3.2. Import Price Index Values

You may enter Price Index Values into the Data Warehouse by uploading your spreadsheet ensuring that all columns headings are populated accordingly.

- Upload the relevant file
- Select the relevant format

### 7.3.3. Import Exchange Rates Values

You may enter Exchange Rate Values into the Data Warehouse by uploading your spreadsheet ensuring that all columns headings are populated accordingly.

- Upload the relevant file
- Select the relevant format

### 7.3.4. Import Trade Flow Quantity Values

You may enter Trade Flow Quantity Values into the Data Warehouse by uploading your spreadsheet ensuring that all columns headings are populated accordingly.

- Upload the relevant file
- Select the relevant format

### 7.3.5. Import Survey Indicator Values

You may enter Survey Indicator Values into the Data Warehouse by uploading your spreadsheet ensuring that all columns headings are populated accordingly.

- Upload the relevant file
- Select the relevant format

## 8. METADATA MANAGEMENT

Metadata are the smallest parts from where to build and classify data so that it can be gathered and be used for analysis and download.

### 8.1. COMMON

On the one hand, when classifying data, it will be from here that the HO will be able to:

- Establish what Classified products the system will recognize when uploading the data,
- Organized according to Countries from a list similarly provided, that is categorized within Country groups.

#### Window: Add Country

- ISO 3166-1 Alpha-2:
- ISO 3166-1 Alpha-3:
- ISO 3166-1 Numeric:
- English name:
- French name:
- Spanish name:
- Admin 1 name:
- Admin 2 name:
- Country groups:
- Save:

On the other hand, to ask the system for data values that can be compared in units that we can understand, or that can help us assess or analyze trends, the HO will enter:

- Currencies so that exchange rates can be set and updated to serve the purposes under Dataseries Management.
- Units of measure conversions that rely on
- Units of measure that have similarly been entered in the system before.

## 8.2. PRICE

- Markets: Prices rely on the Markets, and markets rely on the location on the spatial application explained in the next point. Markets metadata will be entered by the HO, so that FO can sync data from their markets upload that the system will recognize.

### Window: Select Market to Change

A market is the name of the actual market within a given town, village, or city, where the data (prices) is collected.

From this window you can view the market after selecting it, you can add a market, Import markets and Export markets.

### Window: Add a Market

- Name: You must enter the name of the place (e.g. town or city) where the prices are collected, followed by the name of the Market if it is different.
- Country: Select the country where the market is located
- Description: Optionally add few relevant details about the Market
- Admin 1 /2: Enter names of the *administrative levels* of the markets
- Aliases: If a market name has two different spellings, add the second name to the *Aliases* field. The aliases need to be a ~ separated string with a leading and trailing ~  
For example: ~Hargeysa~Hargeisa~.
- Urban or Rural? Select whether the market is *rural* or *urban*
- Start Month: The first month of the Market year
- Location: Select the area with the zoom and arrows provided and use the buffer shape or circle tool to help you draw it.
- Delete All Features: This will help you undo your selection
- Save: Add another, continue editing or finish your task.

### Window: Import Markets

1. Ensure your file has the corresponding data under the following fields:

- id
- market
- country
- admin1
- admin2
- alias

- urban\_rural
  - latitude
  - longitude
  - location
2. Select the Format of your file
  3. Click on Browse and select the file
  4. Press Submit after confirming the import preview is correct
  5. The system will display a success message to indicate data has been imported. In the event the data are not complete, an error message will be displayed on this page.

Window: Export Markets

- Select the Export Format and click Submit. You will be able to access the file with all available markets and corresponding information.

### 8.3. SPATIAL

We have built the first half of the spatial module and central to this module is the generic concept of Geographic units. Admin units are one specific type of Geographic units. Livelihood zones is also another specific type of Geographic Unit, and you may have other types of Geographic units.

For Admin units, we can organize them into a hierarchy, Admin 0 (country) being the highest, followed by Admin 1, Admin 2, Admin 3 and finally Admin 4.

Geographic shape model allows us to store boundary data, so that when you are loading Geographic units you can store the shape bar if you need to.

The Season's model is used to specify the seasons.

Notes:

- Geographic unit sets: This allows versioning of a set of Geographic units e.g. Kenya Admin units (1963-2010), Kenya Admin units (2010-Present).
- Geographic unit types: Admin 0, 1, 2, 3, 4 and livelihood\_zone.

Window: Add Geographic Unit Type

- Code:
  - Name:
  - Administrative unit?
  - Description:
  - Save:
- 
- Geographic units: Each Geographic unit that we have exists in a hierarchy and has to be of a particular Unit type. I.e. Abata is Admin 3, in Sudan and a Child of Zalingei in West Darfur. (full name: Abata, Zalingei, Western Darfur, Sudan)

Window: Add Geographic Unit

- Name:
- Code:
- Unit type:
- Country:
- Aliases:
- Description:
- Position:
- Relative to:
- Full name:
- Versions:
  - Geographic unit set version
  - Add another Version
  - Shape
  - Delete
- Save:
  
- Livelihood zone types: which come from Nutrition spreadsheets (Agropastoral, Coastal, IDPs, Mixed Farming, Pastoral, Riverine, Urban). More can be added if required
  
- Livelihood zones: A specific type of Geographic unit which shares a similar Livelihood.
  
- Seasons: Name, Season type – Wet, Dry, Mild, Spring, Summer, Fall, Winter, Monsoon - and Geographic unit – Normally a country). For each of the survey locations we get to pick a Season.

Window: Add a Season

- Name: You should always enter the name of the country followed by: and the actual season name.
  
- Season Type: Wet, Dry, Mild, Spring, Summer, Fall, Winter, Monsoon.
  
- Geographic Unit
  
- Start and End Month: when the season starts and ends.
  
- Production Start and End Month
  
- Aliases: When a Data Collection containing data imported, the Data warehouse can only match the geographic unit it contains if the actual spelling is the one used in the Data Warehouse. In some *Countries*, e.g. Somalia, place names may have many slight variations in spelling and the spelling used by FEWS NET and maintained in the

Data Warehouse may not be the same as the spelling contained in the spreadsheet received from Data Source Organizations. In such a situation, geographic units in the spreadsheet would not be recognized unless the user changes the spellings to match the Data Warehouse before uploading the spreadsheet. In order to allow spreadsheets to be uploaded without manual changes, geographic units that contain alternative spellings are entered in the Aliases field. The aliases need to be a ~ separated string with a leading and trailing ~ For example: ~Hargeysa~Hargeisa~.

Note: The aliases don't need to include the Geographic unit used by the Data Warehouse, only the alternative spellings, if any.

## 8.4. SURVEY

Generally speaking surveys are questions, where the answer of questions will feed the variables that make up an indicator. In terms of the Survey application in FDW the survey metadata is being entered as follows:

- Surveys
- Indicator groups will gather individual indicators according to groups. I.e. in Nutrition one group would be Mortality indicators where mortality rate would be separated according to age ranges or genre.

### Window: Add Indicator Group

- Abbreviation: The abbreviation will be specified by the Home Office
  - Name: The name will be given in relation to the abbreviation
  - Description
  - Data Domain: The indicator will be from a Data Domain
  - Display Order
- 
- Indicators: Regardless of the group where indicators belong to, Indicators must be first entered individually.

### Window: Add Indicator

- Abbreviation
- Name
- Indicator group: The drop down list of indicator group will only show groups that have been added in the system.
- Display order
- Has confidence interval? If the indicator has a confidence interval the box must be ticked. And as a consequence when adding a Survey, the default indicators from the selected Data Domain will appear with the 'Confidence Interval' box ticked.
- Default indicator: if the Home Office selected this indicator as 'Default Indicator', when selecting the relevant Data Domain, this indicator will be included in the list when adding a survey.
- Description
- Save

- Localities can be entered to gather indicators within a group but also within localities. Therefore we will be able to measure indicators to know about trends according to zones. Note 'localities' in Surveys is connected to the spatial application. Therefore, before adding a locality here, the HO must ensure the relevant metadata has been entered under the spatial application first.

#### Window: Add Locality

- Geographic unit: These are FEWS NET standard geographic areas occupied by a certain population group. The Geographic unit makes the first part (i.e. before the semicolon) of the locality name. From FEWS NET Standard Geographic unit list, the Home Office will select one.
- Population group: Is a group of people living in a geographic unit, it can be a community, ethnic group, women or however you may want to define it. The population group makes the second part (i.e. after the semicolon) of the locality name. i.e. Oromo Ethnic group
- Dominant livelihood zone: The main activity for which a given population group is involved. There is a dropdown list from where to select one.
  - Agropastoral
  - Coastal
  - IDPs
  - Mixed Farming
  - Pastoral
  - Riverine
  - Urban

These are metadata and can be managed using from Metadata Management | Spatial | Livelihood Zone Type

#### Window: Add Livelihood Zone Type

- Code:
- Name:
- Description:
- Save:
- Survey types is a relevant metadata setting so that when uploading indicator values, depending on the survey type, the system will be able to read it or classify it in a standardized manner.

#### Window: Add Survey Type

- Code:
- Name:
- Description:

## 8.5. WAREHOUSE

There are other crosscutting aspects to all the data that the system is dealing with:

- **Data Usage Policies:** so far there are two options; the data can be FEWS NET only, meaning only FEWS network will be using the data. If it is set to Public, it means the data is available publicly.

Window: Add Data Usage Policy

- Name:
- Description:
- Source Documents refers to the type of document is used as a primary source of information

Window: Add Source Document

- Source organization
  - Name
  - Description
  - Usage policy
  - Usage last change:
  - Source type:
    - Manual
    - Microsoft Excel
    - Comma separated values
    - Tab separated values
    - Web service
  - Display order
    - Market then Product
    - Product then Market
  - Schedule
    - Start
    - End
    - Schedule: Weekly, monthly, etc.
- 
- Source organization refers to the organization in charge for releasing a Source Document with the data that FEWS NET will be using.

Window: Add Source Organization

- Name
- Description
- Country
- Source Documents (Add another Source Document)

## 9. SYSTEM ADMINISTRATOR

It is from here that access rights can be assigned, and that administration of users and oversight of actions taken can be possible.

## 9.1. ADMINISTRATION

Log entries can be seen from here. This refers to the actions taken and the relevant information required: Action time, User, Content type, Object, Action and Change message.

## 9.2. USERS AND PERMISSIONS

Users rights can be assigned from here and such access rights can be organized in Groups.

## 9.3. COMMON

Field Offices, in charge for data entry, will be added from here in order to be able and make groups of users.

## 9.4. SESSIONS

Sessions can have a record and you may access the Session key, the user and the user mail.

## 10. FDW- PRICES

The FEWS NET Data Warehouse (Price) - FDW-P is a web application for entering and analyzing food and commodity price data utilizing Product and Unit of Measure codings that facilitate comparing products across countries. With built-in functionality for converting into common currencies and weights, you can view multiple price series from different countries across the globe in the local currency, or expressed in user-defined common currency (e.g. USD). The purpose of the FDW-P is to improve data, information and knowledge management for FEWS NET Field, Regional and Home Offices. The FDW-P gives you the ability to download your data, so that you can carry out your analyses in an offline setting using Excel or other software. This can be an advantage when internet connections are unstable.

The price component is only one of many sections of the Data Warehouse. Other sections include Nutrition, Agricultural Production, and Livelihoods, that is, studying the ways in which people obtain food and income and engage in trade. You can think of the system as a collection of related Data Warehouses built on a common foundation.

The system is designed to improve data, information and knowledge management for Field, Regional and Home Offices, including:

- Easier data collection and consolidation
- Improved data quality
- More efficient production of standard reports
- New tools to support online and offline ad hoc analysis

This User Manual covers the collection and management of Market Price data using the Data Warehouse.

The system uses standard Product and Unit of Measure codes and has built-in functionality for converting into currencies and units allowing you to compare data from multiple countries and display prices in a currency and unit of measure of your choice.

The Data Warehouse provides both online and offline analysis tools, including the refreshable Microsoft Excel spreadsheets that can automatically fetch the latest data, to enable offline working when internet connections are unstable.

## 10.1. OFFLINE ANALYSIS USING MICROSOFT EXCEL

The Price Data Warehouse allows you to download your data and undertake your analysis in an offline mode. This can be an advantage when Internet connections are unstable. In addition, this eliminates the potential for errors due to sharing spreadsheets among offices. If an error is made, it is made in only one place, the FDW-P.

### 10.1.1. Refreshing the Data from the Data Warehouse

1. Click on the Options button above the formula bar and select enable content in the options box.
2. On the Parameters tab, enter the month and year for the Reporting month (cell B2).  
Note: This is the month of the last valid data reported
3. Enter the month, day and year of the report in the third row for the Publication Date (cell B3)
4. On the data tab, place cursor anywhere in the data sheet and hold down the right mouse button to access a dropdown menu
5. Select refresh on the dropdown menu.
6. If formatting is lost on any of the charts on the Price Bulletin tab after refresh, use a design template or ask the Helpdesk for assistance on learning how to quickly update the chart formats if you do not have the template for this spreadsheet.

### 10.1.2. Creating a Chart Template

When you first create a chart in Excel, the chart that appears is Microsoft's default design. To quickly change the design, the Chart Template is the answer. After creating your chart, highlight it and select the template to change to your preferred design.

1. Click on a Price Bulletin chart that has the correct formatting.
2. Select the Design menu on the Excel ribbon
3. Select Save Template and give your template a name (e.g., PB 20000 to show that the X-axis reaches a maximum of 20000)
4. When you need to recreate the same chart design, click on the chart requiring this new design.
5. Select the Design menu on the Excel ribbon
6. Select Change Chart Type, click on the new design in the Templates list, and click OK.  
Adjust the x-axis if needed.

### 10.1.3. Creating a New Chart Using the Pivot Table on the Price Series Tab

1. CLICK A CELL IN THE PIVOT TABLE
2. Select the Insert menu
3. Select your chart type in the chart category
4. To move the chart, you may cut and paste the chart to a new location or follow these steps:
  - a. Select the chart
  - b. Select the Design menu on the Excel ribbon
  - c. Click on Move chart
  - d. Choose destination

#### 10.1.4. Creating a Pivot Table in This Workbook

Pivot tables are dynamic and interactive charts that are easily created and assist with analyzing large amounts of data without creating complex formulas. You can rearrange a pivot table in many ways. If you build it to show the same commodity over several markets, you can rotate the row and column headings to display all the commodities in a specific market. Pivot tables can analyze percentage changes in prices over time, provide a list of prices during a specific time period, and become the source table for a chart. The most important step in the process is deciding what you want to know. Follow these steps in your Price Bulletin workbook to create a pivot table:

1. Go to the Data tab and click on any cell in the table
2. Click on the Insert menu on the Excel ribbon, select the Pivot Table icon. The Create PivotTable dialog box will open.
3. Select a table or range is already selected with the name of the data table (New Worksheet is also selected for you as the place where the report will be placed, or you may choose a different location).
4. An area where you build the report and a pivot table field list will appear on the new sheet
5. Tip: The pivot table is active and field list accessible when the cursor is located on any cell inside the table.
6. Decide what you want to know before building the table
7. Move the desired criteria to the Report field by moving the selection to the Report Filter in one of the following three ways
  - a. Select the check box next to the field name in the Field List to move to the appropriate field.
  - b. Right-click a field name and select a location to where you want to move the field
  - c. Select, drag and drop from the field list into the building area
8. You can change the order of the filtered items by clicking and dragging them to new positions in the list or filter.

#### 10.1.5. Additional Information on Analyzing the Data Using Microsoft Excel

The following section will look at how data from the Price Data Warehouse can be analyzed using Microsoft Excel and will cover the topics below:

- Creating a refreshable query
- Pivot Tables
- Pivot Charts
- Additional calculations

#### 10.2. Introduction to Excel and Web Queries

Microsoft Excel in combination with Web Queries is an excellent tool for data analysis: it has a good feature covering statistics, crosstabs (Pivot Tables) and graphing and charting; is familiar to most users; works both online and offline; and can be extended with formulae and macros to meet additional requirements.

This document explains how to connect Microsoft Excel to the Data Warehouse using Web Queries so that the spreadsheet and any linked Pivot Tables and charts can be refreshed and updated automatically with new data.

### 10.3. Data Sets

A Data Set is a collection of Data Series in the Data Warehouse that are to be analyzed together. For most situations the starting point for analysis will be to add a Data Set using the web application that contains the Data Series to be analyzed, e.g. all Maize prices in East Africa, or all prices in Honduras, etc. When you add a Price Data Set you can specify the Common Units and Common Currency that will be used to allow prices to be compared.

You can easily select the required Data Series by using the search box above Available Data Series and entering search criteria that match your requirements, e.g. "Kenya Maize" and then selecting all the matching results and then allocating them to the Chosen Data Series

### 10.4. Web Queries

A web query connects Microsoft Excel to a Data Set such that new data can be pulled in easily. The Data Set edit page contains a link labelled Excel Web Query URL at the bottom. You can easily get the correct URL for a web query by right-clicking this link and selecting Copy Link Location or Copy Link Address (depending on the browser). This link is also present on the Data Set Explorer page that allows online viewing of the Data Set using a scrolling grid.

### 10.5. Creating a New Spreadsheet

1. Use Microsoft Internet Explorer to open the Data Warehouse and add or edit the Data Set you want to use. It is important that you use Internet Explorer because Microsoft Excel will use the session cookie that is created when you log in to the application using Internet Explorer to authenticate you when it refreshes the data.
2. Copy the URL for the web query for the Data Set that you want to use to your clipboard.
3. Open a new Excel 2007 Worksheet
4. Select the Data menu and then the From Web ribbon button
5. Paste the URL into the Address input box and press Go
6. Wait for the Import button to become enabled (which will take up to 15 minutes depending on the size of the dataset) and then press it
7. If you get an error saying, "Microsoft Office Excel cannot access the file" make sure that you can access the Data Warehouse using Internet Explorer.
8. If you get a dialog box asking to create an XML Schema press Accept
9. At the dialog box asking where you want to insert the data place the data at  $\$A\$1$  on a blank sheet (this will be the default if you are creating a new spreadsheet)

### 10.6. Creating a Pivot Chart

1. Select the top left cell of the Table, normally  $\$A\$2$
2. Select the Data menu
3. Select the drop-down PivotTable ribbon button and then the PivotChart menu entry
4. Drag and drop the required fields:
  - Row / Axis fields = period\_date

- Column / Legend fields = country, market, product, common\_unit, common\_currency
  - Values = common\_price
  - Report Filter = price\_type
5. Right-click the period\_date field in Axis Fields and change number format to mmm-yy
  6. Select the Change Chart Type ribbon button and convert to a Line Chart
  7. Select the Chart Layouts ribbon button to change to Layout 1 (with a Chart Title and Axis label)

## 10.7. Refreshing a Spreadsheet

Select a cell in the data table returned from the Web Query or go to the Data menu and then press the Refresh All ribbon button.

## 10.8. Tips and Tricks

- Formulate that you add in columns immediately after the last column in a query will be automatically copied for each row in the result set when the query is refreshed
- When you are designing a spreadsheet it is better to create the query table and then delete all but a small representative sample of rows so that as you refine the formulae you need, the spreadsheet does not spend unnecessary time recalculating. Once you have got the formulae working to your satisfaction you can Refresh All to pull back the full data set with the formulae copied correctly.

## 10.9. Creating New Data Series

The HO M&T team must add new Data Series, such as Market Price Series or Price Index Series before FO can upload data into them.

Each Data Series requires a full set of metadata at the time it is added. If you have data that is not currently in the Data Warehouse that you want to add, you should contact HO M&T to discuss adding it.

For Market Price Series you will need the following metadata:

- Country
- Market Name
- Market Latitude and Longitude
- Whether market is rural or urban
- Product Name
- Unit of Measure
- Price Type (is the price retail or wholesale)
- Currency in which the price is measured
- Product Source (Local or Imported)
- Is the product a staple food or not?
- Data Source Organization
- Data Source Document

For specific definitions of these terms, please refer to the Glossary

## 11. FDW- SURVEY

The FEWS NET Data Warehouse (Survey) - FDW-S is a web application for entering and analyzing survey data utilizing indicators values from a range of spatial locality specifications according to a schedule that facilitate the collection of data across countries. With built-in functionality for linking indicators, localities and schedules you can view homogeneous surveys results from different countries across the globe. The purpose of the FDW-S is to improve data, information and knowledge management for FEWS NET Field, Regional and Home Offices. The FDW-S gives you the ability to download your data, so that you can carry out your analyses in an offline setting using Excel or other software. This can be an advantage when Internet connections are unstable.

The nutrition survey component is only one of many sections of the Data Warehouse. Other sections include Price, Agricultural Production, and Livelihoods, that is, studying the ways in which people live, obtain food and income, engage in trade and how such aspects have an effect on their health. You can think of the system as a collection of related Data Warehouses built on a common foundation.

FDW-S application is used for various Data Domains: nutrition, crop production, livestock, etc. It is used for capturing the data from surveys that can be customized accordingly; in other words, it is suitable for generic survey data. We will use nutrition as our example to explain this application.

The system is designed to improve data, information and knowledge management for Field, Regional and Home Offices, including:

- Easier data collection and consolidation
- Improved data quality
- More efficient production of standard reports
- New tools to support online and offline ad hoc analysis

This User Manual covers the Metadata Management for entering Survey Data in FEWS NET Data Warehouse.

The Data Warehouse provides online tools for data entry and downloads for an offline analysis, including the refreshable Microsoft Excel spreadsheets that can automatically fetch the latest data, to enable offline working when internet connections are unstable.

### 11.1. OFFLINE ANALYSIS USING MICROSOFT EXCEL

#### 11.1.1. Refreshable Nutrition Workbooks

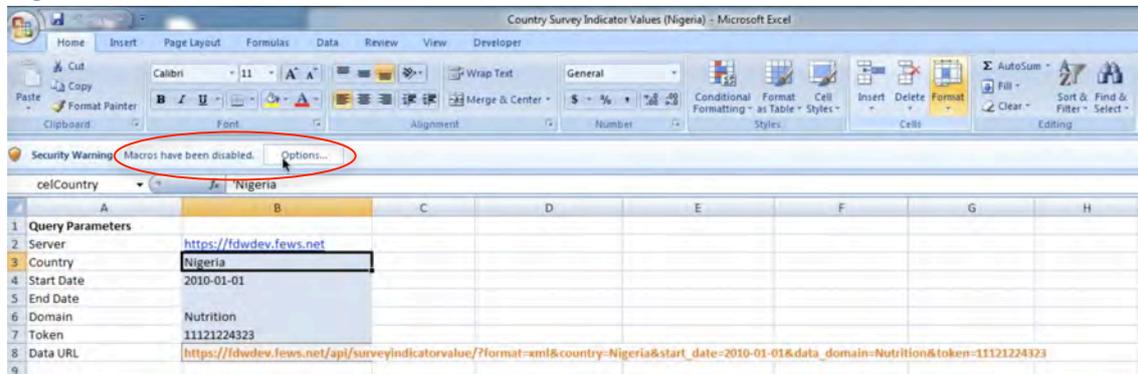
From a given template from a Refreshable Nutrition Workbook you will be able to set:

- Parameters
- Data
- Pivot
- Chart

### 11.1.1.1. Parameters

From an Excel spreadsheet there are some basic parameters to generate the query. If you change any of the parameters, the system will update data bindings, and refresh the data, in other words, the data will also change.

Figure 25: Parameters on a Refreshable Nutrition Workbook



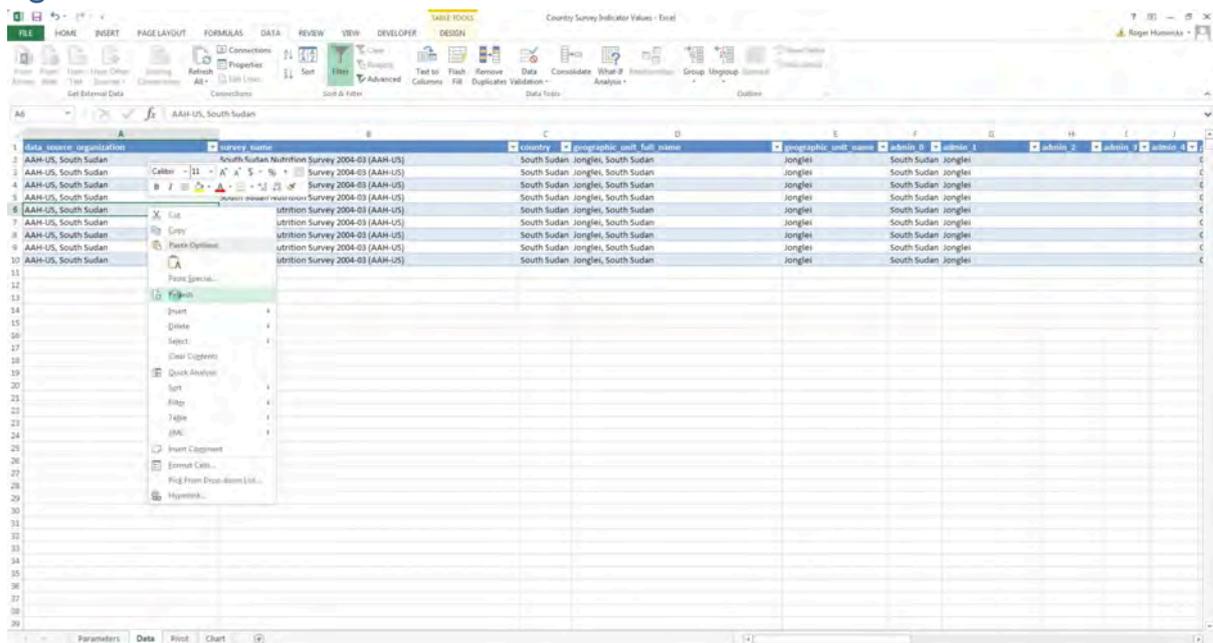
Enable Macros if these are disabled, otherwise nothing will work. Click on Options and select 'Enable this content'

- Server: there are different servers. At the moment this is the draft server because the other one has no nutrition data.
- Country: is the one parameter that users will change. If you type in the country name it will approve the database to get that data
- Dates: Both fields in blank will tell the system to use all the available data.
- Start Date: if you need recent data and you set the start date for later, the system will take less time to refresh/download the data into the spreadsheet. It should not take more than 5 minutes.
- End Date: if you are interested in a certain period, 2-3 years, then you can pick an end date.
  - The Data Domain will always be nutrition
  - Token number is used to authenticate and everyone will have one.
  - Data URL: It builds the URL automatically

### 11.1.1.2. Data

You may refresh data in the Data spreadsheet as many times as you require as indicated on the screenshot below:

Figure 26: Data on a Refreshable Nutrition Workbook

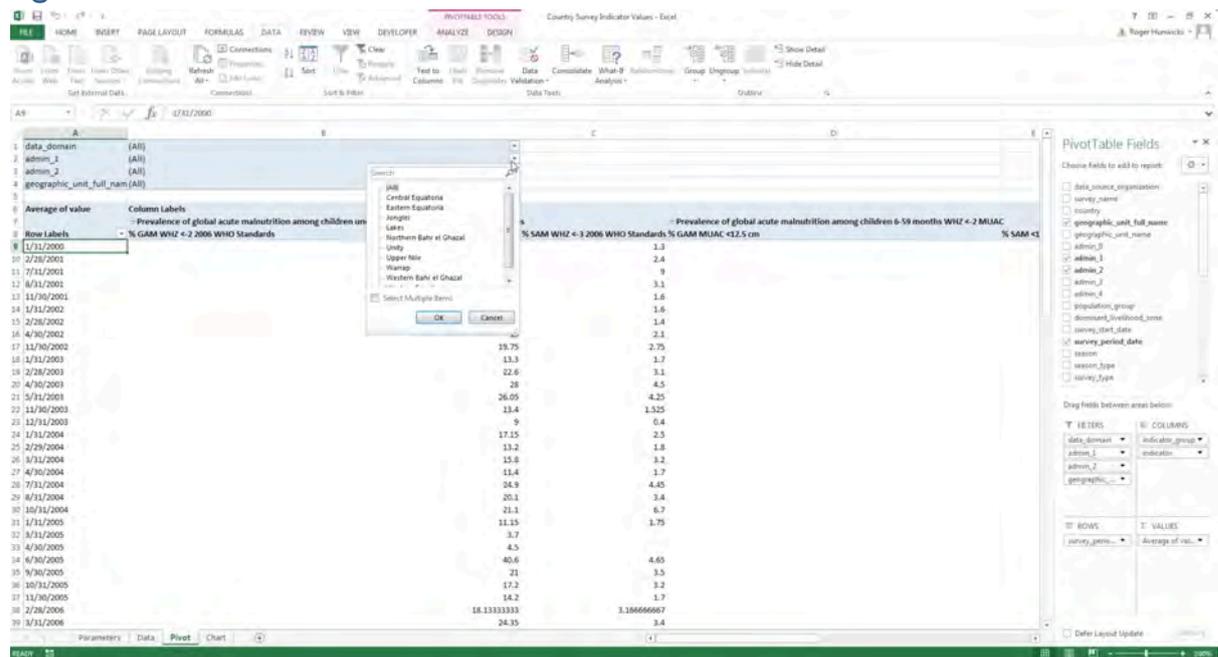


Click on the 'Data' ribbon and right click to select 'Refresh'. This will connect to the database in the background to send the requested data in the correct format to the excel spreadsheet herein. It should take a maximum of 15 minutes to refresh all the data for it to appear on the screen. You will then be able to work with the data offline for analytical purposes.

### 11.1.1.3. Pivot

At the moment we can produce the crosstab interface from the straight data table back from FEWS NET Data. However, the spreadsheet itself is not very useful for analysis because it is difficult to filter out the relevant data we may require, or to cut it down to a particular request. Therefore with the Pivot table you can restructure the data anyway you would like.

Figure 27: Pivot Table on a Refreshable Nutrition Workbook

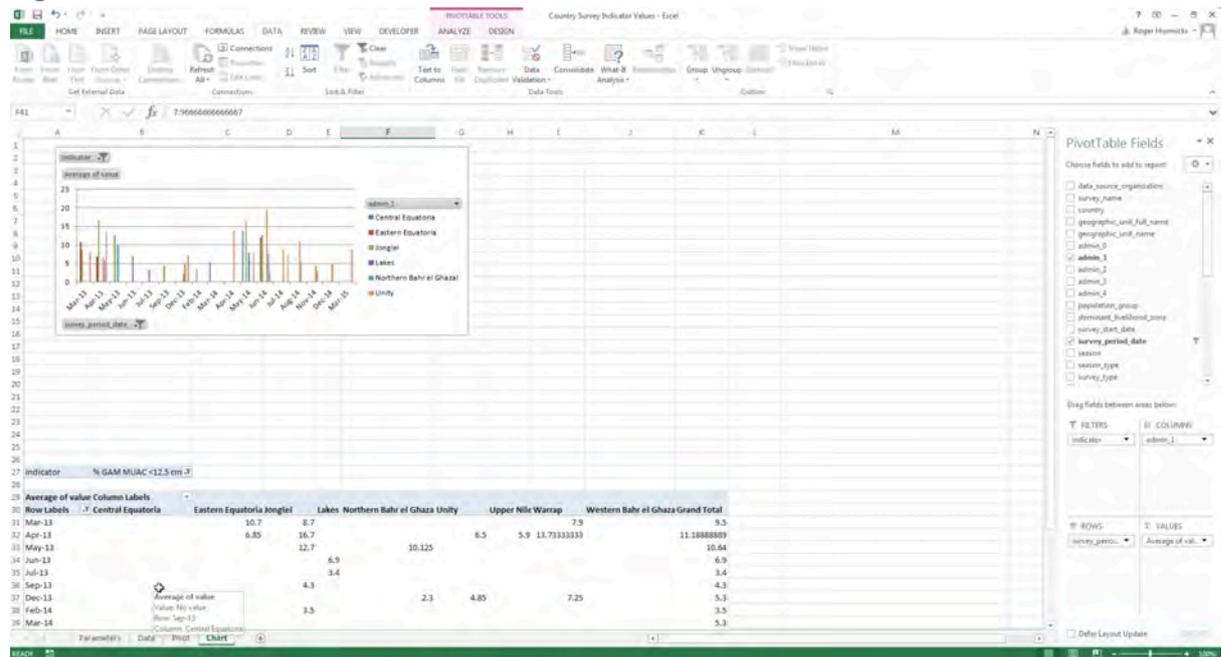


For example you can filter the data by Admin unit as it is shown in Figure 34, or you can take particular indicator groups to push them down or back up again.

#### 11.1.1.4. Chart

If you select the Chart label, you can have the pivot table under the pivot chart and explore the data interactively.

Figure 28: Chart on a Refreshable Nutrition Workbook



For example you can take out the ‘Admin unit’ value out of the equation and look at a straight measure. If looking at a straight measure, you can select a specific measure as it is shown in figure 36. You may easily change the indicator and choose the period date, or select one single data series or multiple data series. You can customize the chart from the right hand side ‘Pivot table fields’ shown in Figure 35 in various ways, depending on what it is useful for your specific analysis.

Figure 29: Chart Measure Selection

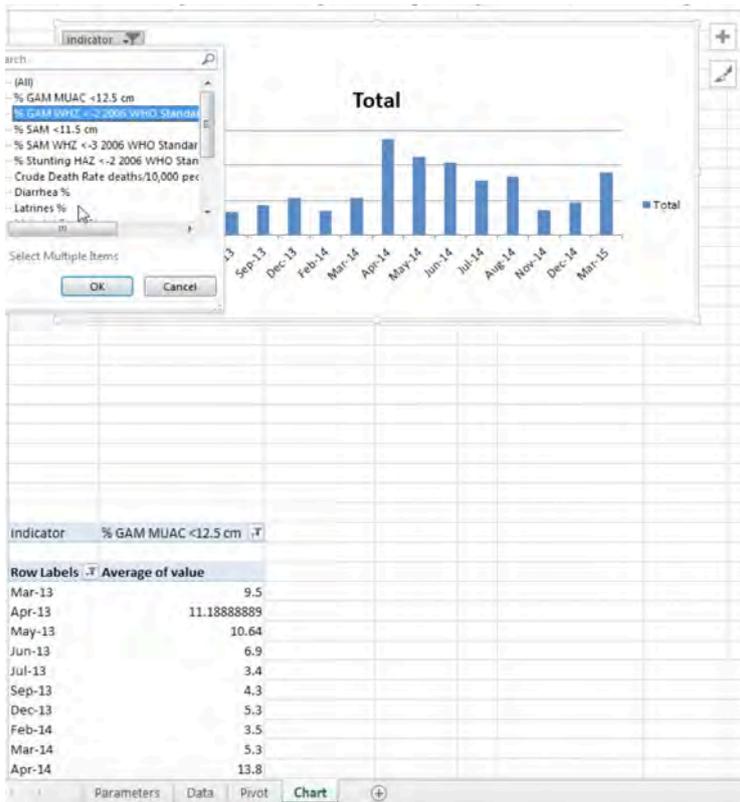
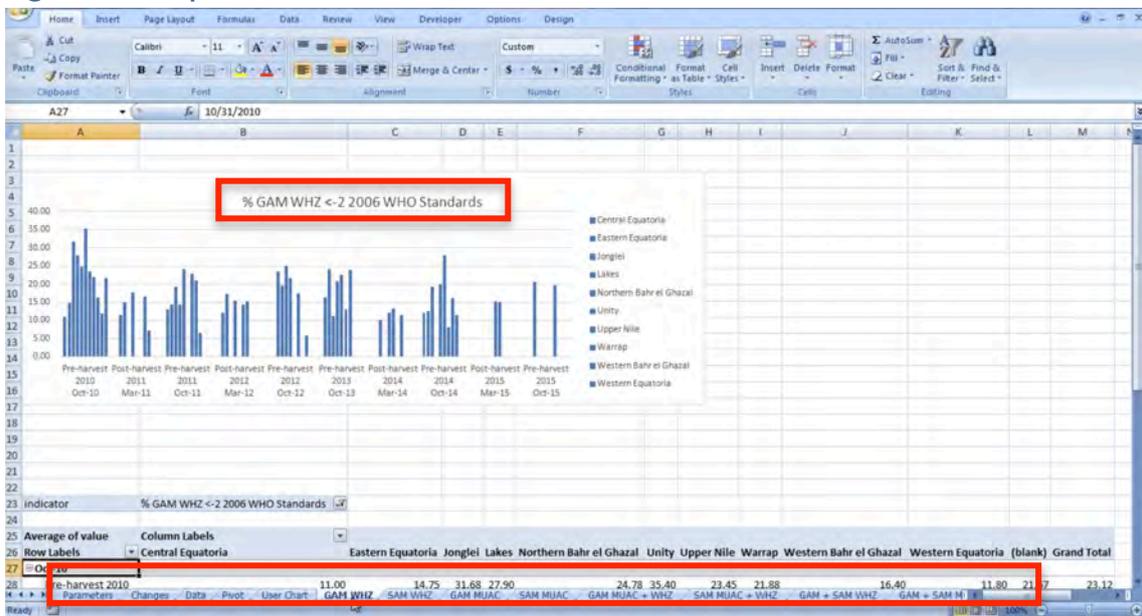
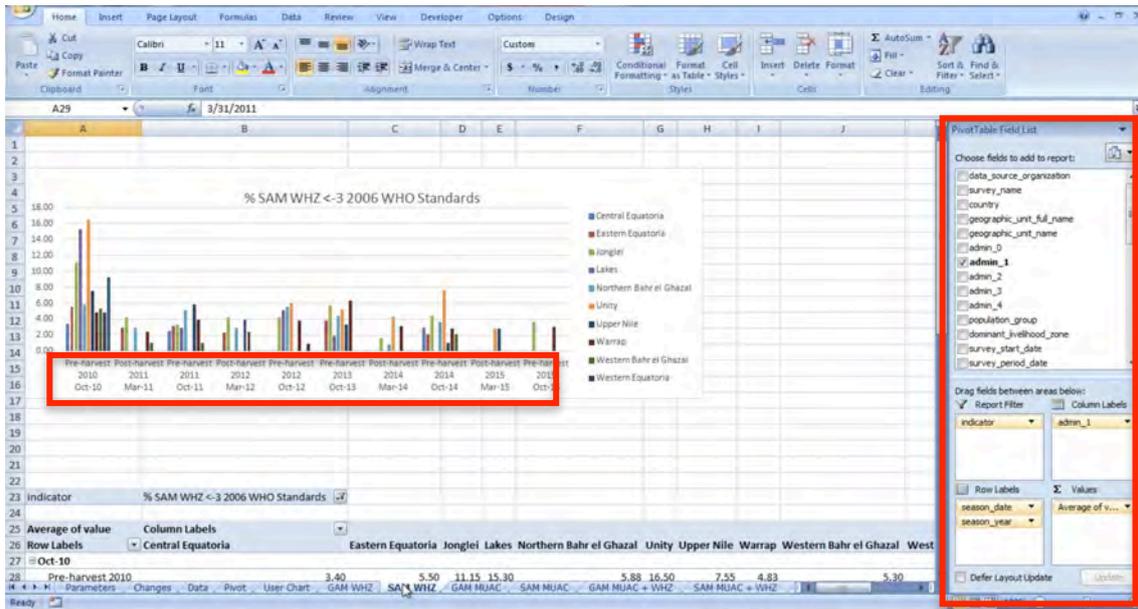


Figure 30: Spreadsheets Labels on a Nutrition Workbook



The tab names represent the various spreadsheets on a Nutrition Workbook. In the example above the data is represented by region. Here it shows one indicator for Admin I Unit as a series.

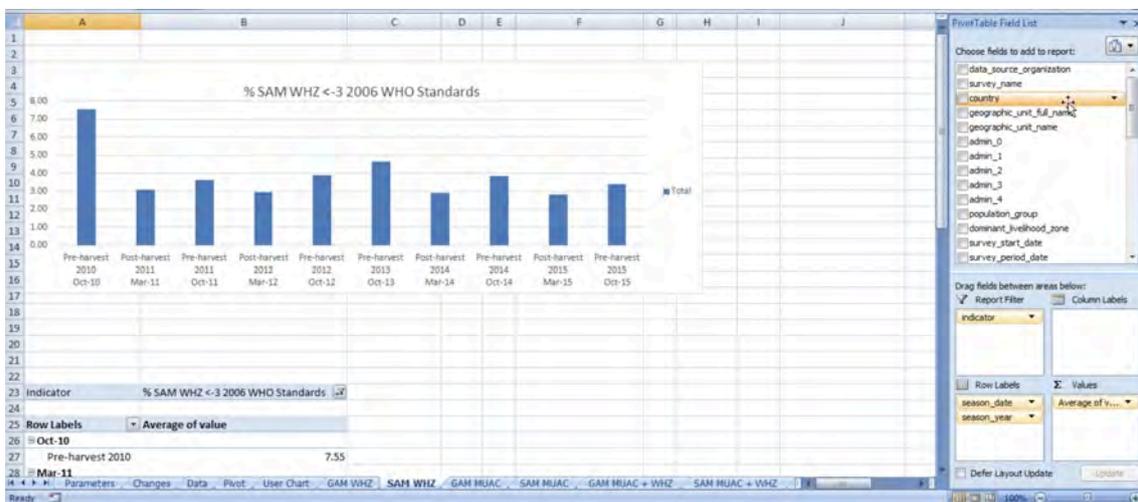
Figure 31: SAM WHZ Spreadsheet Data Cluster on a Nutrition Workbook



This figure shows another spreadsheet within the same nutrition workbook and it is grouped by season. Where there is a gap it is because there is not any data available. The approximate date under the chart is based on the typical season for the country. To put them effectively in chronological order in excel, the only way we can cluster data is, by having some date that we can tie data to, so we give it a label of 'pre-harvest 2010' but the date is normally tied to its 31<sup>st</sup> Oct 2010.

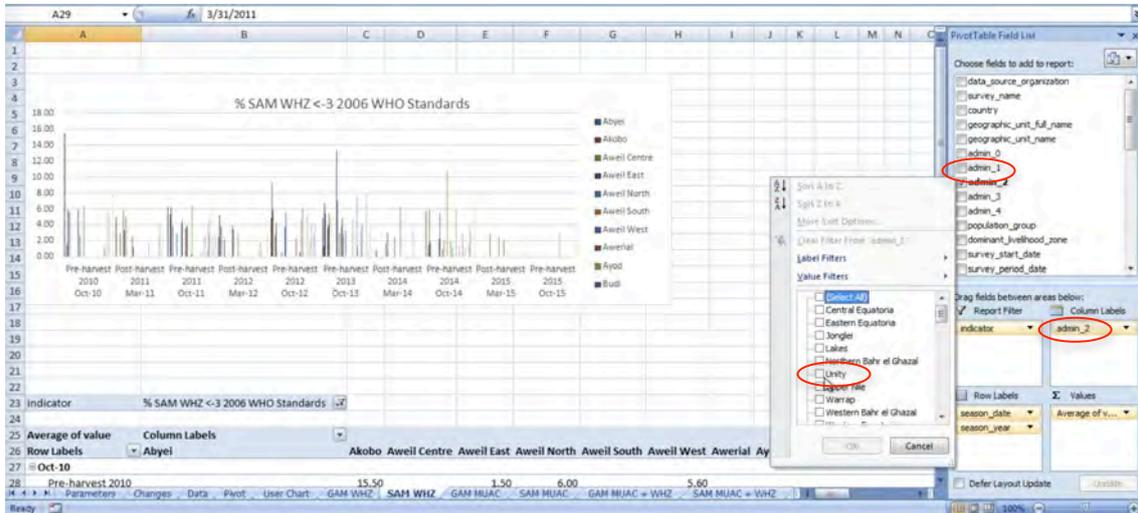
If you want to look at the national average by season instead of the regional average, you can go to the Pivot Table Field List on the right hand of the screen and choose the relevant fields to add to the report. By taking Admin I out of the column labels box you would then get the national average.

Figure 32: National Average Set Up From Pivot Table Field List in SAM WHZ Chart



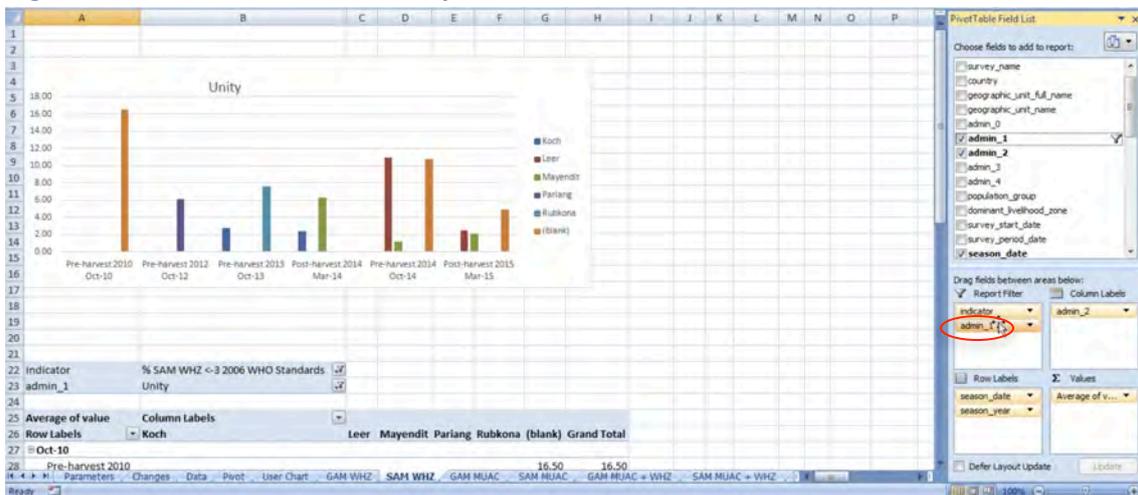
Similarly you can drag Admin 2 in column labels if you wanted to look at the data at that level. To select unity state in Admin level 1, you can right click over admin 1 and select 'Unity' from the drop down list.

Figure 33: Admin 2 Level Average Set Up From Pivot Table Field List in SAM WHZ Chart



You can drag admin 1 to 'Report Filter' box and the chart will be represented as shown below:

Figure 34: Admin 1 under Report Filter in SAM WHZ Chart



Similarly you can drag admin 1 from Report Filter to Column labels and perhaps filter for two admin 1 at the same time and still look at Admin 2. It would vary from country to country and report to report. Manipulation is quite flexible.

Figure 35: GAM MUAC Spreadsheet Chart

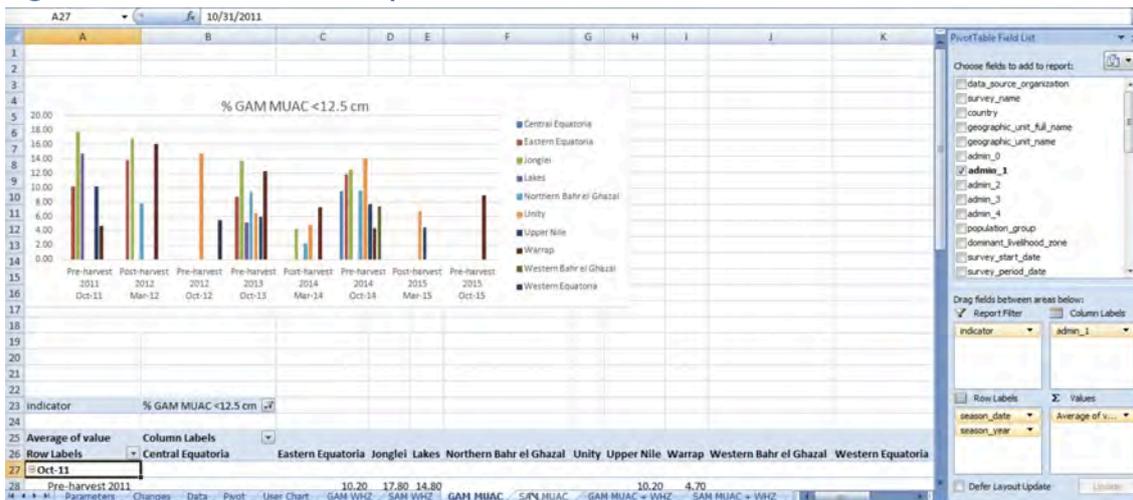


Figure 36: SAM MUAC Spreadsheet Chart

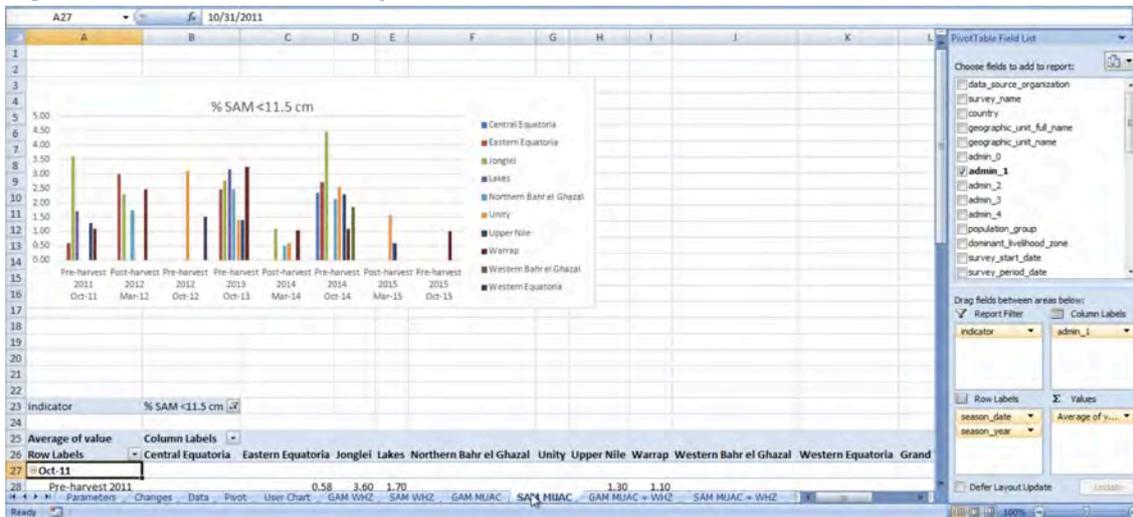
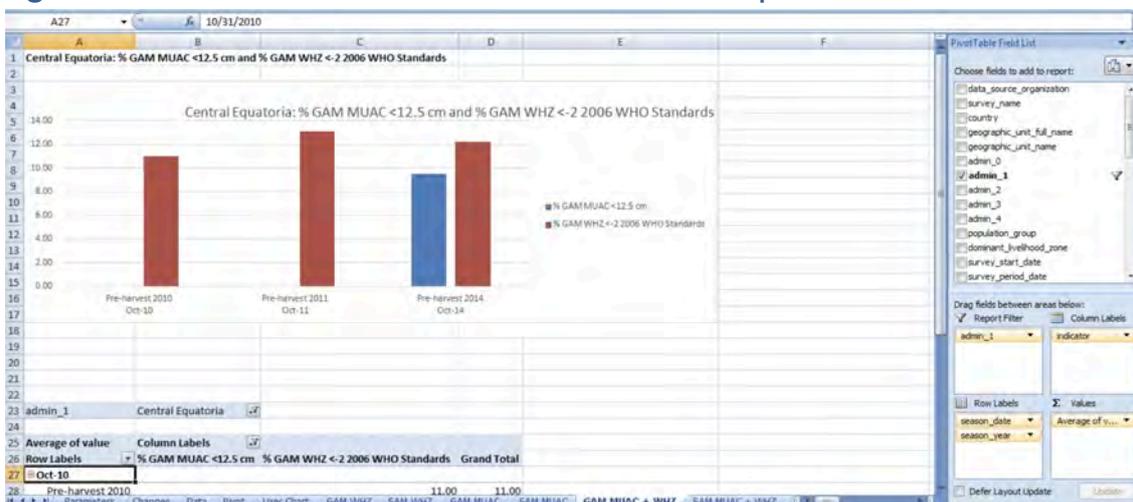


Figure 37: GAM MUAC + WHZ indicators on a Spreadsheet Chart



When looking at two indicators at once, you only need to do so according to one geographic unit. In addition, the titles from the charts update automatically.

Figure 38: SAM MUAC + WHZ Indicators on a Spreadsheet Chart

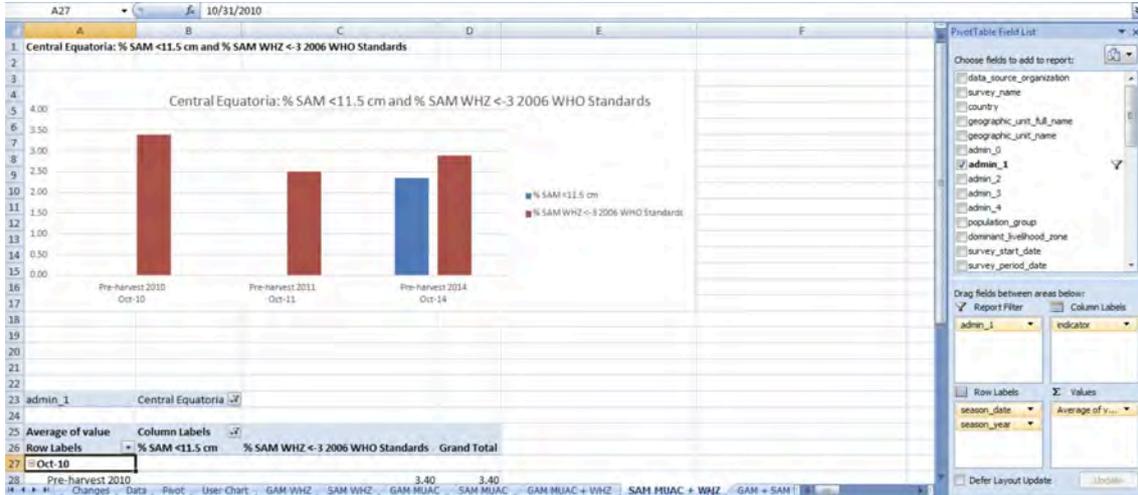


Figure 39: GAM +SAM WHZ Indicators on a Spreadsheet Chart

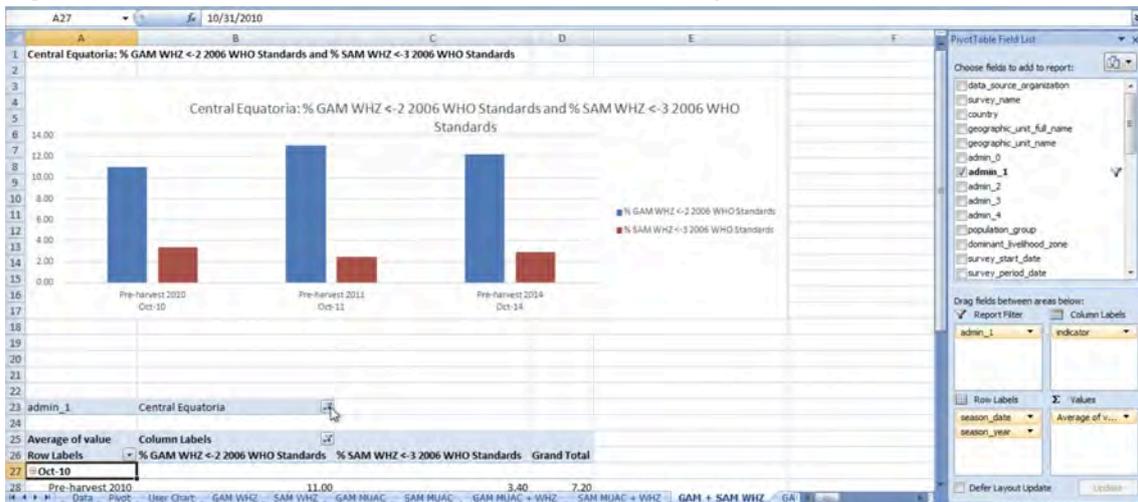


Figure 40: GAM +SAM WHZ Indicators by Unity on a Spreadsheet Chart

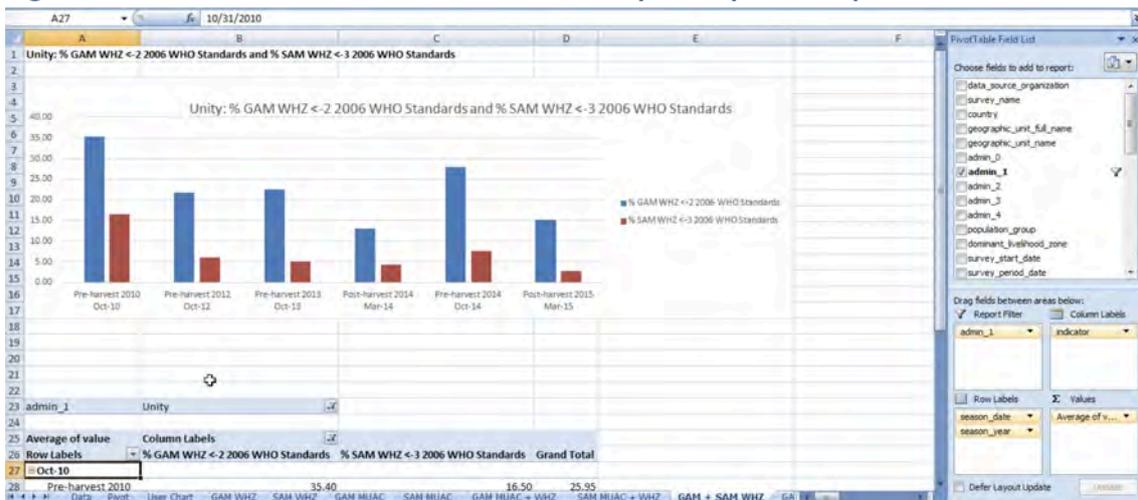
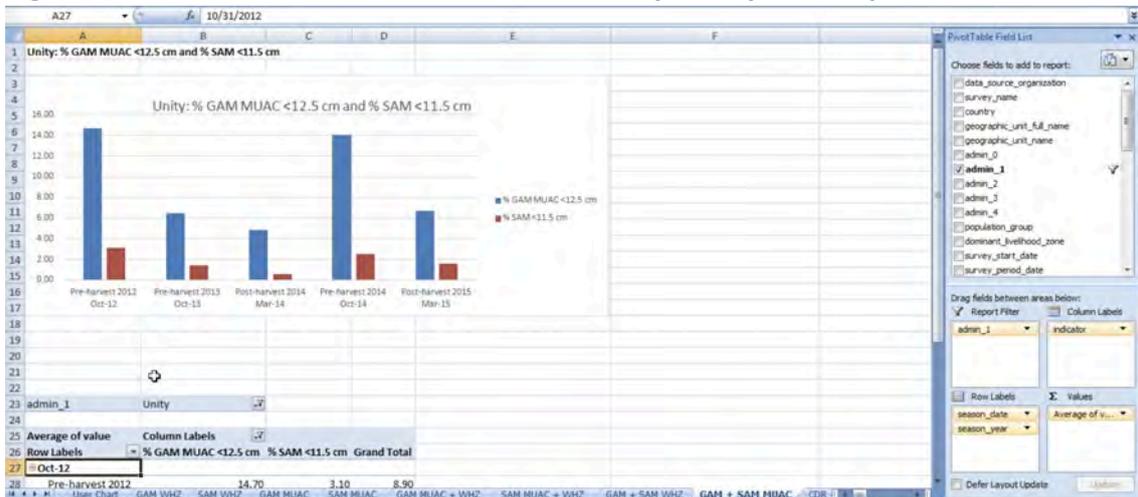
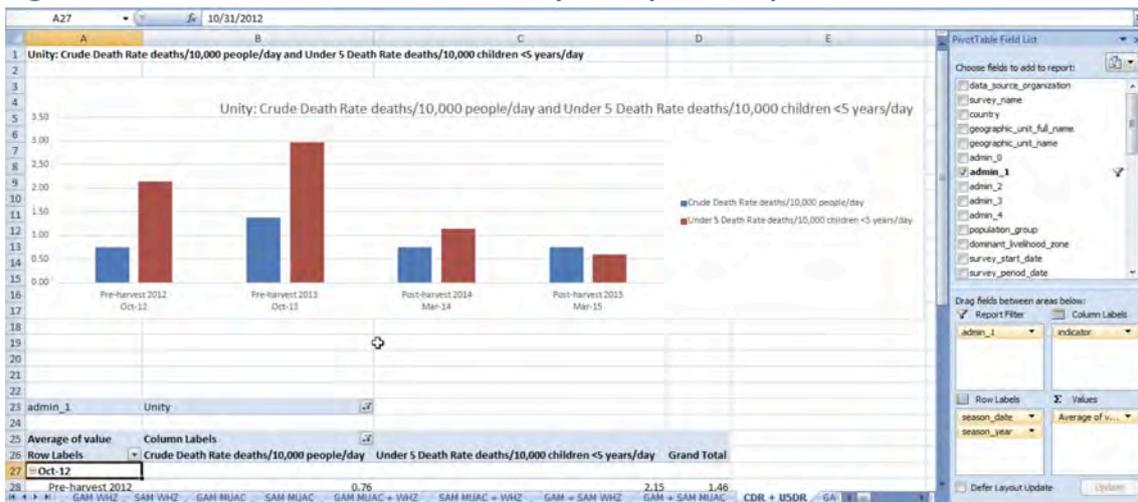


Figure 41: GAM +SAM MUAC Indicators by Unity on a Spreadsheet Chart



Note the dates under the chart, (Oct-12, Oct-13, Mar-14, Mar-15) represent the end of the season.

Figure 42: CDR+ U5DR indicators by Unity on a Spreadsheet Chart



These are averages for all surveys in Unity state. The number of data points that represent this average cannot be seen. However you can find out at the number of surveys by clicking in one of the numbers from the table under the graph as shown below.

Figure 43: Double Click a Number

admin_1	Unity		
Average of value	Column Labels		
Row Labels	Crude Death Rate deaths/10,000 people/day	Under 5 Death Rate deaths/10,000 children <5 years/day	Grand Total
Oct-12			
Pre-harvest 2012	0.76	2.15	1.46
Oct-13			
Pre-harvest 2013	1.38	2.98	2.18
Mar-14			
Post-harvest 2014	1.14	0.95	
Mar-15			
Post-harvest 2015	0.76	0.61	0.68
<b>Grand Total</b>	<b>0.93</b>	<b>1.66</b>	<b>1.30</b>

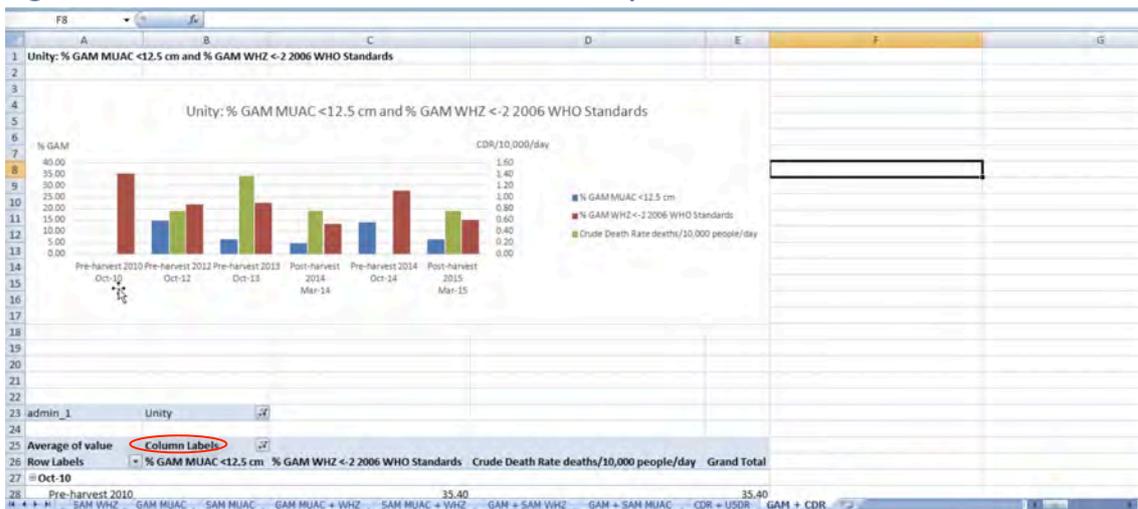
If you double click a number, a new Spreadsheet will be created on the Workbook with the Survey series dates that were used to calculate that number as shown below:

data_source_organization	survey_name	country	geographic_unit_full_name	geographic_unit_name	admin_0	admin_1	admin_2	admin_3	admin_4	population_group	dominant_livelihood
CWW, South Sudan	South Sudan Nut	South Sudan	Koch, Unity, South Sudan	Koch	South Sudan	Unity	Koch				
CARE, South Sudan	South Sudan Nut	South Sudan	Rubkona, Unity, South Sudan	Rubkona	South Sudan	Unity	Rubkona				

Figure 44: No. of Surveys after the Double Click

Unfortunately there is no way to find out how much data contributed to the number.

Figure 45: GAM + CDR Indicators on a Spreadsheet Chart



CDR is in green and the other two indicators, GAM MUAC and GAM WHZ, are in blue and red. GAM is on the left Y-axis, and CDR is on the right Y-axis. If you want to look at GAM according to weight for high season score and not to MUAC, you can click the filter button shown below and uncheck what you do not want on the Chart.

Figure 46: Uncheck GAM MUAC from the Filter

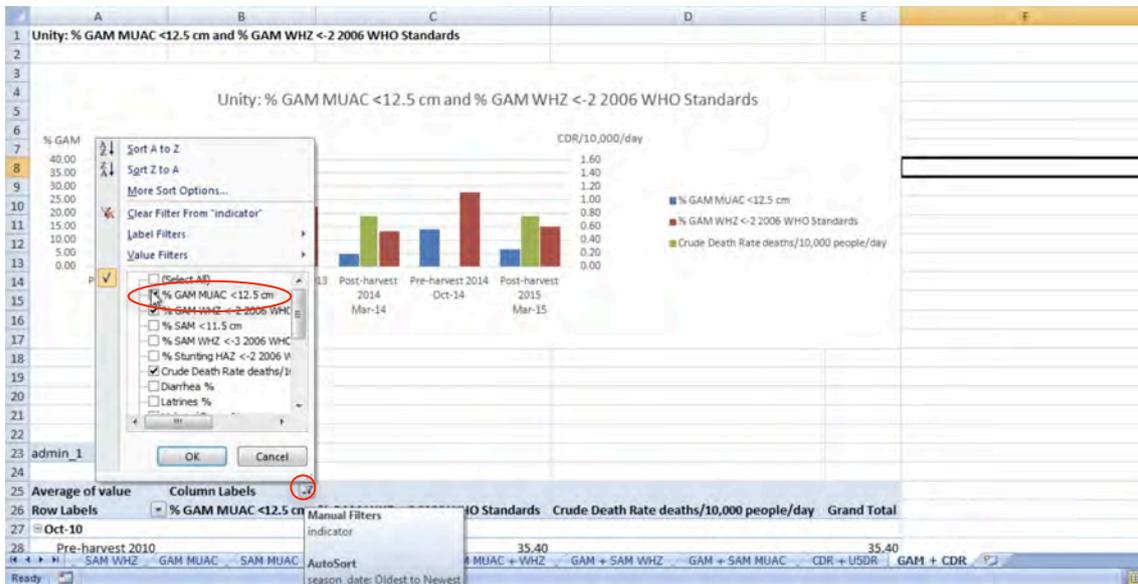
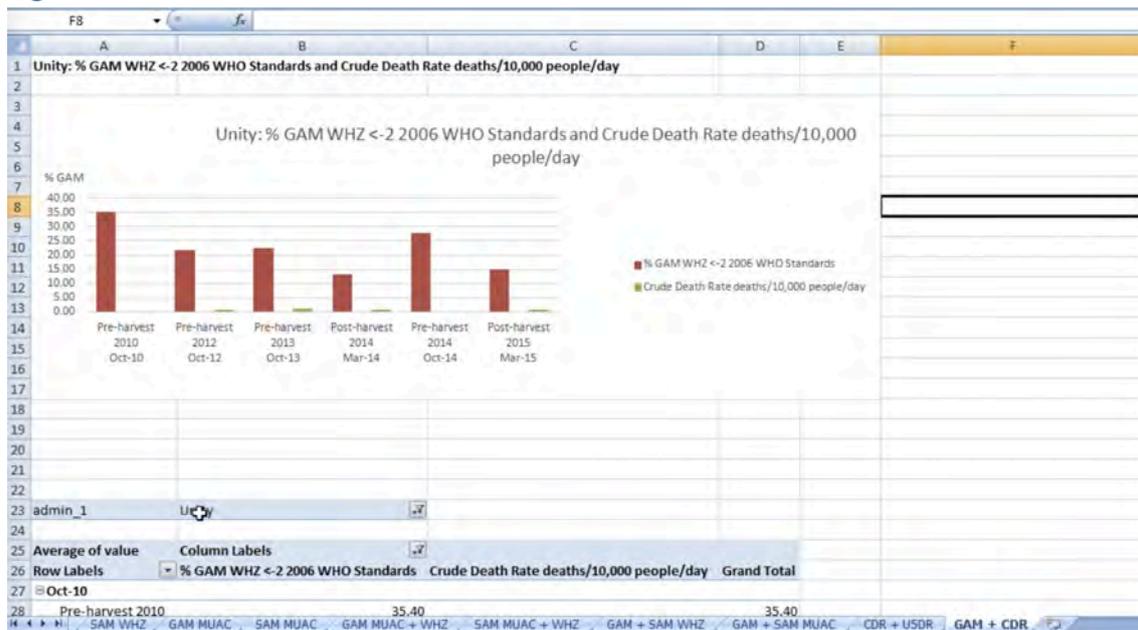


Figure 47: Chart with GAM MUAC Unchecked



The right Y-axis is lost (to be discussed on next Sprint Meeting)

You can copy the chart on a new Spreadsheet and play with the filter settings to create a new graph with different data mixing data, as you may need.

## 12. Glossary

Word	Definition
Base period	This is the period to which prices in other periods are being compared. This is used when calculating calculated indexes, CPIs, etc.
Calculated Index	A calculated Data Series that calculates a weighted or unweighted index of other Data Series for each Collection Period for which each Data Series has a value.
Collection periods	A single interval on the schedule for a Data Source Document - e.g. if the Data Source Document specifies a monthly schedule then there will be a Data Collection Periods for Jan 2014, Feb 2014, etc. If the data Source Document specified a weekly schedule, then there will be a data collection period for the week of January 1st 2014, January 5th 2014, January 12th 2014, etc.
Commodity name	One type of name used for a particular product.
Country	A Country (or dependent territory or special area of geographical interest) included in ISO 3166.
Data collections:	an actual set of data points provided together in a single instance of a Data Source Document - e.g. a specific Excel file received from a Data Source Organization on a particular date
Data series	A collection of Data Points with the same reference data that contain different values collected for that reference data over time. For example, a Data Series could be the Wholesale Price of a locally-produced 90kg bag of Maize in KES at Garissa Market.
Data usage policies	A policy specifying how the data provided by a Data Source Document may be used.
Denominator	The part of a fraction that is below the line and that functions as the divisor of the numerator. For example, when calculating terms of trade (ToT), the denominator is typically the price of a bag of grain.
Exchange rate	This is the rate at which one currency is exchanged for another. The exchange rate can be the InterBank rate (which FEWS NET obtains through Oanda.com), or a secondary rate such as the <i>official rate</i> set by the government (through the Ministry of Finance), or an <i>informal market rate</i> (e.g. black market exchange rate which could be very different from either the Inter Bank or official exchange rate).
Location	This is the name of the physical place (village, town, or city) where the prices in question are collected.
Market	This is the name of the actual market within a given town, village, or city, where the prices are collected
Market price	A Data Point that records the price of a specific Market Product for a specific Collection Period. This information must be imported into the system in order for it to be exported or analyzed along with the historical values.
Market product	A Data Series that records the Market Price for a Product in a Market for a specific combination of: unit of measure, Currency, Price Type, Product Source

NTM	National Technical Manager
Numerator	The part of a fraction that is above the line and signifies the number to be divided by the denominator. For example, when calculating terms of trade (ToT), the numerator is typically the price of a head of livestock or a day or work.
Price data set:	A Data Set that contains a collection of time series of Prices, Price Ratios or Calculated Indexes over a user-defined period of time that can be analyzed, charted and/or exported together
Price index	A Data Series that records the value of a Price Index for a specific Collection Period for an external price index, typically a Consumer Price Index (CPI) for a Country.
Price index value	A Data Point that records the value of a specific calculated Price Index (calculated by FEWS NET as a “Calculated Index” or obtained from a secondary source as a Price Index) for a specific Collection Period
Price ratio:	A calculated Data Series that calculates the ratio between two other Data Series for each Collection Period for which both Data Series have a value.
Product	A product such as a commodity or service classified using UN CPC v2 codes.
RMS	Regional Market Specialist
Source Documents	A document that contains the prices being collected, by whom, and on what schedule...
Source organizations:	Primary sources for collection of price data (e.g. <i>Ministry of Finance, Government of Kenya, or W.F.P.</i> )
Terms of trade (ToT)	Terms of trade are a frequently used and analyzed price ratio (Relative Price) in FEWS NET, which tells you the rate at which one good or service can be exchanged for another and is typically expressed as a ratio. FEWSNET typically uses livestock to grain or daily wages to grain terms of trade, which tell you the number of KGs of grain one can purchase through the sale of a head of livestock of a day of work at the prevailing market rates.
Unit	A Unit of Measure, such as kilogram, litre or meter.
Wage rate	Rate of pay based on per period of work time or per unit of production.

Other terms to be defined:

Metadata

Data Points

Data Analysis

Relative Prices

Data Domain

Survey Type

Survey Populations

Log entries

Specialization type

Consumer Price Index

Staple food

Rate types

Nutrition Data Series

Crop Production Data Series

Indicators groups

Localities

Surveys

Indicators

Schedule

Survey Collection

Import

Export

Download

Web Query URL

Refresh

Collection Status

Status

Trade Flow:

Reporting Country

Border Point

Partner Country

Flow Type