FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

PERFORMANCE MONITORING

PARTICIPANT MANUAL

USAID

FROM THE AMERICAN PEOPLE

Welcome to the Feed the Future Performance Monitoring Course

Dear Course Participant,

Welcome to Feed the Future's course on performance monitoring. Monitoring, learning and adapting activities-based evidence moves us forward in our goal to reduce hunger, poverty and under-nutrition. To that end, this course will prepare you to:

- Meet the requirements for reporting performance such that program activities and outcomes to the Feed the Future Results Framework.
- Use performance monitoring as a means for strategic adaptive management of Feed the Future activities.

Over the next five days, you will build your skills and knowledge to:

- Develop a theory of change and a results framework for your FTF activities
- Select require if applicable indicators for your activity results framework
- Create custom indicators
- Define beneficiaries, baselines and targets
- Collect performance monitoring data
- Verify performance monitoring data
- Report and use performance monitoring data
- Submit open data

To achieve these outcomes, we have just a few guidelines for all course participants to follow:

- Listen, inquire and share
- Respect and value different ideas and options
- Create a safe space
- Challenge yourself
- Support each other

The course was developed by the Feed the Future Monitoring and Evaluation team. If you have any questions about monitoring and evaluating Feed the Future activities, do not hesistate to ask any Monitoring, Evaluation and Learning team member. We are proud to be your partners in the important work you do in the field.

Sincerely,

Anne Swindale
Anne Swindale, Course Owner
Senior Program Advisor
Monitoring, Evaluation and Learning
Feed the Future, USAID

Salik Farooqi
Salik Farooqi, Course Owner
Technical Advisor
Monitoring, Evaluation and Learning
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SESSION 8:

Reporting and Using Data

NUTSENAG Performance Monitoring

Group Exercise
60 minutes

Your team is responsible for reporting on the performance of NUTSENAG. The NUTSENAG FTFMS focuses on three indicators:

- Number of people trained
- Number of beneficiaries applying improved technologies
- Gross margin.

In addition, the implementing partners have a database they shared with us.

The data has been collected on an Excel spreadsheet. Look at the data and do some analysis; for example, compare targets to achieved, look at what proportions of results or beneficiaries fall in different disaggregate categories, and jot down what you observe in the data.

Some are questions you'll want to ask. You always want to apply a gender lens, by asking these questions in general and then also looking to see if the answer is different for male versus female farmers:

- Is NUTSENAG reaching the number of beneficiaries it planned to, overall and with training?
- Does the training seem to be effective?
- Do beneficiaries seem to be facing constraints in applying specific technology types?
- Are beneficiaries having trouble applying some types of technologies more than others?
- Are there crops where beneficiaries are having a harder time applying the promoted technologies?
- Do some of the crops yield a greater return to investment than others?
- Are there differences in the number of direct beneficiaries cultivating each crop?
- Are there are significant differences in gross margin by sex of farmer? If yes, why? Are there differences in yields? In prices received? In inputs per hectare?
- Does the amount of land cultivated under each crop vary by sex of farmer? What about the proportion of the harvest sold?

Prepare to report out on your findings and conclusions.

Notes:

	Baseline	Target	Actual
4.5.2(7): Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	-	220,500	212,444
Type of individual	-	220,500	212,444
Producers	-	210,000	211,362
Sex	-	210,000	211,363
Male	-	21,000	22,249
Female	-	189,000	189,114
People in private sector firms	-	10,500	1,082
Sex	-	10,500	1,082
Male	-	6,500	750
Female	-	4,000	332
4.5.2(5): Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance	6,850	199,500	196,169
Producers	6,837	189,000	195,087
Sex	6,837	189,000	195,087
Male	1,048	18,900	21,481
Female	5,789	170,100	173,606
Disaggregates Not Available			
Technology type	6,837	189,000	195,087
crop genetics	3,009	170,100	107,943
cultural practices	5,475	189,000	185,448
post-harvest - handling and storage	-	189,000	57,367
total w/one or more improved technology	6,837	189,000	195,087
Commodity			
Groundnut	1,852	124,740	52,507
Maize	5,361	189,000	159,634
Soy	906	52,920	24,362
Others (rest of data not included)	13	10,500	1,082

	Baseline	Target	Actual
4.5(16,17,18): Gross margin per hectare, animal or cage of selected product	16	24	20

	Baseline	Target	Actual
Groundnuts/peanuts [USD/Ha]	39		75
Male	15		17
Female	887		28,812
Hectares planted	10		445
Male	877		28,367
Female	126		5,306
Total Production (MT)	3		200
Male	123		5,106
Female	4,892		225,868
Value of Sales (USD)	471		42,050
Male	4,421		183,818
Female	27		1,161
Quantity of Sales (MT)	2		140
Male	25		1,021
Female	9,064		452,204
Purchased input costs (USD)	292		26,698
Male	8,772		425,506
Female	18,031		122,368
Number of direct beneficiaries	487		8,899
Male	17,544		113,468
Female			

	Baseline	Target	Actual
4.5(16,17,18): Gross margin per hectare, animal or cage of selected product	250	320	385
Maize [USD/Ha]	236		365
Male	252		388
Female	45,322		166,309
Hectares planted	5,848		24,474
Male	39,474		141,835
Female	89,854		494,282
Total Production (MT)	11,696		75,868
Male	78,158		418,414
Female	1,934,608		17,603,811
Value of Sales (USD)	410,527		3,482,339
Male	1,524,081		14,121,472
Female	14,882		130,399
Quantity of Sales (MT)	3,158		25,795
Male	11,724		104,603
Female	337,720		2,739,923
Purchased input costs (USD)	140,351		1,321,571
Male	197,369		1,418,353
Female	48,733		211,362
Number of direct beneficiaries	4,873		22,249
Male	43,860		189,114
Female			

	Baseline	Target	Actual
4.5(16,17,18): Gross margin per hectare, animal or cage of selected product	206	510	517
Soy [USD/Ha]	210		518

Male	206		517
Female	92		3,393
Hectares planted	4		556
Male	88		2,837
Female	59		3,616
Total Production (MT)	3		595
Male	56		3,021
Female	29,543		2,036,313
Value of Sales (USD)	1,276		350,544
Male	28,267		1,685,769
Female	56		3,284
Quantity of Sales (MT)	2		565
Male	53		2,719
Female	12,193		486,300
Purchased input costs (USD)	526		80,651
Male	11,667		405,649
Female	4,483		30,592
Number of direct beneficiaries	97		2,225
Male	4,386		28,367
Female	4,386		28,367

Everyone grows maize, no one grows both maize and legumes.
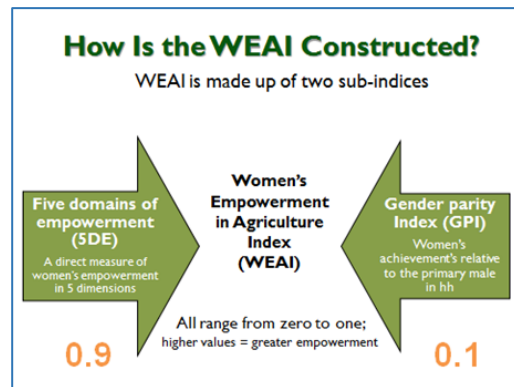
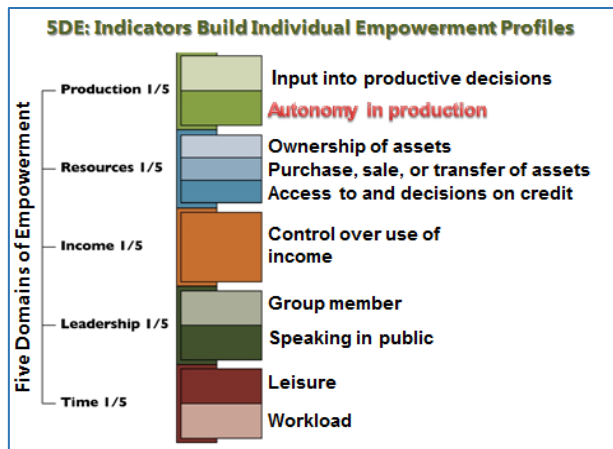|	# beneficiaries cultivating			# beneficiaries applying improved technologies			# beneficiares using improved seed			# beneficiaries using improved cultural practices			# beneficiaries using improved post-harvest practices		
	baseline	target	actual	baseline	target	actual	baseline	target	actual	baseline	target	actual	baseline	target	actual
Groundnut males	487	6,300	8,899	97	5,670	7,120	58	5,103	4,984	78	5,670	5,696	0	5,670	4,272
Groundnut females	17,544	132,300	113,468	1,754	119,070	45,387	702	107,163	31,771	1,404	119,070	36,310	0	119,070	31,771
Groundnut total	18,031	138,600	122,368	1,852	124,740	52,507	760	112,266	36,755	1,481	124,740	42,005	-	124,740	36,043
Maize males	4,873	21,000	22,249	975	18,900	17,799	487	17,010	10,679	731	18,900	13,349	0	18,900	3,560
Maize females	43,860	189,000	189,114	4,386	170,100	141,835	1,754	153,090	70,918	3,509	170,100	113,468	0	170,100	28,367
Maize total	48,733	210,000	211,362	5,361	189,000	159,634	2,242	170,100	81,597	4,240	189,000	126,817	-	189,000	31,927
Soy males	97	2,100	2,225	29	1,890	1,669	26	1,701	1,502	26	1,890	1,502	0	1,890	1,168
Soy females	4,386	56,700	28,367	877	51,030	22,694	746	45,927	19,290	833	51,030	21,559	0	51,030	18,155
Soy total	4,483	58,800	30,592	906	52,920	24,362	772	47,628	20,791	860	52,920	23,061	-	52,920	19,323

	% beneficiaries that apply improved technologies to legume but not maize (to eliminate double-counting)			unique # beneficiaries applying improved technologies			unique # beneficiares using improved seed			unique # beneficiaries using improved cultural practices			unique # beneficiaries using improved post-harvest practices		
	baseline	target	actual	baseline	target	actual	baseline	target	actual	baseline	target	actual	baseline	target	actual
Groundnut males	0.6	0	0.4	58	-	2,848	35	-	1,993	47		2,278	0		1,709
Groundnut females	0.6	0	0.5	1,053	-	22,694	421	-	15,886	842		18,155	0		15,886
Groundnut total				1,111	-	25,541	456	-	17,879	889		20,433	-		17,594
Maize males				975	18,900	17,799	487	17,010	10,679	731	18,900	13,349	0	18,900	3,560
Maize females				4,386	170,100	141,835	1,754	153,090	70,918	3509	170,100	141,836	0	170,100	28,367
Maize total				5,361	189,000	159,634	2,242	170,100	81,597	4,240	189,000	155,185	-	189,000	31,927
Soy males	0.5	0	0.5	15	-	834	13	-	751	13		751	0		584
Soy females	0.4	0	0.4	351	-	9,077	298	-	7,716	333		9,078	0		7,262
Soy total				365	-	9,912	311	-	8,467	346		9,829	-		7,846
males				1,048	18,900	21,481	536	17,010	13,424	791	18,900	16,378	-	18,900	5,853
females				5,789	170,100	173,606	2,474	153,090	94,519	4,684	170,100	169,069	-	170,100	51,515
total				6,837	189,000	195,087	3,009	170,100	107,943	5,475	189,000	185,448	-	189,000	57,367

	average area cultivated per beneficiary			total area cultivated by beneficiaries			total area under improved technologies		
	baseline	target	actual	baseline	target	actual	baseline	target	actual
Groundnut males	0.02	0.20	0.05	10	1,260	445	2	1,134	356
Groundnut females	0.05	0.20	0.25	877	26,460	28,367	88	23,814	11,347
Groundnut total				887	27,720	28,812	90	24,948	11,703
Maize males	1.20	1.00	1.10	5,848	21,000	24,474	1,170	18,900	19,579
Maize females	0.90	0.70	0.75	39,474	132,300	141,835	3,947	119,070	106,376
Maize total				45,322	153,300	166,309	5,117	137,970	125,955
Soy males	0.04	0.20	0.25	4	420	556	1	378	417
Soy females	0.02	0.20	0.10	88	11,340	2,837	18	10,206	2,269
Soy total				92	11,760	3,393	19	10,584	2,687

Women's Empowerment in Agriculture Index (WEAI)

Notes:

How Is the WEAI Constructed?
WEAI is made up of two sub-indices

Five domains of empowerment (5DE)
A direct measure of women's empowerment in 5 dimensions

0.9

Women's Empowerment in Agriculture Index (WEAI)

All range from zero to one; higher values = greater empowerment

Gender parity Index (GPI)
Women's achievement's relative to the primary male in hh

0.1

5DE: Indicators Build Individual Empowerment Profiles

Five Domains of Empowerment

- Production 1/5
  - Input into productive decisions
  - Autonomy in production
- Resources 1/5
  - Ownership of assets
  - Purchase, sale, or transfer of assets
  - Access to and decisions on credit
- Income 1/5
  - Control over use of income
- Leadership 1/5
  - Group member
  - Speaking in public
- Time 1/5
  - Leisure
  - Workload

Interpreting WEAI

Source: IFPRI (2012a).

What are the three indicators that contribute most to women's disempowerment?

Source: IFPRI (2012a).

What are the three indicators that contribute most to men's disempowerment?

What strikes you about the similarities and differences between men's and women's disempowerment?

Individual Exercise: Interpret the WEAI data for Aredonia's ZOI Influence

Individual
Exercise
10 minutes

Using the WEAI below:

- What are the three indicators that contribute most to women's disempowerment?
- What are the three indicators that contribute most to men's disempowerment?
- What strikes you about similarities and differences between men and women's disempowerment?

Notes:

Source: Westat (2012b).
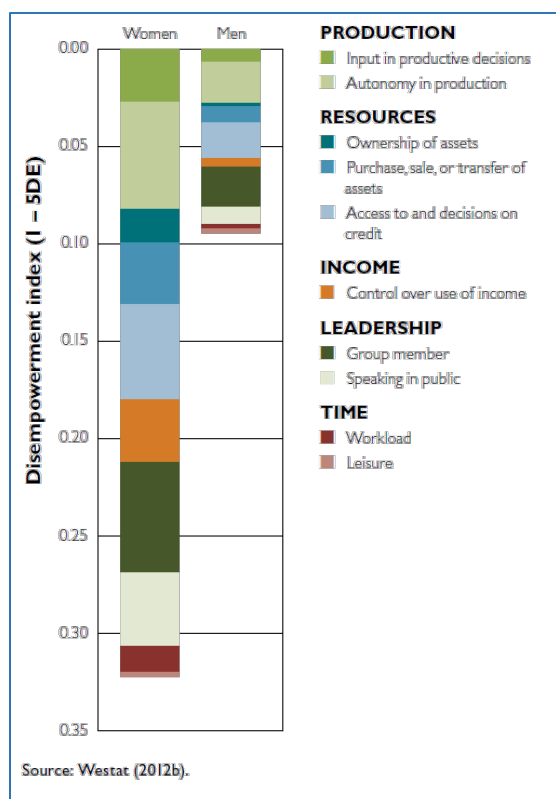
Gender Integration Framework

Notes:

Problem or Constraint to Address	Is this problem or constraint relevant in your specific context? Y/N, *Please explain and provide evidence.*	What activity(ies) are you implementing that address or relate to this problem?	What activity(ies) are you planning that will address this problem and how with they address it?	Activity's Specific Contribution to Outcome
Women do not have equal or adequate control over the use of household income. Women are not engage satisfactorily in household decisions around how to use household income	Based on the WEAI, control over income is the third largest contributor for disempowerment for women. It is also a significant gap between men and women	Fertilizer Deep Placement activity – promotes and supports women's fertilizer dealerships / retail outlets	Ag inputs activity will certify women retailers and establish start-up grants of women-owned retailers.	By supporting women retailers, this activity will increase the ability of women to earn income outside of the farm that they may have greater ability to control

Identifying Constraints

Individual
Exercise
10 minutes

Based on your analysis of the WEAI, what constraints faced by women do you think NUTSENAG activities should focus on in order to narrow the gap between female and male groundnut yields?

Addressing Constraints

For the constraint assigned to your group, identify:

- What component(s) of NUTSENAG currently address or relate to your constraint? How do they address it?
- How could you modify NUTSENAG to address the issues around this?
- How will these changes specifically contribute to improving NUTSENAG outcomes?

Prepare a flipchart summarizing your answers.

Small Group
Exercise
15 minutes

Notes:

Individual Application

Individual
Exercise
15 minutes

Think about your own work. Select an activity you are working on:
- How would you engage you partners with the WEAI data?
- What process would you follow to use the WEAI data to modify your interventions?

For more information on WEAI: http://www.ifpri.org/topic/weai-resource-center

Writing Results Narratives

Notes:

A narrative has four parts:

- What's the problem?
- What are we doing to solve the problem?
- What results are we seeing?
- What are we going to do to improve results?

Types of Narratives

In Feed the Future context, we focus on three types of narratives:

1. **Performance Narratives:** explains how results are linking to desired outcomes, identifies successes and challenges, and expected activities
2. **Deviation Narratives:** explains why targets have been missed (+/-)
3. **Success Stories:** highlights real-life examples of positive results of interventions

Which option do you prefer?

As a problem statement:

Option 1	Option 2
Honduras is the second poorest country in the Western Hemisphere, with a poverty rate of 66 percent. Approximately 2.5 million of the extreme poor live in rural areas, 40 percent of which are concentrated in the Western Highlands.	Nepal is a severely food deficit country recovering from a 10-year civil war and remains the poorest country in South Asia. Malnutrition is a widespread problem in Nepal with rates comparable to those in many African countries.

As a solution statement:

Option 1

The activity promotes rice and maize production in the Senegal River Valley and the Southern forest zone with millet and fish as secondary priorities. Small scale and industrial mills receive support in improving quality management capacities, such as training in quality control practices, storage systems, local milling cluster development, contractual and production monitoring, investment negotiations and working capital access.

Option 2

The activity promotes agriculture through capacity building efforts aimed at raising the technical skills and knowledge of labor-saving technologies and practices that can reduce vulnerability and strengthen the food security of households. Food security funds are used to accelerate the uptake of proven production, processing, and marketing technologies; significantly increase the productivity of selected staple food crops and some export cash crops with more access to agricultural inputs.

As a results statement:

Option 1

- In FY 2011, USAID reached over 435,000 farmers who applied deep fertilizer placement and urea briquettes to improve management practices on more than 244,600 hectares, leading to an average 15% increase in rice yields for these farmers. As a result, the Barisal division in the south experienced its first-ever rice surplus.

Option 2

- Malawi has completed a CAADP Compact, CIP Peer review and Business Meeting. Malawi's FTF strategy is fully aligned to Malawi's CIP. Through a public-private partnership with Lilongwe Dairies, FTF beneficiaries doubled milk yields in 2011 as a result of USAID training in feeding practices and fodder conservation improved animal breeds, and improved storage facilities.

Which will you give additional funding to?

Option 1

- The value chain activity will continue to support the development and scaling up of innovative solutions to improve food security. This includes support for climate-smart agriculture to increase agricultural production and help meet future food needs; improved technologies for irrigation; water reuse, efficiency, and storage activities within the food value chain; and development of a drought monitoring and mitigation system for the region.
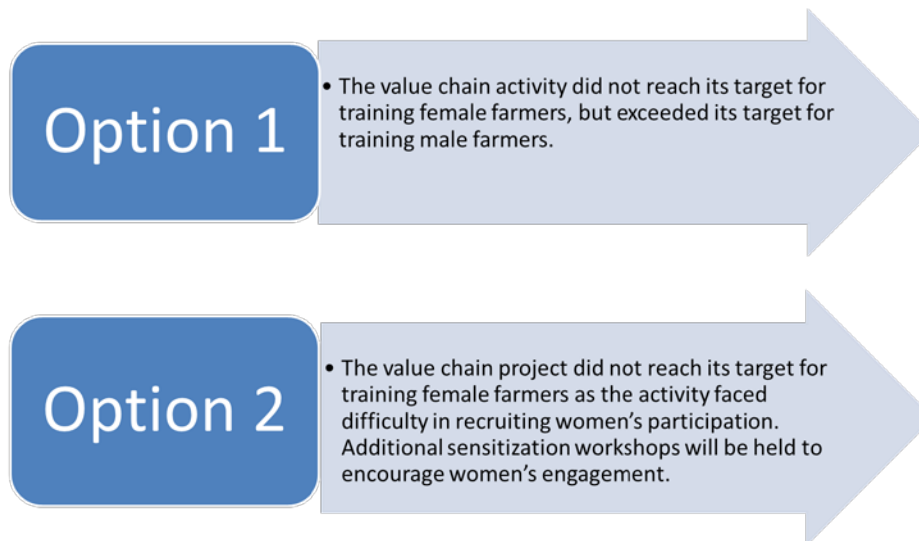
Option 2

- Given the influence of the private sector, the value chain project plans to establishing **5 new partnerships** next year, which will create **24,000 new jobs**, assist **52,000 farmers** in applying new technologies or management practices, and leverage **$31.1 million** in loans for farmers, agro-processors and micro, small, and medium enterprises. If this model proves to be successful, the value chain project will continue to expand to additional geographic areas, beginning in FY17.

Remember when writing a narrative to:

Know your audience and purpose

Be specific

Be concise

Use numbers

Talk about: the problem, solving the problem, the result, the potential
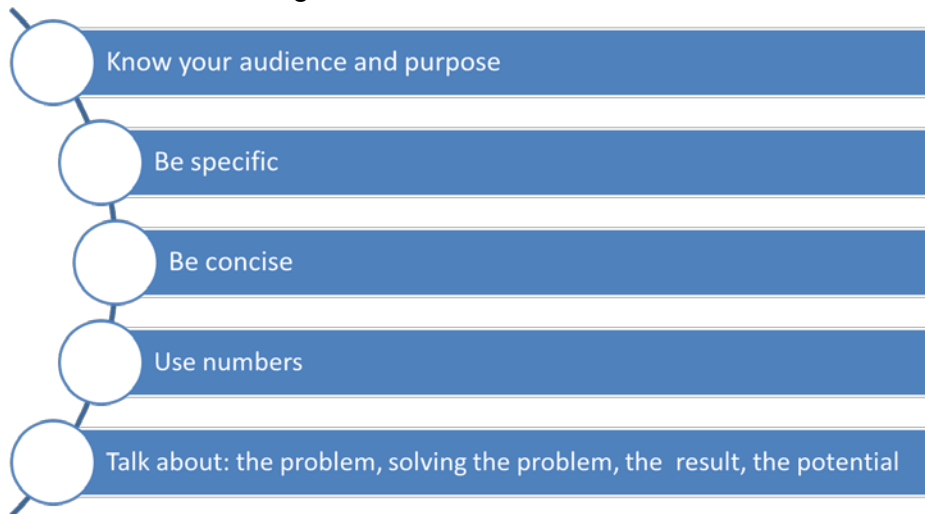
Which is a better deviation narrative?

Option 1
- The value chain activity did not reach its target for training female farmers, but exceeded its target for training male farmers.

Option 2
- The value chain project did not reach its target for training female farmers as the activity faced difficulty in recruiting women's participation. Additional sensitization workshops will be held to encourage women's engagement.

Writing a Performance Narrative

From the data on the Excel spreadsheet, write a short performance narrative:
- Highlight 1 or 2 results in 3 or 4 sentences.

Small Group
Exercise
20 minutes

Notes:

Individual Application

Record your key learnings about writing performance narratives.

Individual
Exercise
10 minutes

Visualizing Data

Notes:

❶ Visualizations are all about comparisons.

❷ Choose an appropriate chart type.

❸ Simplify your message. Simplify your graphics. Get it right in black and white.

❹ Annotate to explain and provide context.

❺ Sketch and try variations.

Draw a Story

Small Group
Exercise
20 minutes

Draw one:
- Scenario card
- Findings card

Using your scenario and finding sketch out your data story.

Be prepared to explain your sketch:
- What relationship are you showing?
- How did you decide to represent the data?
- What was challenging?
- Were there any tradeoffs you made in your visualization?

Notes:

Additional Resources on Visualizing Data

- USAID GeoCenter: https://sites.google.com/a/usaid.gov/usaidgeocenter/
- Color: Color Brewer
- Excel: http://stephanieevergreen.com/
- New York Times: The Upshot
- Flowing data: www.flowingdata.com
- Data Stories podcast: http://datastori.es/
- Source OpenNews (Projects): https://source.opennews.org
- Pinterest gallery

WHERE SHOULD I START WHEN MAKING A VISUALIZATION OR MAP?

1 HAVE A QUESTION OR GOAL

What do you want to learn or find out?

What story or message do you want to tell?

2 DEFINE THE AUDIENCE

Who will use the information?

How will they use it?

interactive / online — least
presentation
one pager
poster — most information dense

Why will they use it?
- to learn
- to understand
- to make decisions
- as a platform to discuss data
- ...

3 EXPLORE & CLEAN THE DATA

Do the data make sense?
- How are the data distributed?
- Are there outliers?
- Are there missing data?
- Do the data fall within a reasonable range?

What do they mean?
- Are the data related?

- Do new variables shed more insight?

Plot bar charts (categorical data) or histograms (numerical data)

← Is this normal?

Plot scatter or line plots between two variables
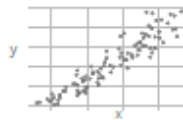
x seems to be positively correlated with y.

Transform data

- Average (point or running), calculate a percent, convert to comparable units
- Normalize, create ratios, reduce dimensions by calculating an index

4 DEFINE WHAT COMPARISONS TO MAKE

What do you want to show?

How do you want to show it?

Fill in the blanks!

I want to show the relationship between _____ and _____.

I want _____ to use this info to _____.

I want to represent this with <<plot type>>.

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5 TEST IT OUT!

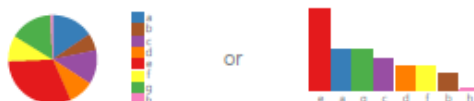Sketch, make a mock-up, test it in your software, and refine it.

Sketch, test, refine

6 IS THIS THE BEST WAY TO REPRESENT THE INFO?

Is the plot successful? Refine it by asking yourself:

• Does the plot show the relationship I want?

• Is the plot type successful?
  Is there a better way?

or

• Will it be useful to the audience?

• Can you understand the plot with little verbal explanation?
  Annotations are your friend. Use them to explain how to read the graph, and/or what's interesting about it.
  Directly label things where possible. Only use legends if you have to.

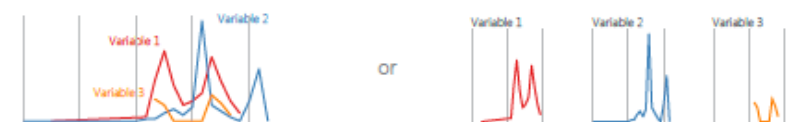• Is the plot a faithful representation of the data?
  Plots can lie (or at least distort the truth).
  Don't do that.

• Is every dot, symbol, color, line, and variable necessary?
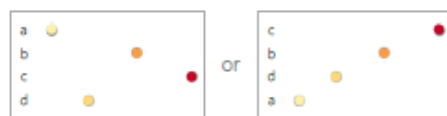 Keep things simple, consistent, and meaningful

show the data!
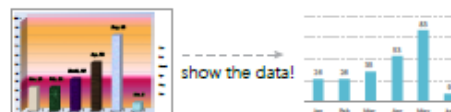
• Is the plot more effective as small multiples?

or

• How should things be ordered?
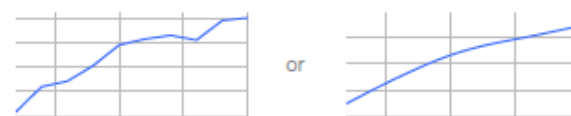 • alphabetically
  • by ranked value
  • by group or theme

or

• Should I group (average) the variables together?
  Does the average smooth out noise,
  or does it wash away the signal?

or

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FOR MORE INFORMATION:

For more information about the Feed the Future Performance Monitoring Course, contact:
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USAID