



FEED THE FUTURE

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

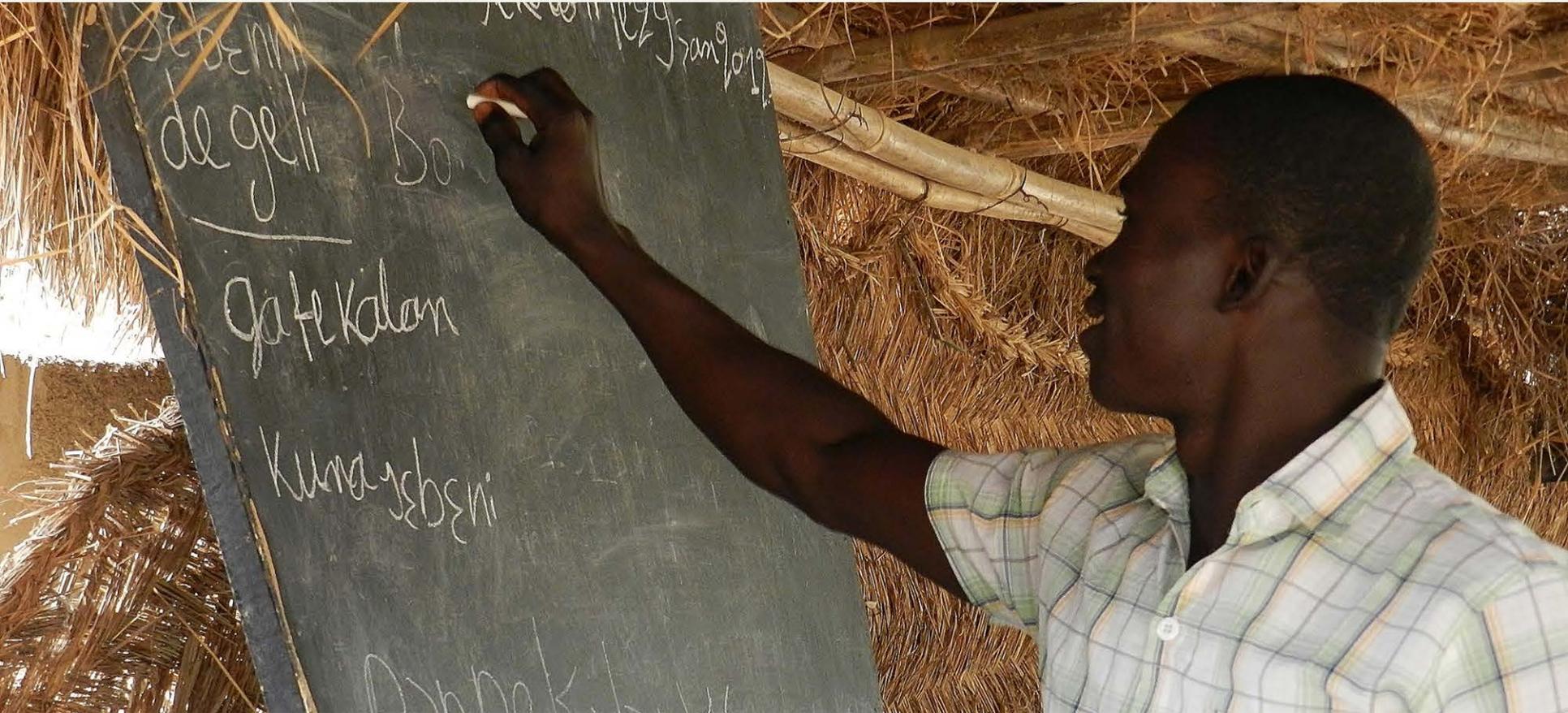


Photo: Lisa Bacon, Peace Corps Mali

Session 8:
Reporting and

Session 8: Reporting and Using Data



FEED THE FUTURE

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





- 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?



What are your findings?

- What did you find?
- How did you find it?
- What does it mean for NUTSENAG?





FEED THE FUTURE

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



Gain skills and knowledge about WEAI to use this data to improve the impact of FTF activities



Women's Empowerment in Agriculture Index

- Measures women's and men's empowerment and inclusion in the agricultural sector
- Developed by USAID, IFPRI, OPHI in 2012

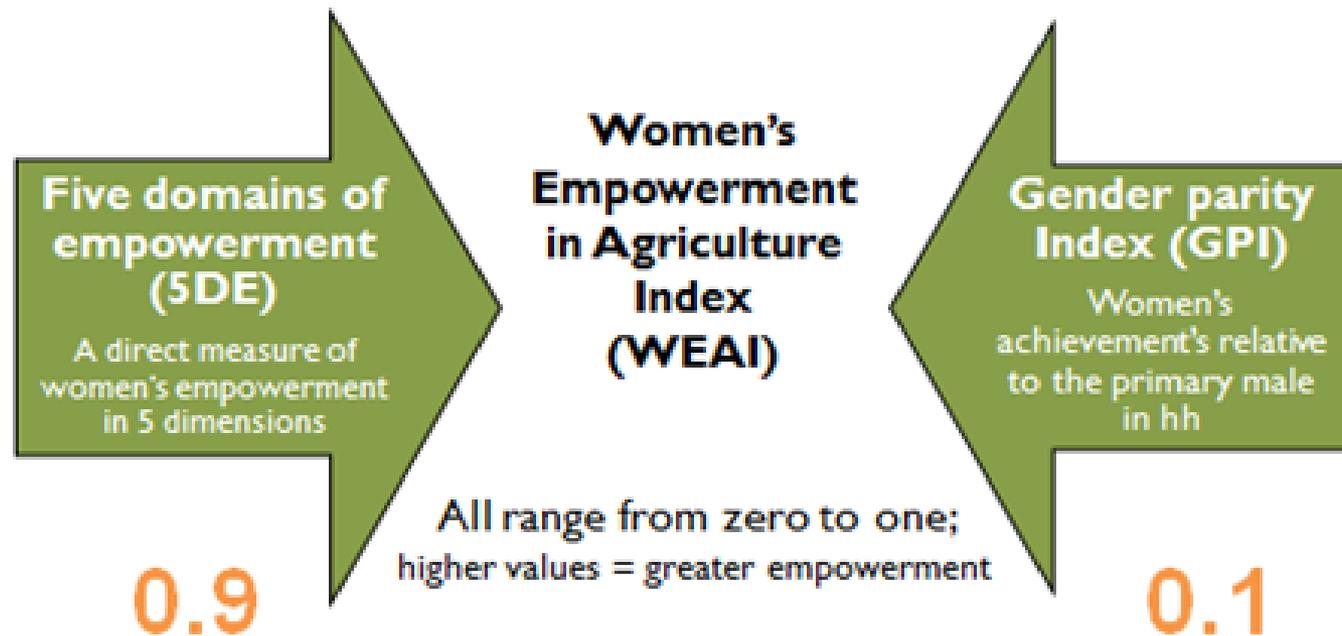


- **Survey-based**
 - Not based on aggregate statistics or secondary data
 - Uses interview of the women and men in the same household
 - Index components designed to apply across countries and cultures



How Is the WEAI Constructed?

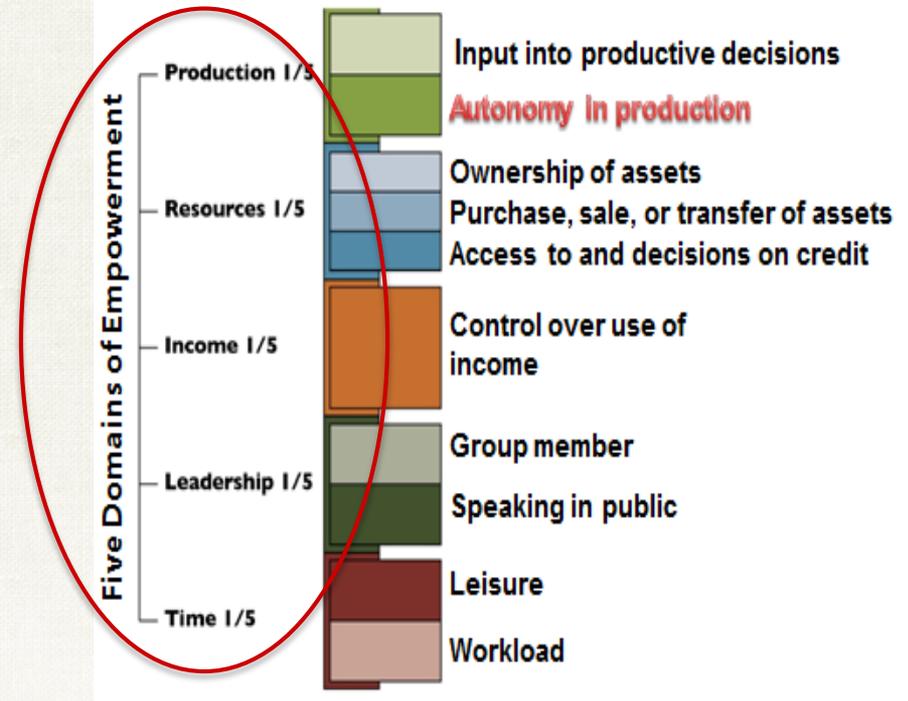
WEAI is made up of two sub-indices





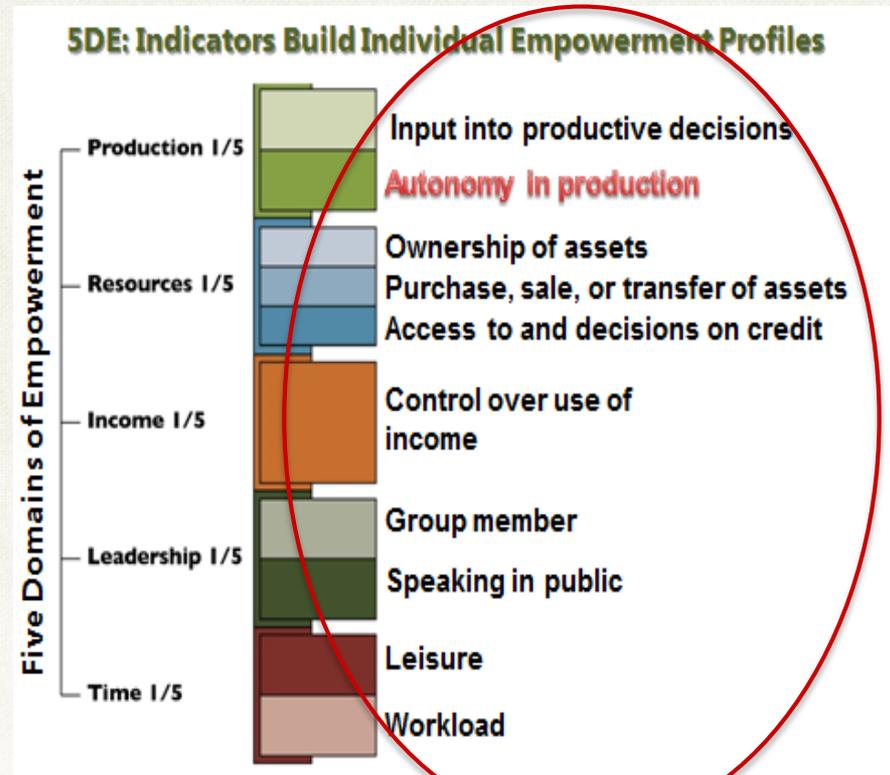
5 different domains

SDE: Indicators Build Individual Empowerment Profiles



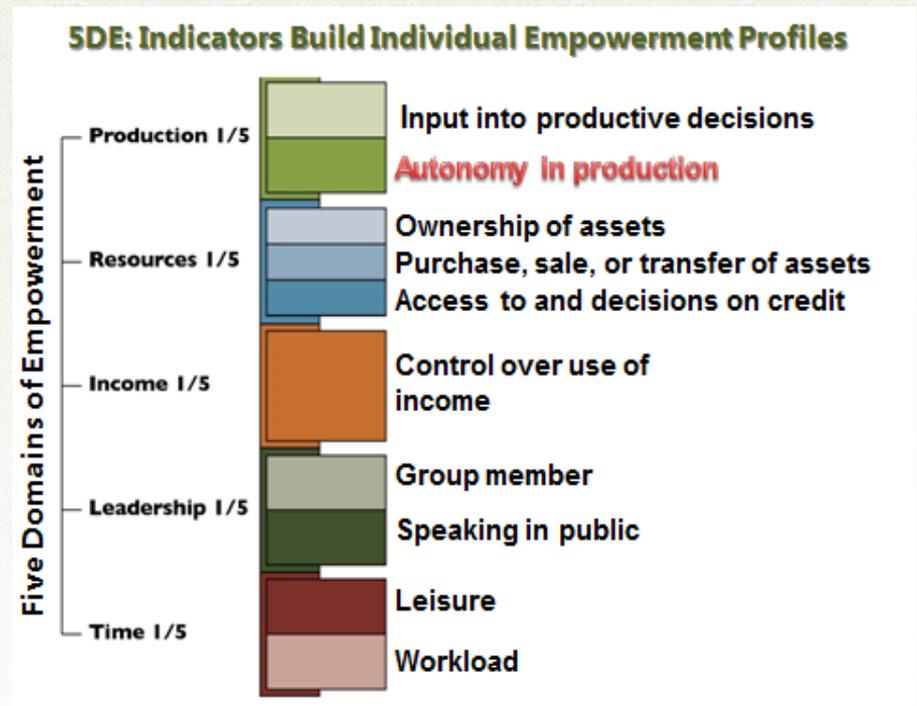


1 to 3 indicators per domain



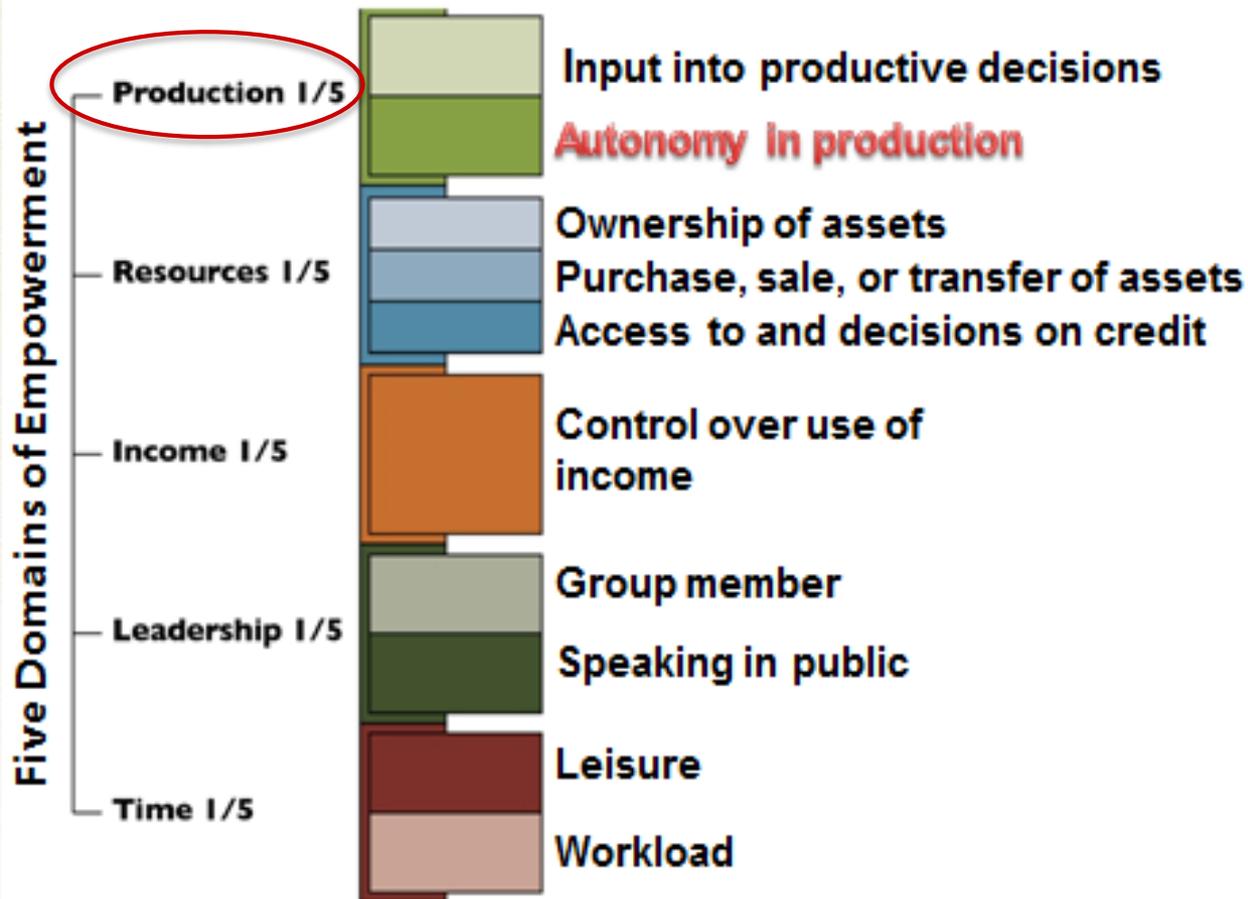


- Index of 0 to 1
- Higher score indicating greater empowerment



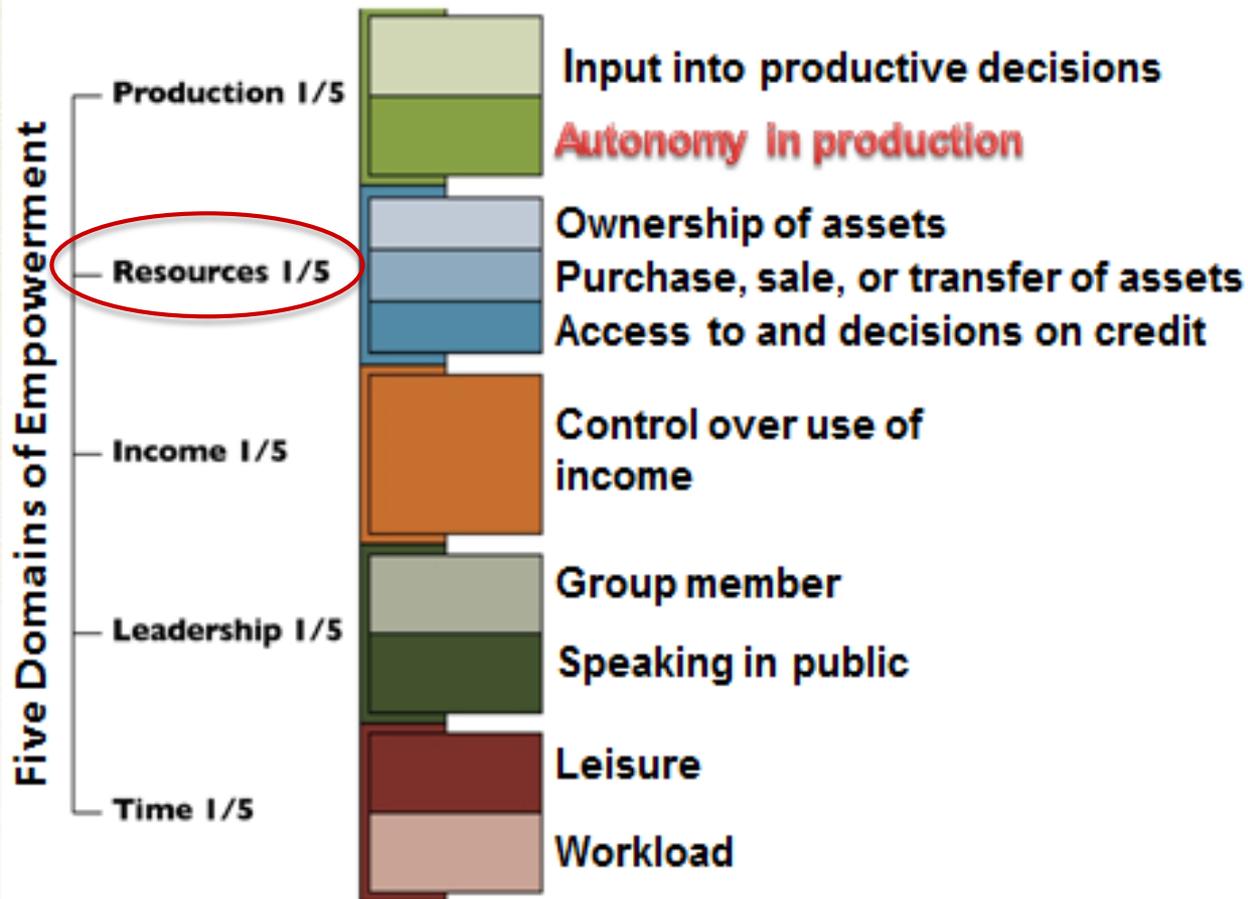


5DE: Indicators Build Individual Empowerment Profiles



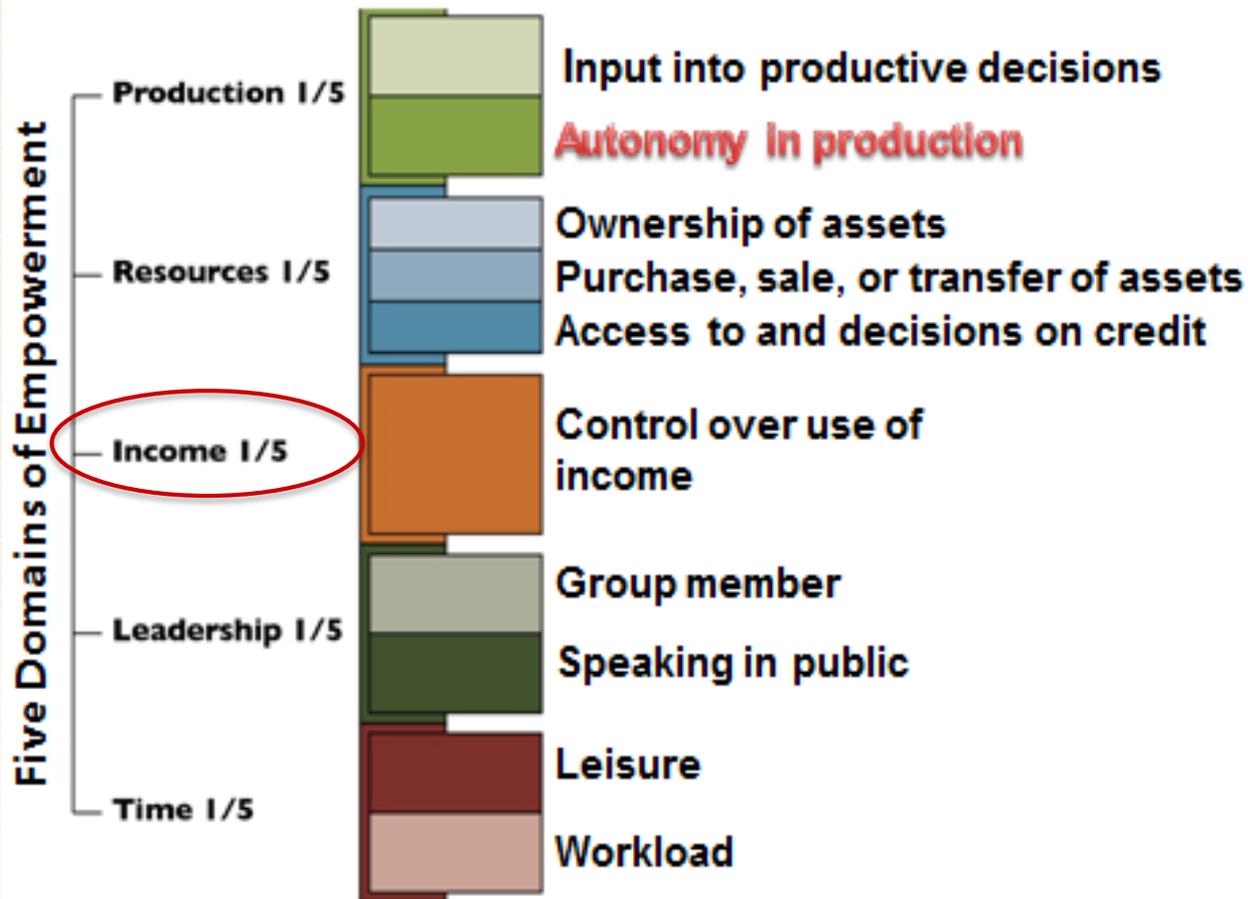


5DE: Indicators Build Individual Empowerment Profiles



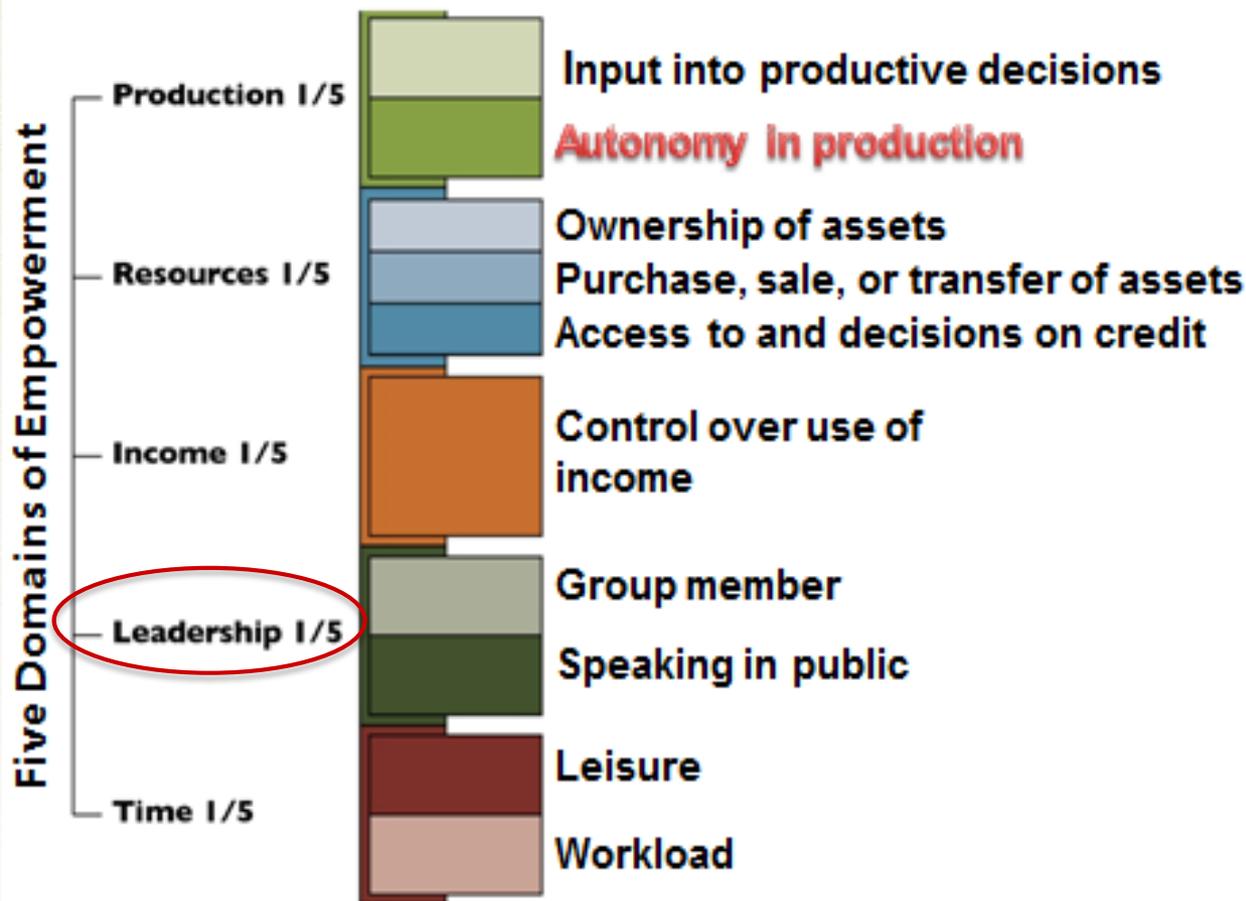


5DE: Indicators Build Individual Empowerment Profiles



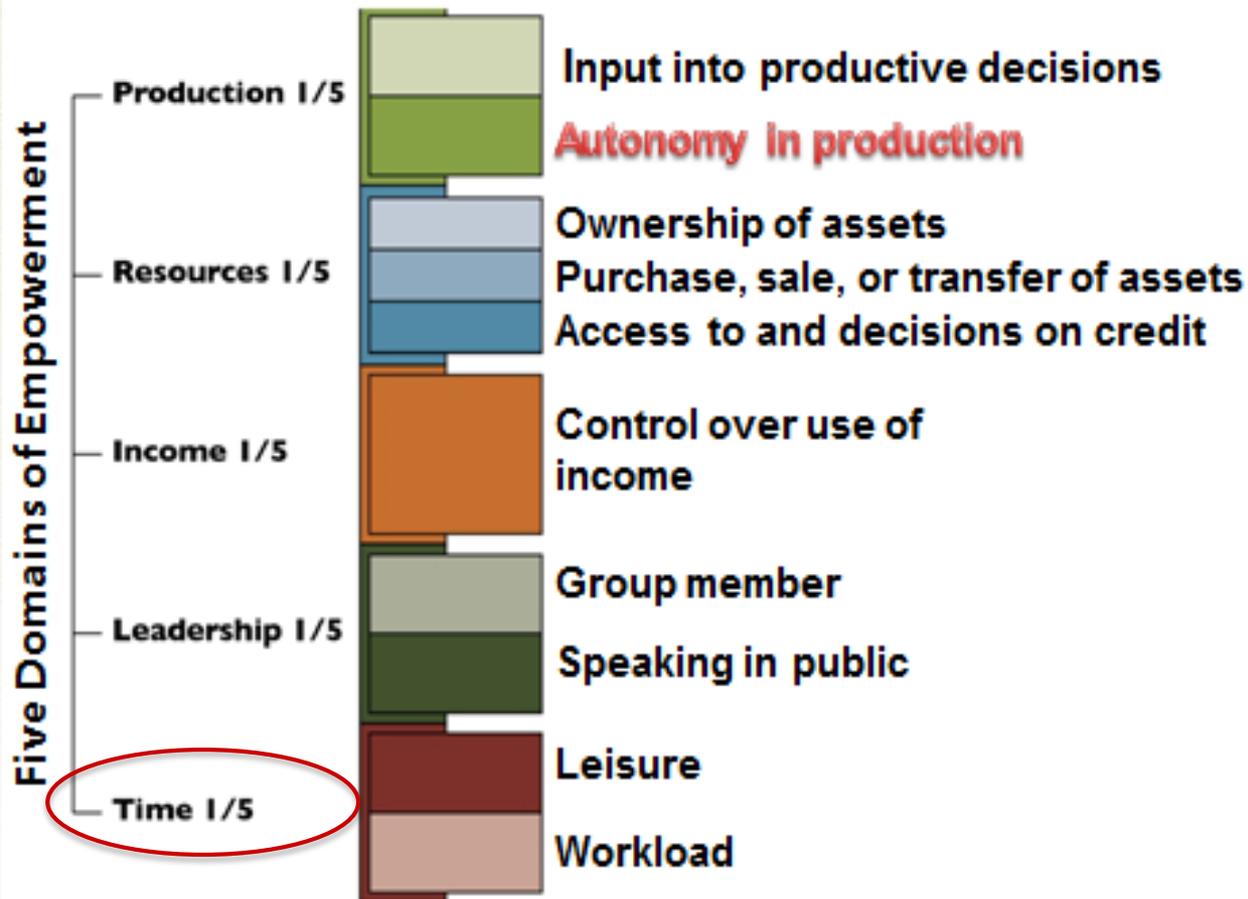


5DE: Indicators Build Individual Empowerment Profiles





5DE: Indicators Build Individual Empowerment Profiles





Progress

Empowering women in agriculture will be achieved by:

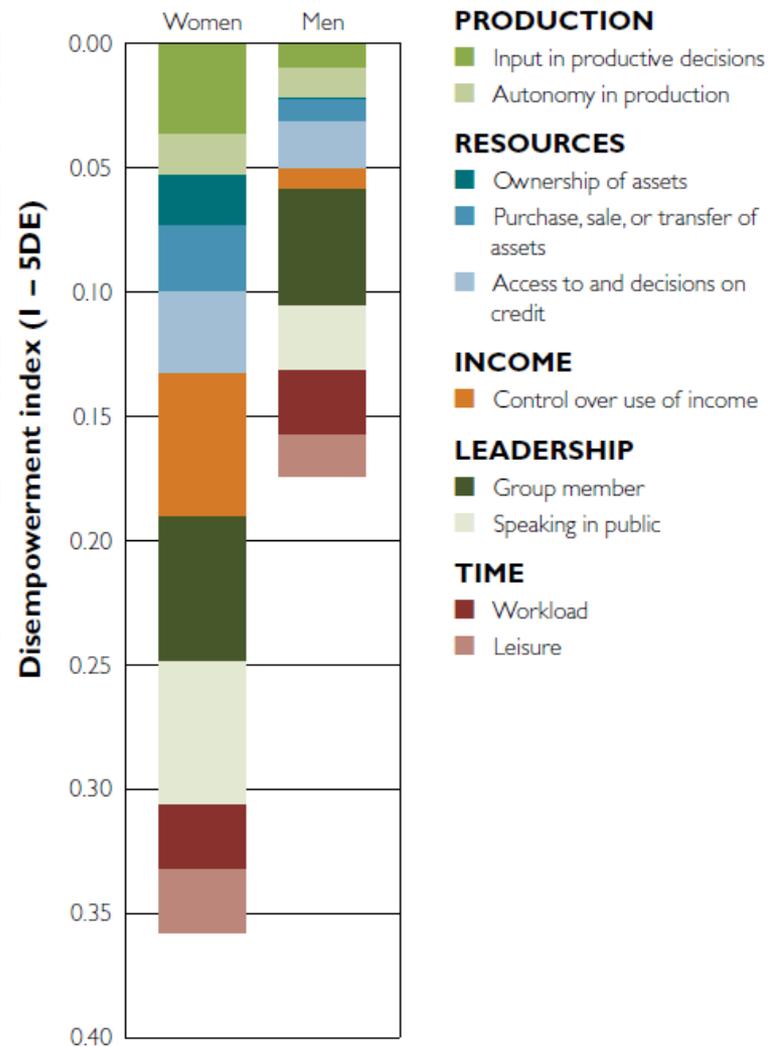
- Empowering women in the 5 domains
- Achieving gender parity within the household.





Interpreting WEAI

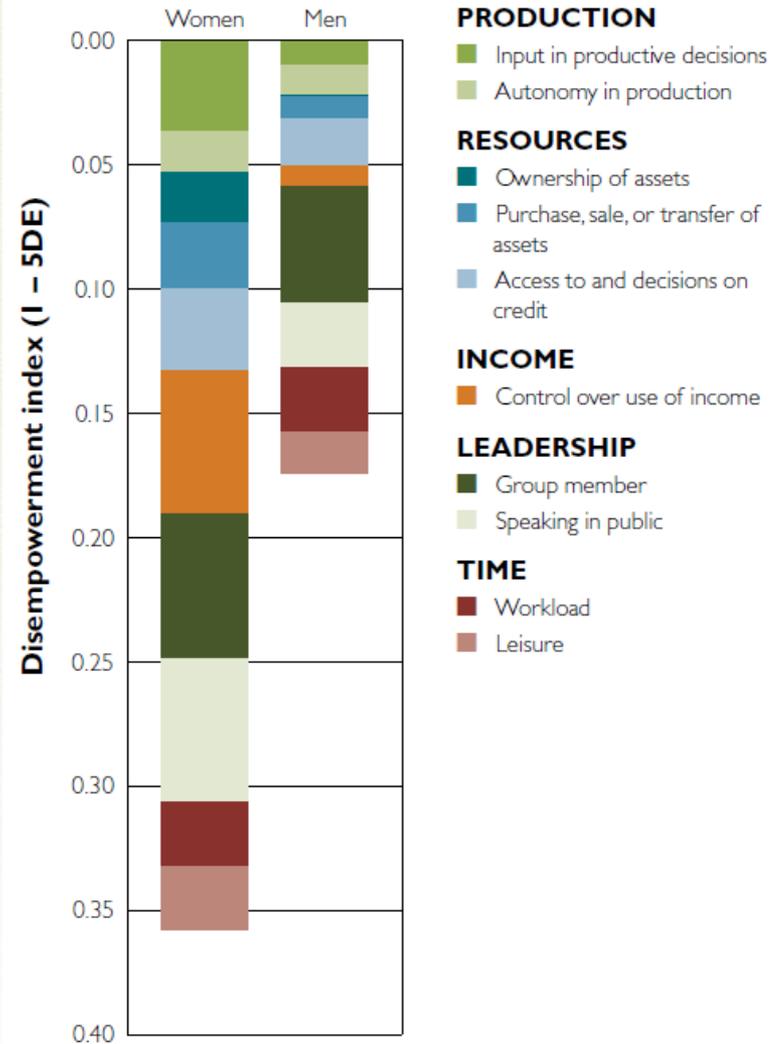
Bangladesh



Source: IFPRI (2012a).



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

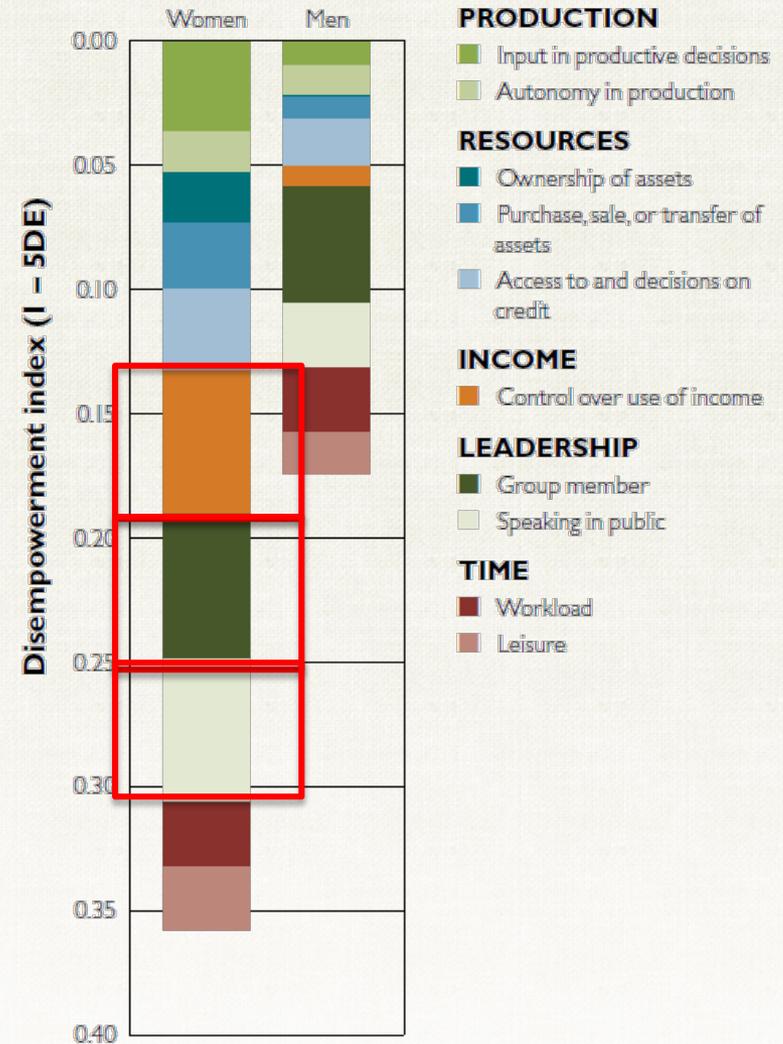


Source: IFPRI (2012a).



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

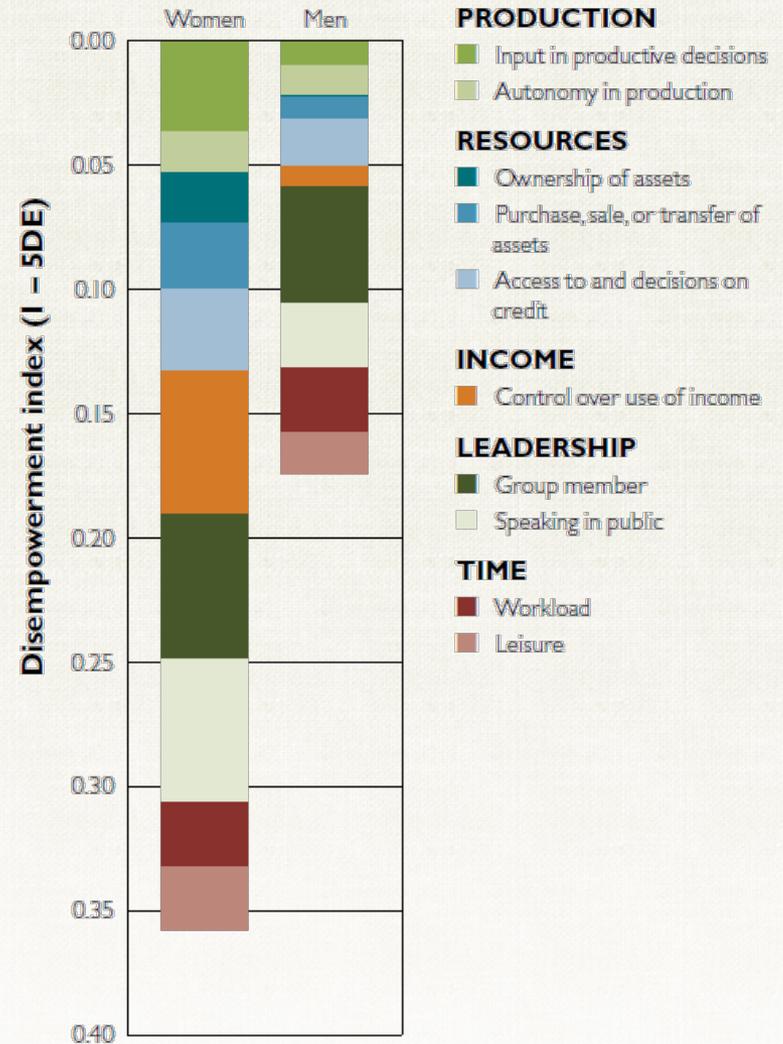
- group membership
- control over income
- speaking in public



Source: IFPRI (2012a).



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

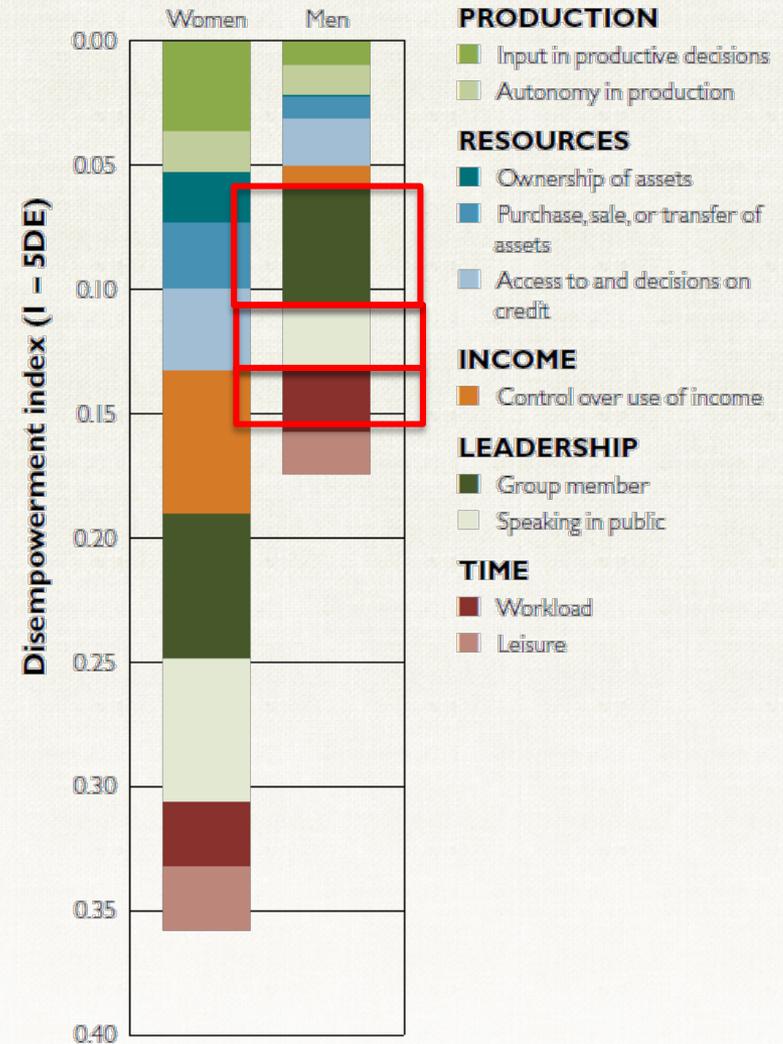


Source: IFPRI (2012a).



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

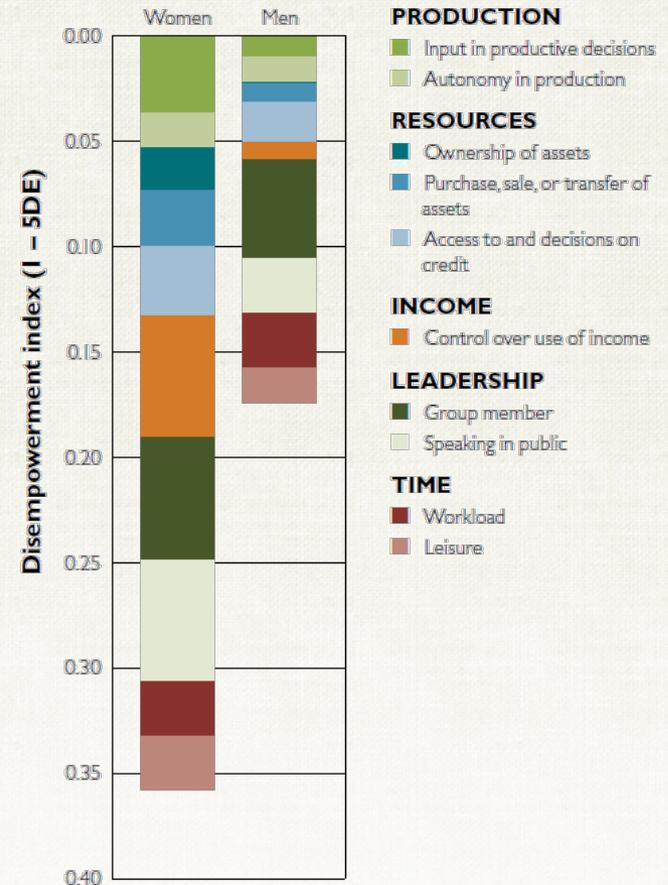
- group membership
- control over income
- workload



Source: IFPRI (2012a).



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



Source: IFPRI (2012a).



Exercise

Using the WEAI data for Aredonia in your NUTSENAG case study, answer the following questions:

- 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?



Gender Integration Framework (GIF)

- 7 dimensions/domains of women's empowerment in agriculture
- Guide to examine and prioritize
 - current status of domains of empowerment
 - activities that exist in FTF programming
 - activities that are needed in FTF programming
 - activities to go forward with
 - how to measure progress
- Use WEAI data in GIF





FEED THE FUTURE

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

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



NUTSENAG

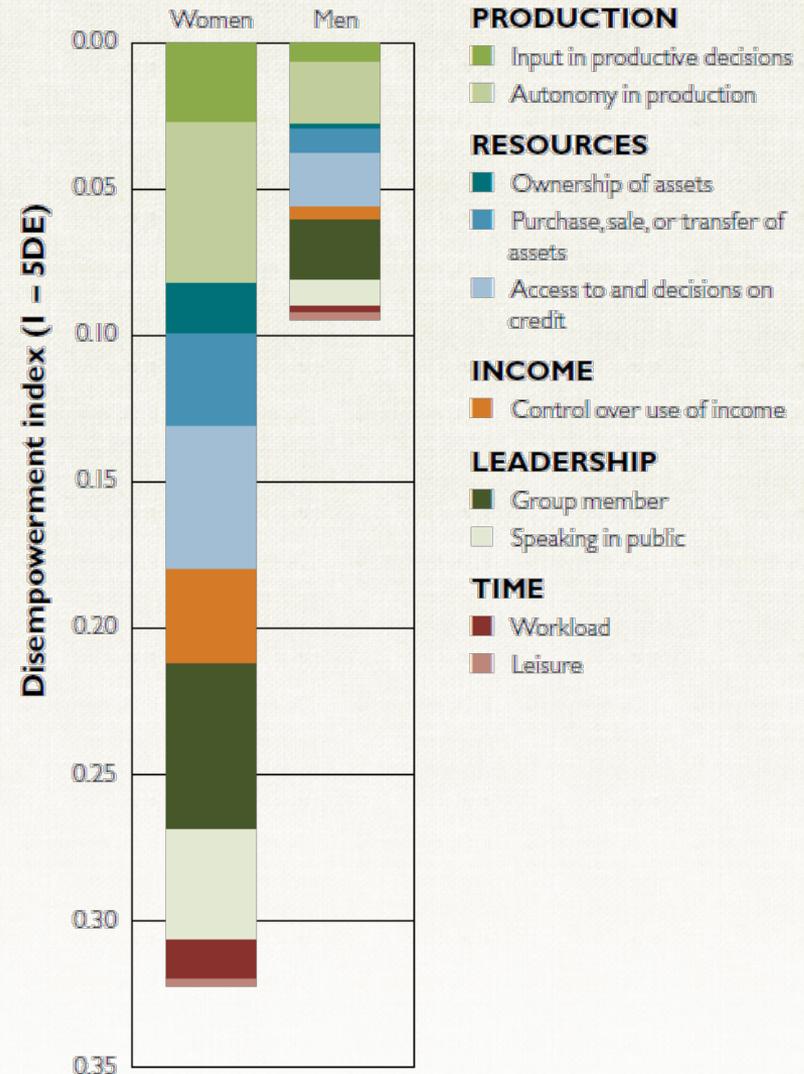
From the performance monitoring data, we found:

- Females' groundnut yields are significantly lower than males'
 - Lower inputs per hectare
 - Lower price per kilogram
 - Lower proportional sold
- Greater number of hectares per female
- Larger number of female beneficiaries





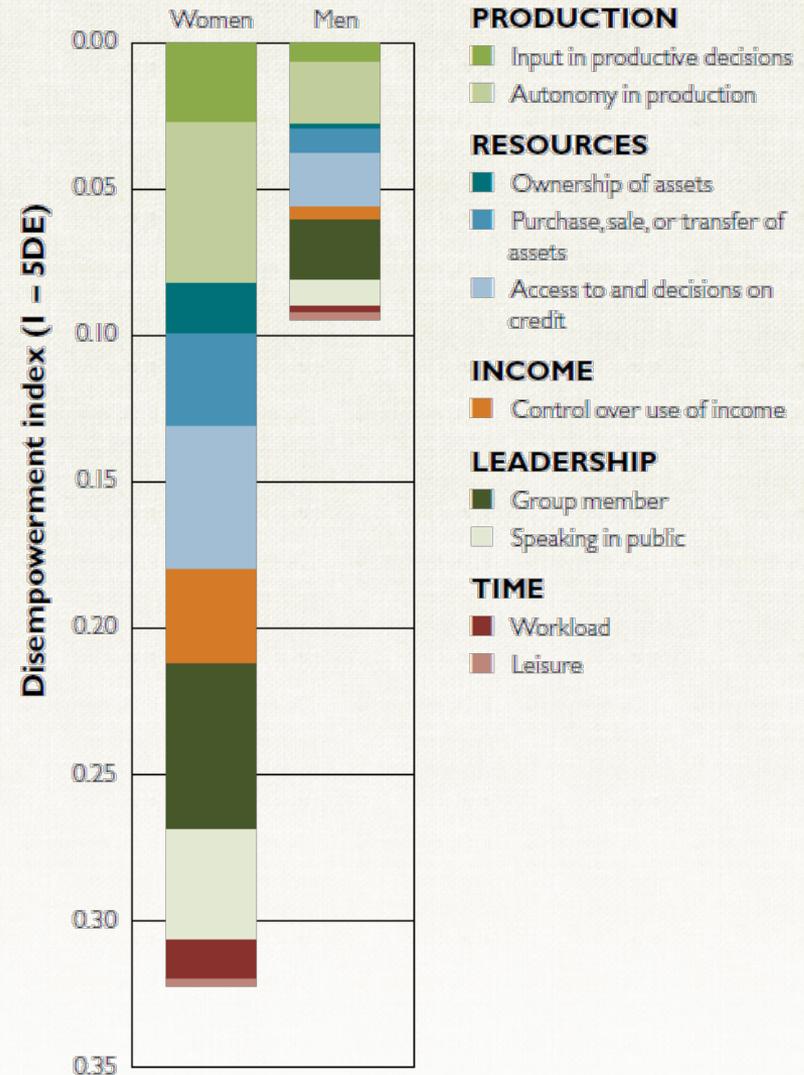
What constraints should NUTSENAG focus on in order to narrow the gap between men's and women's groundnut yields?





What constraints should NUTSENAG focus on in order to narrow the gap between men's and women's groundnut yields?

- Household decision making over production
- Access to and decisions regarding credit
- Lack of strong social networks





Small Group Activity

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.

You have 15 minutes



Gallery Walk

- What similar approaches do you see?
- What different approaches do you see?





Individual Reflection

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?

You have 15 minutes





INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE

IFPRI

LIBRARY IFPRI WEBSITES BLOGS STAFF JOBS

SEARCH

ABOUT RESEARCH PUBLICATIONS & TOOLS EVENTS PRESS

Twitter Facebook RSS Email

TOPIC

WEAI RESOURCE CENTER

The "Women's Empowerment in Agriculture Index" (WEAI), launched by IFPRI, Oxford Poverty and Human Development Initiative (OPHI), and USAID's Feed the Future in February 2012, is the first comprehensive and standardized measure to directly capture women's empowerment and inclusion levels in the agricultural sector.

The WEAI is an innovative tool composed of two sub-indexes: one measures how empowered women are within five domains, and the other measures gender parity in empowerment within the household.

Key Resources

- › [WEAI Training Materials](#)
- › [WEAI summary brochure](#)
- › [Press release on WEAI launch](#)
- › [Fellowships awarded](#)
- › [Video introduction to WEAI](#)
- › [Key WEAI Publications](#)
- › [WEAI Events](#)



flickr (IFPRI/Farha Khan)

Two women collect leafy vegetables in Khulna, Bangladesh, 2014.

CONTACT US

For more information about the Women's Empowerment in Agriculture Index (WEAI), please contact IFPRI-WEAI@cgiar.org.

WEAI PARTNERS

Global Partners

<http://www.ifpri.org/topic/weai-resource-center>



FEED THE FUTURE

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

Session 8: Reporting and Using Performance Monitoring Data



Writing Results Narratives for Missions and Implementing Partners



Past FTF Information Requested

How is the activity integrating nutrition?

Why are we not meeting set targets?

How are interventions promoting increased dietary diversity?

How has the intervention impacted gender roles and women's empowerment?

What results has the FTF program achieved toward the goals of accelerating agricultural growth and improving

nutrition?
How are interventions addressing climate change?

How are activities engaging the private sector?



Key Considerations

- **Audience:** who is it?
 - The tones and themes of the narrative will differ based on the audience
- **Purpose:** why are we writing the narrative?
 - Will drive the content and key take-away messages



Types of Narratives

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

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



Parts of a Narrative

- 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?



The Problem

- Be concise (1-2 sentences)
- Be Specific
- Use numbers to show the severity (data up to 3 years old)



The Global Challenge

- ✓ Almost **one billion** people suffer from chronic hunger
- ✓ More than **3.5 million** children die from undernutrition each year
- ✓ The world's population will increase to more than **9 billion by 2050**
- ✓ Food production will have to **increase by 70%** to feed the world



Option 1

- 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.

Option 2

- 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.



Solving the Problem

- Get to the point of what you are doing
- Be Specific
 - Don't use jargon (e.g., “capacity building”)
 - Talk about commodities, geographic location
- What is your direct intervention?



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.



The Result

- Always, always, always answer the **So What?**
- Talk about outcomes
 - Start with outputs, then talk about outcomes
 - It's **okay** to round numbers
- If no outcomes, talk about coverage
 - Use percentages
- Reference a time period for your results
 - Should be the previous year



FY 2013 Feed the Future Results

- Nearly **7 million** farmers applied new technologies and practices in FY 2013, nearly 2.5 million more farmers than in FY 2012.
- **4.1 million** hectares of land, an area slightly larger than Switzerland, came under improved technologies and management practices, an increase of nearly 1 million hectares from FY12 and nearly double the hectares of FY 2011.
- FTF leveraged over **164 million** dollars in **new** private sector investment in the agriculture sector.
- Over **340,000** micro-, small-, and medium-sized enterprises received assistance to access loans.
- In FY 2013, **11 million households** benefited directly from FTF investments which was an increase of 2 million from FY 2012.



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.



The Potential

- So, what now? Communicate how we plan to improve results going forward
- This means identifying:
 - 1) **successes** and **challenges**
 - 2) **planned activities** for building on successes and mitigating challenges
- Be concrete about planned activities;
- Provide targets and timelines (when possible)
- **Talk about LEARNING!!!**



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.



Summary



Know your audience and purpose



Be specific



Be concise



Use numbers



Talk about: the problem, solving the problem, the result, the potential



Deviation Narratives

- Why did the result ***deviate*** from the target?
- Deviation narratives can address many questions about the data; avoids follow-up
- Deviation narratives **are required** if actual results deviate +/- 10% from the target
- Keep them **short!** (two or three sentences)
- **Address the deviation**



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.



FEED^{THE}**FUTURE**

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

Success Stories

Success Stories

≠

Performance Narratives



Success Stories

- The formula is simple: use **powerful statistics** ;communicate **progress** ;and bring it to life with a **personal narrative**.
- Stories **must** contain beneficiaries and beneficiary quotes
- Photographs bring a story to life!
- <https://stories.usaid.gov/#intro>



Group Activity

From the data on the Excel spreadsheet write a short Performance Narrative:

- Highlight 1 or 2 results
- In 3 or 4 sentences

Choose a person from your group to present your narrative to the class

20 minutes



Individual Reflection

Record your key learnings about writing performance narratives.

We do not learn from
experience... we learn
from reflecting on
experience.

- John Dewey



Finding and conveying meaning in data through visualization





FEED THE FUTURE

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





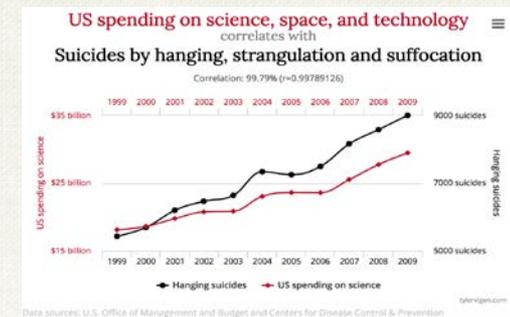
What visualization can do

- Highlight comparisons and identify trends
- Generate ideas about relationships
- Provoke conversation
 - What's up with that point/region?
 - Why are those points high/low?
 - How does this compare to previous knowledge?
- Synthesize data into a consumable format
 - See information at a glance to compare, without having to memorize the numbers



What visualization can't do

- Tell you “the answer”: it is not magic
 - Dashboards will not solve all problems. A **well-designed** dashboard can solve a **particular** problem.
- Correlation does not imply causation
 - Just because things visually overlap mean one causes the other.
- Save you from bad data
 - A good visualization doesn't rescue meaningless or inaccurate data
- Bypass data processing, exploration, and analysis
 - ... and a LOT of work goes on to collect, clean, analyze, and visualize data
 - Data viz can be pretty, but it takes thought and work to make it **meaningful**





How do I make it meaningful?

1. Find the **comparison** that's **useful** to the **audience**
2. Pick an appropriate chart type
3. Simplify graphics to focus message
4. Annotate to highlight and explain



FEED^{THE}**FUTURE**

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

**I Visualizations are all about
comparisons**



Who's the audience?

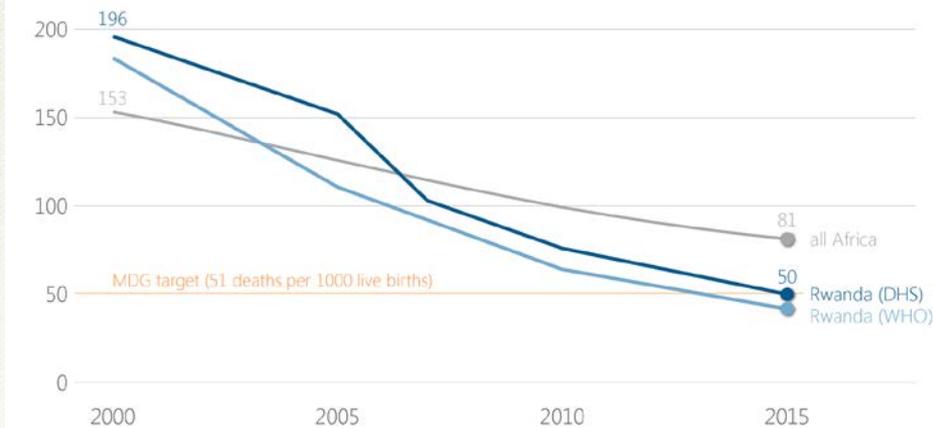
- What are you hoping to achieve?
- What relationship do you want to show?
 - Magnitude / size
 - Relationship between 2+ variables
 - Trend over time
 - Ratio / composition of a group
 - Differences *between* groups (geographies / regions? groups of people?)
 - Differences *within* groups (distribution)
 - Between different data sets (what's the context?)
- Who will use the information to make a decision?
- How will they consume the information?



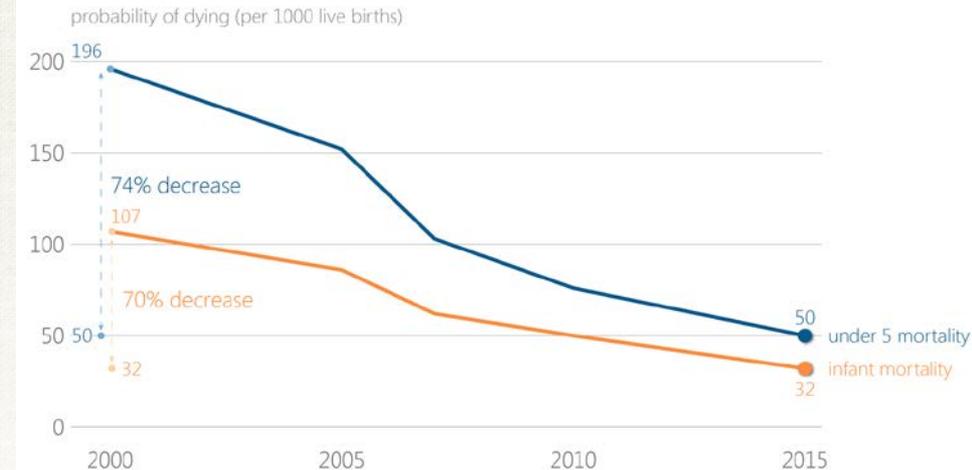
Change your comparison, change your story

Two perspectives on the same data:

Rwanda was one of the few countries to meet the under 5 child mortality Millennium Development goal probability of dying by age 5 (per 1000 live births)



Under 5 child mortality has declined slightly more than infant mortality



relative to other countries?

between age groups?



2

**Choose an appropriate
chart type**



Choosing chart types

- There's a lot of research on choosing an appropriate chart type, and we could debate the merits of each for days.

Each has its own purpose;
our “go-tos” are:

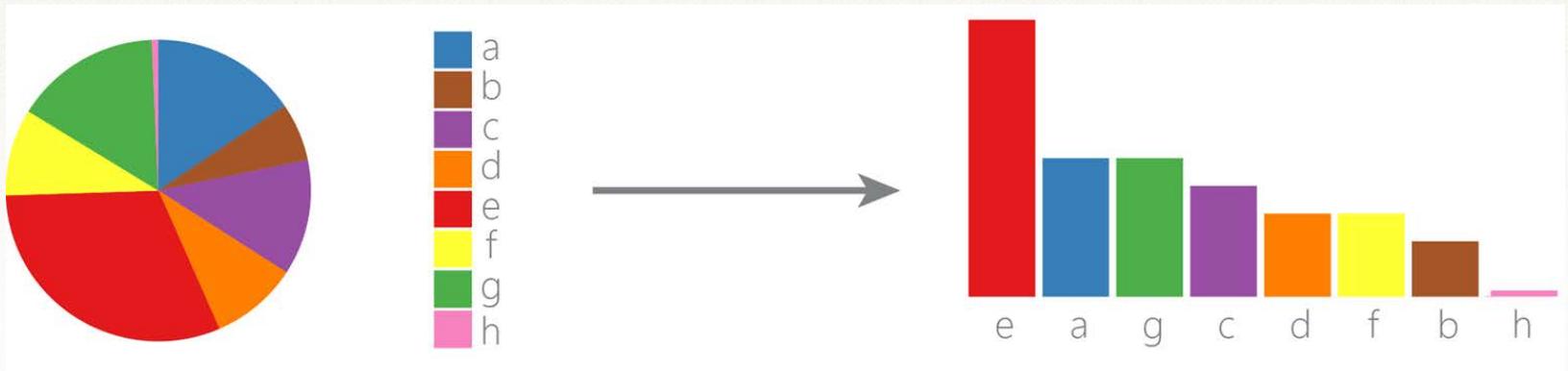
- bar graphs (not pies)
- small multiples
- scatter plots





Pies are for eating!

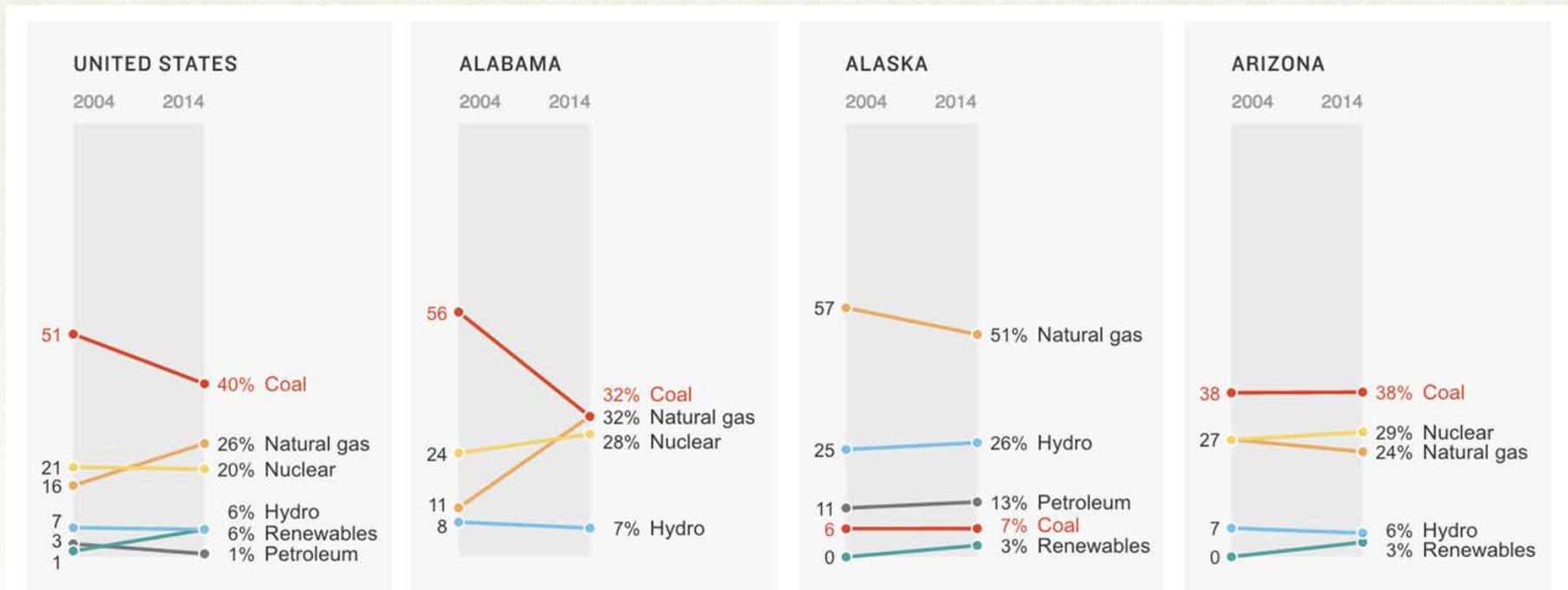
- People are not good at estimating angles
- ... especially when the angle doesn't start at 12 o'clock.
- Comparing more than a few is difficult
- Small numbers get lost





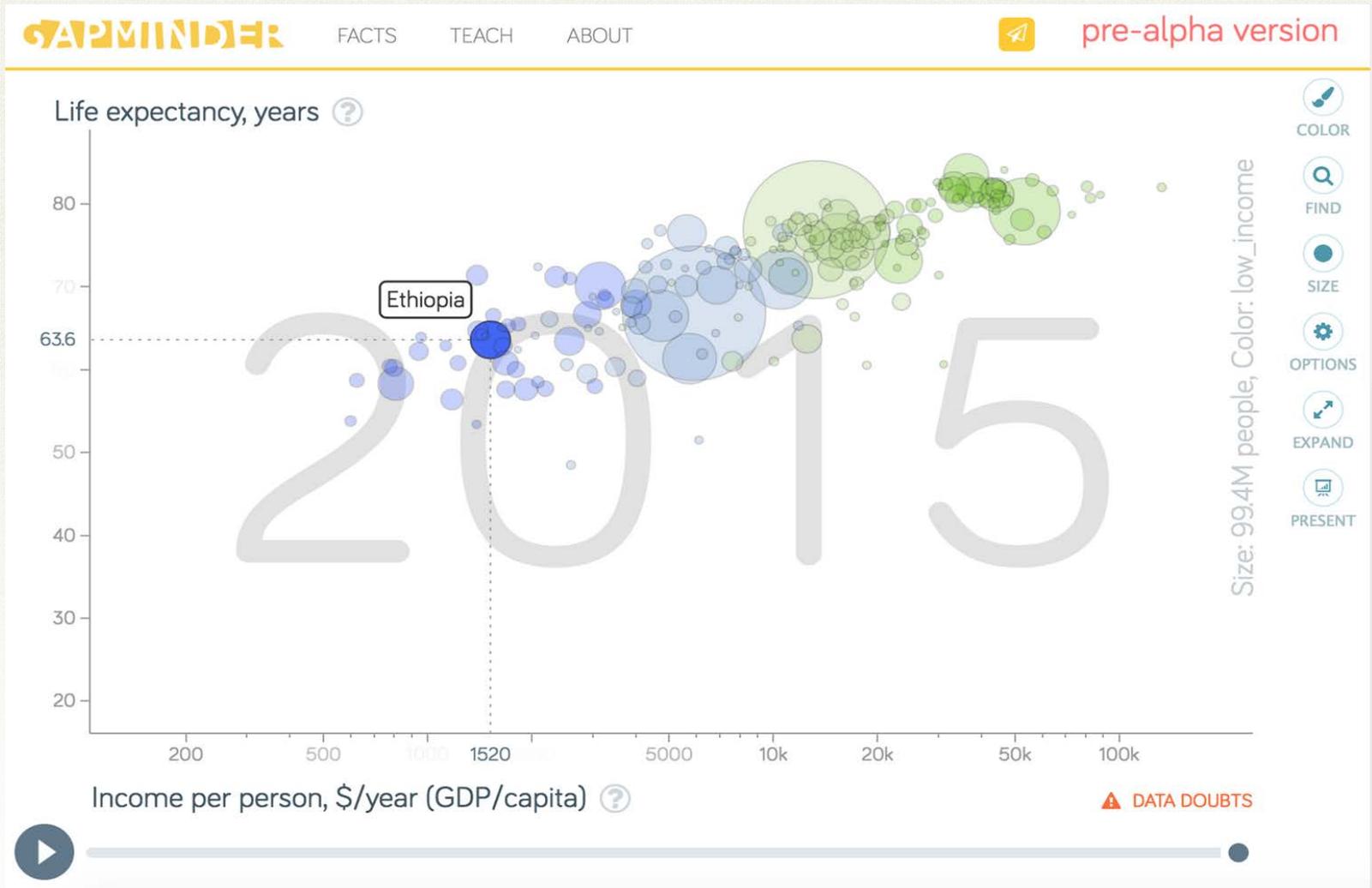
Don't show everything on the same graph!

Highlight differences between groups with small multiples





Show relationships with scatter plots





3

Simplify your message

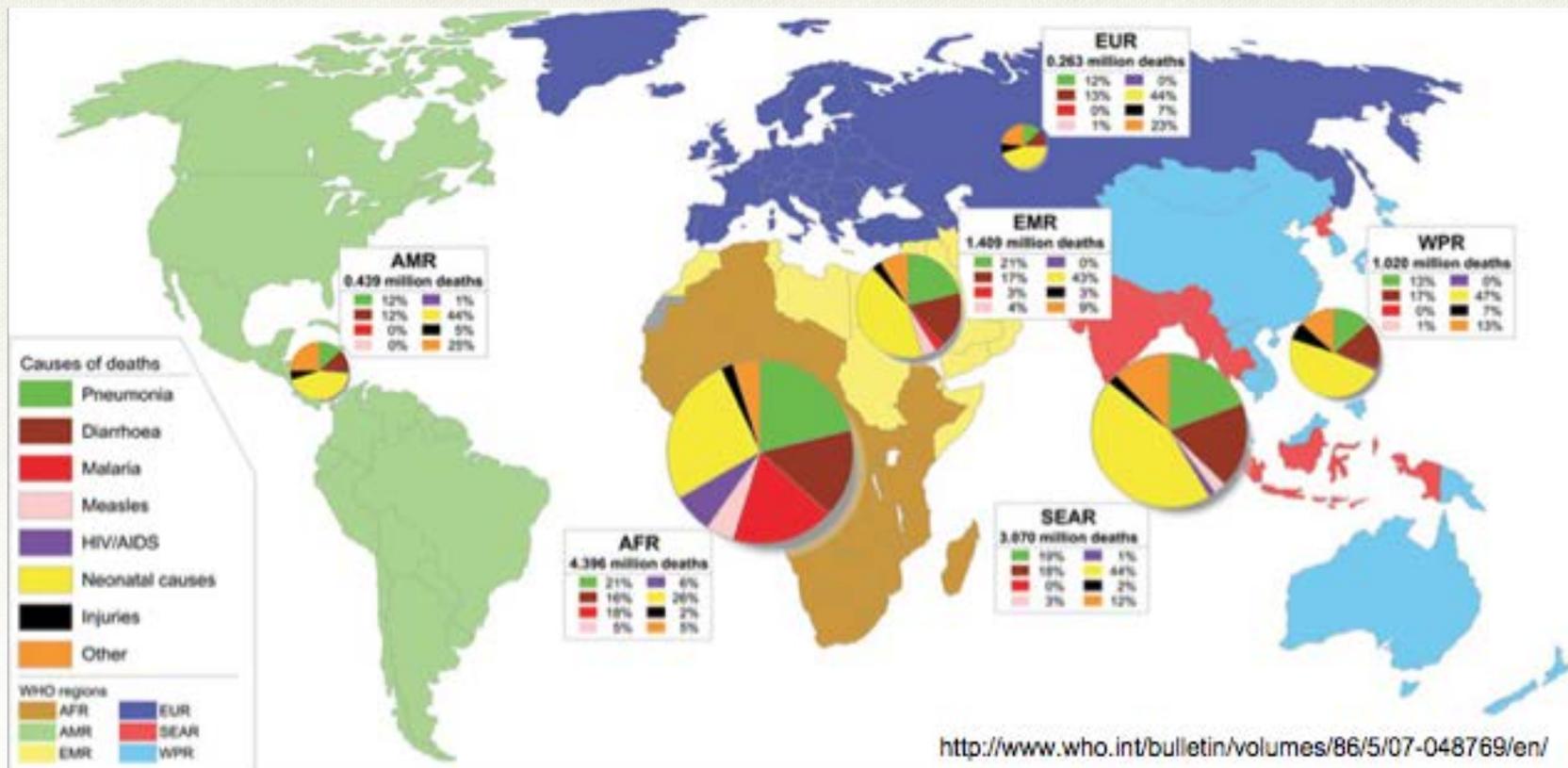
Simplify your graphics

**Get it right in black and
white**



Why to keep things simple

Distribution of deaths from pneumonia and other causes in children aged less than 5 years, by WHO region



Title is accurate and informative-- but doesn't tell a story

WHERE DO I LOOK?

Distribution of deaths from pneumonia and other causes in children aged less than 5 years, by WHO region

WHO region

Why is there a map here?

must look back and forth to read colors on legend

What's WPR?

and why doesn't it add to 100%?

WHAT IS THE STORY?

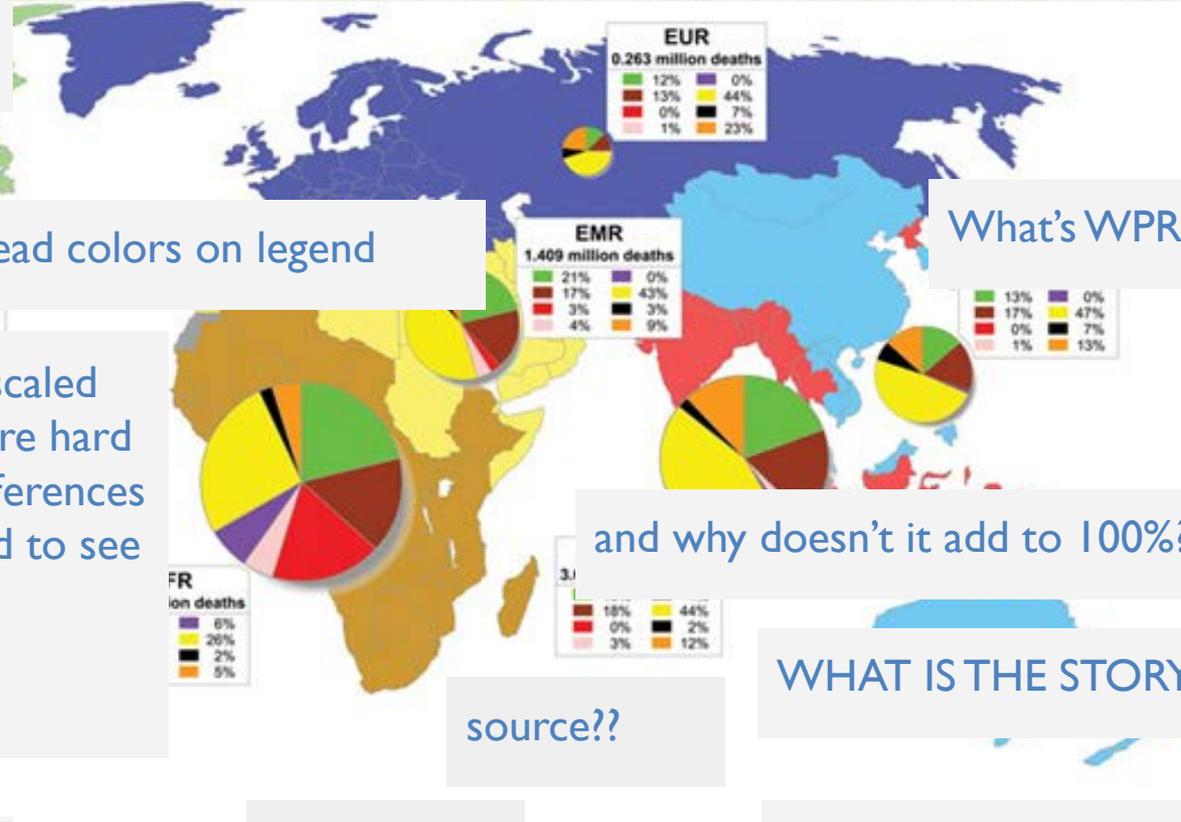
source??

shadow??!

unmeaningful pies.

AH! 2 yellows!

size of pies are scaled by -- but areas are hard to judge, and differences in death are hard to see

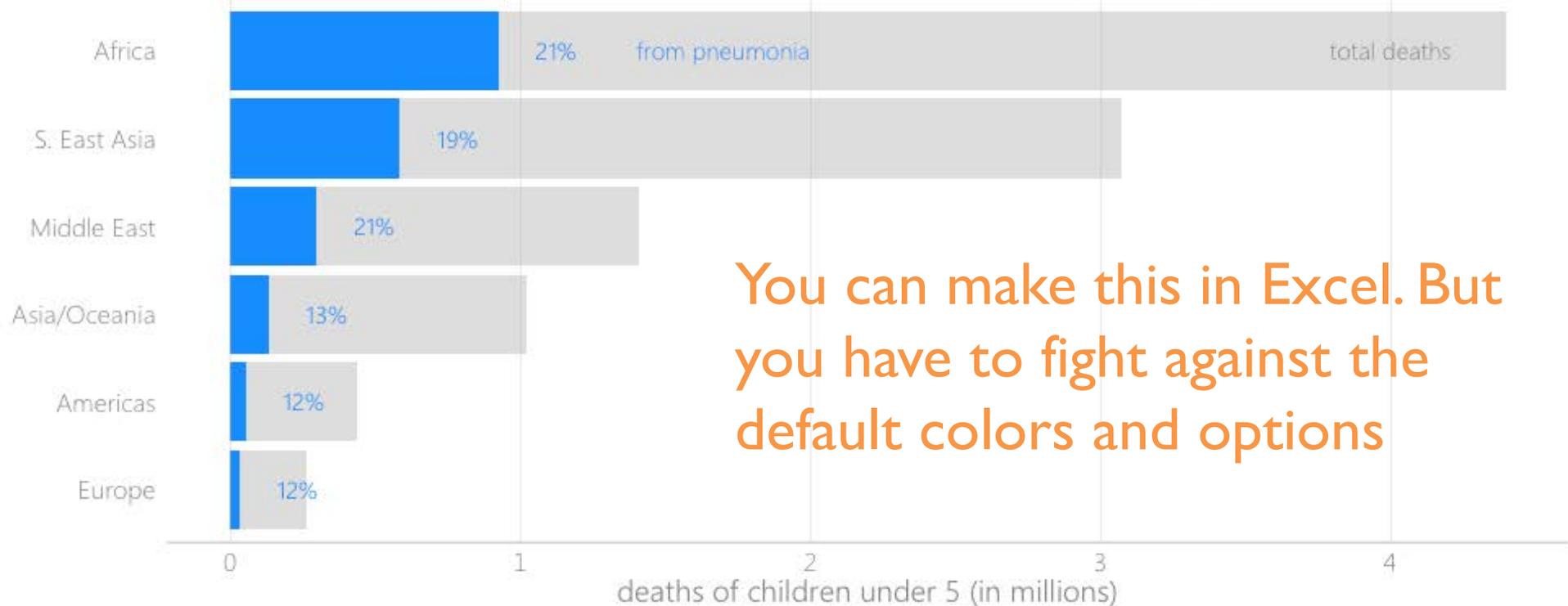


There are SO MANY COLORS my notes have to have a grey box behind them.



Focus on the story

Child deaths from pneumonia are most common in Africa, S.E. Asia, and the Middle East



You can make this in Excel. But you have to fight against the default colors and options



4

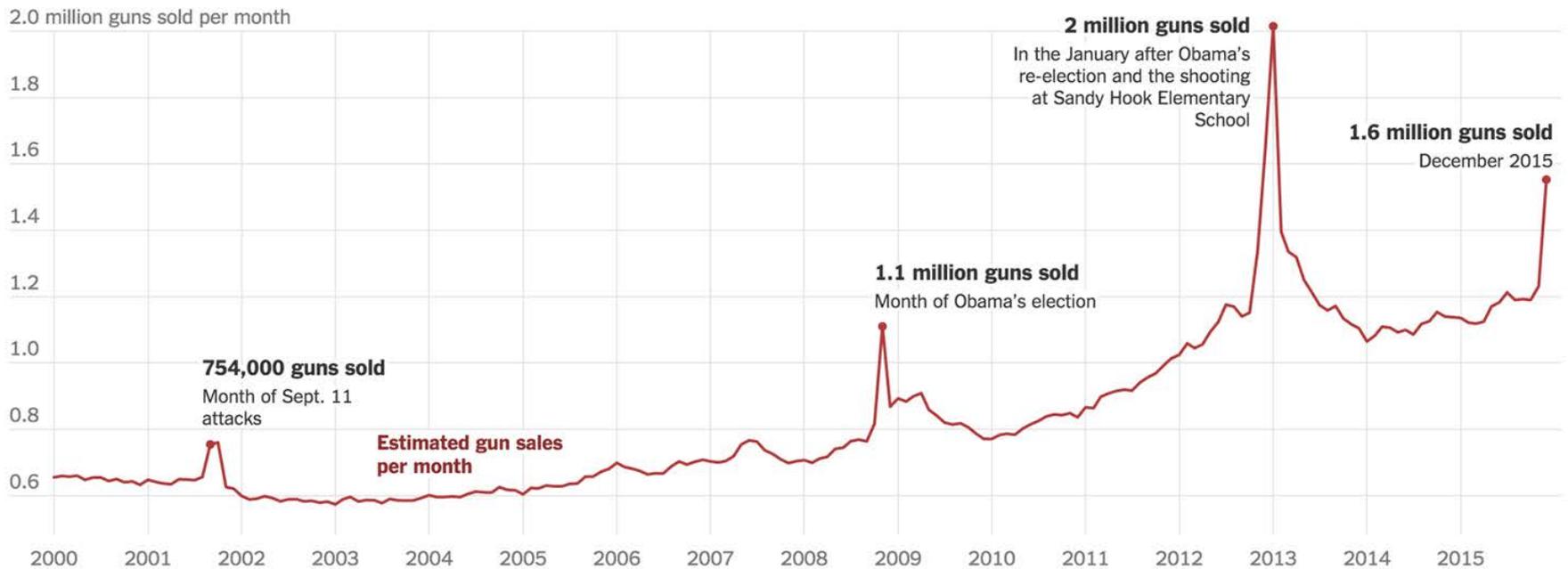
**Annotate to explain
and provide context**



What happened in 2013?

Calls for New Restrictions

By GREGOR AISCH and JOSH KELLER **UPDATED** JAN. 4, 2016

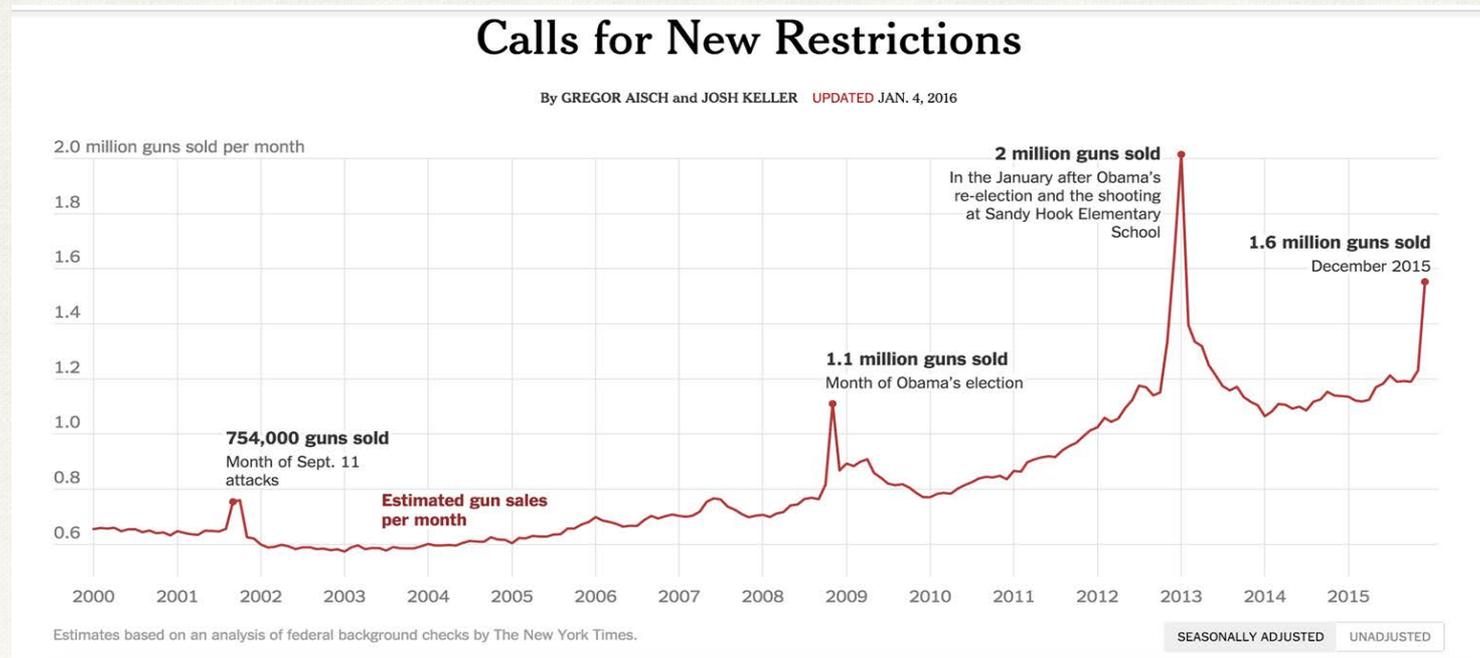


Estimates based on an analysis of federal background checks by The New York Times.

SEASONALLY ADJUSTED UNADJUSTED



Annotations provide context



- Highlight interesting / confusing parts of the data
- Provide context or relationships to other information
- Provide meaningful, descriptive titles to guide the reader
- Document the source of the data/ how manipulated



FEED^{THE}**FUTURE**

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

5 Sketch and try variations



Group Activity: Draw a story

- Draw one
 - Scenario card
 - Findings card
- Sketch out your data story

Your visualization should be:

- Informative
- Interesting
- Appropriate to the audience
- Bonus points for being pretty



Presenting your visualizations (3 min. each)

- 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?



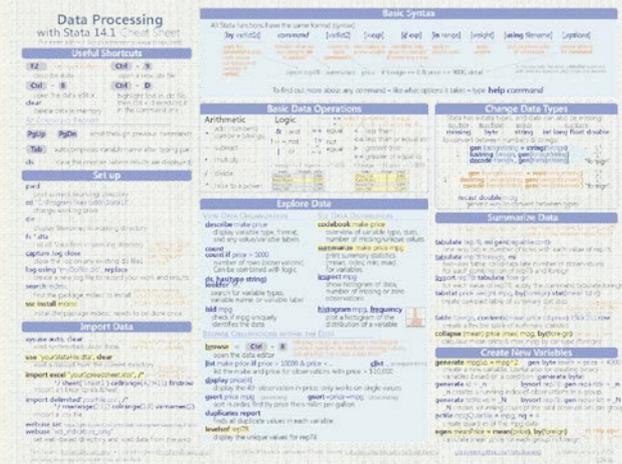
At the end of the day...

- **Be thoughtful:**
 - what **comparisons** are you making?
 - is your representation appropriate?
 - how is the visualization useful?
- **Simplify, simplify:**
 - break things into small multiples
 - get it right in black and white
 - annotate



Resources

- [GeoCenter](#)
 - Free resource to the Agency
 - Customized data analyses / visualizations
 - Training: maps, data, visualization
 - Consultation and second opinions on work
- TONS of books, webinars, classes
 - geocenter.github.io/StataTraining/resources/
- Color: [Color Brewer](#)
- Excel: <http://stephanieevergreen.com/>
- Each other!



Inspiration

- New York Times: The Upshot
- Flowing data: flowingdata.com
- Data Stories podcast: <http://datastori.es/>
- Source OpenNews (Projects): <https://source.opennews.org>
- [Pinterest gallery](#)



FEED THE FUTURE

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

Our Portfolio

BANGLADESH

USAID BANGLADESH LIVELIHOOD MAPPING: HOUSEHOLD NUTRITION

Food consumption is worst in the western half of the country, especially in the north. Diets tend to be similar, with families relying on staples (rice, other cereals, tubers), oils, and vegetables for most of their diet. Higher wealth and better female education is associated with better nutrition.

1 Food Consumption Score

Food Consumption Score

Low HSP

Significant Clusters of Food Consumption Scores

- High FCS
- Low FCS

What are Food Consumption Scores?

Food consumption scores (FCS) measure the dietary diversity of a household combined with the frequency of consumption and range from:

- <20 poor diet
- 20-35 borderline diet
- 35-45 low-accessible diet
- 45-112 good diet

2 Food consumption is lower in the west.

Food consumption is lower in the west, especially in the north. Diets tend to be similar, with families relying on staples (rice, other cereals, tubers), oils, and vegetables for most of their diet. Higher wealth and better female education is associated with better nutrition.

Food Consumption is nearly the same across districts.



Map of Bangladesh showing Food Consumption Score by district. A heatmap shows scores ranging from low (blue) in the west to high (red) in the east.

3 Significant Relationships

Factors Associated with Better FCS

- Higher wealth index
- Higher female education
- Herds and fish holdings

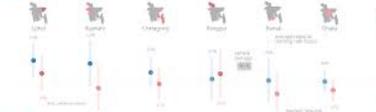
Factors Associated with Worse FCS

- Household in Bangor and Rajshahi

USAID BANGLADESH LIVELIHOOD MAPPING: CHILD NUTRITION

Over half the children in rural Bangladesh experienced some form of malnutrition in 2011-2012. Stunting was high across the country but especially in the north, and has been associated with long-term health impacts. Households with higher wealth (including improved sanitation) and households with younger children report lower stunting rates.

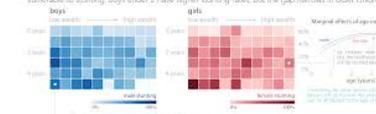
1 Stunting is highest in the north.



2 Significant Relationships (stunting)

Wealth, Age, and Gender

Households that are asset poor (shown at the left) and older children (shown at the bottom) are the most vulnerable to stunting. Boys under 2 have higher stunting rates, but the gap narrows in older children.



Factors Associated with Lower Stunting

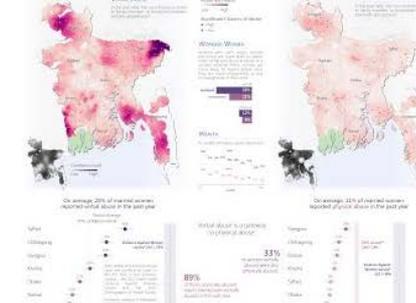
- Younger children
- Higher wealth index
- Households with younger females
- Households with older children

Factors Associated with Higher Stunting

- Asset-poor households
- More children under 5 years old
- Households with asset-poor women in the past 2 years
- Households that fish and/or water

USAID BANGLADESH LIVELIHOOD ANALYSIS: WOMEN'S EMPOWERMENT

Bangladesh has some of the highest rates of domestic violence worldwide. Analysis of the Integrated Household Survey suggests that nearly 50% of married women are verbally abused, and over 10% are physically abused. These figures are much lower than previous studies, and likely point towards underreporting by respondents.



Domestic Violence is highest in the north.

Being a rural woman in the north is associated with higher rates of verbal and physical abuse. Married women in Bangladesh and Chittagang report both high rates of verbal and physical abuse.

Why might these patterns exist? Women reporting abuse experience partners with the educational equivalent are less likely to report abuse.

ETHIOPIA

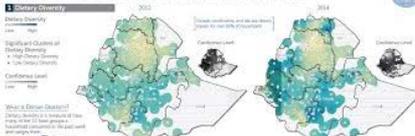
USAID ETHIOPIA LIVELIHOOD ANALYSIS: HOUSEHOLD SHOCKS

Households in the north and eastern parts of the country were most likely to report a shock of any type. Price shocks were the most common.



USAID ETHIOPIA LIVELIHOOD MAPPING: HOUSEHOLD DIETARY DIVERSITY 2012/2014

Diet diversity improved slightly in Ethiopia between 2012 and 2014. A diverse diet is a key indicator of a less vulnerable household. Overnutrition and/or undernutrition can lead to serious malnutrition. Limited diet diversity can be caused by natural limitations, lack of access to markets, or cultural aversion to specific foods.



USAID ETHIOPIA LIVELIHOOD ANALYSIS: HOUSEHOLD PRICE SHOCKS

Price shocks affected households more than any other type of shock in 2012/2014. Price is a key indicator of household vulnerability and access to markets. Price shocks can lead to household vulnerability in areas with severe reported shocks, markets may not be functioning properly due to natural, local issues or other broader problems.





FEED THE FUTURE

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



FEED ^{THE} FUTURE

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