

SESSION 6.2: PRESENTING DATA, USER ENGAGEMENT AND MAKING DATA MEANINGFUL

UNSD

Workshop on Data and Statistics for
Evidence-based Voluntary National
Reviews (VNRs)

9-12 December 2019, Vienna, Austria





User Engagement



Who is a 'user'?

Which users do we want to prioritize and why?

PRIVATE SECTOR
RESEARCHERS/ACADEMIA
POLICY/DECISION MAKER
CIVIL SOCIETY (CSO)
GOVT. OFFICIALS
STUDENTS
MEDIA
DEVT. PARTNERS/INT. ORG
INDIVIDUALS

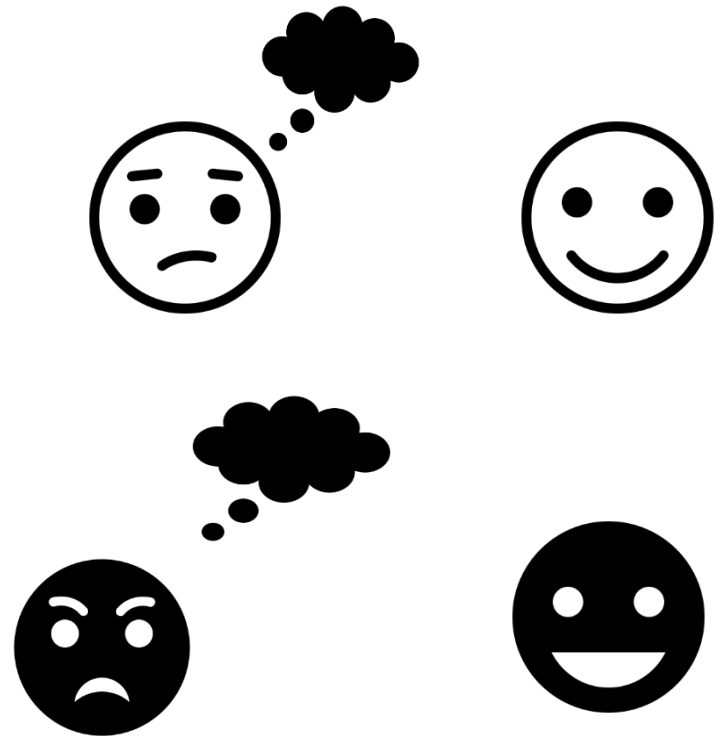


How do we find out what the users need?

We **engage** with them

Possible ways of engaging:

- Round tables
- Seminars
- Focus groups
- Key informant interviews
- Questionnaires



We should also have ways of **verifying** if our work to meet their needs is going in the right direction

- Encourage feedback



How do we engage with the different users?

• Researchers

- Micro data portal with detailed metadata
- Workshops/presentations

• Policy makers

- Policy briefs
- Accessible data portals
- Briefs at Ministries and Parliament
- Meetings/presentations

• Media

- Press conferences
- Media trainings and consultations
- Individual interviews

• Students

- Training materials for teachers
- Open house
- Competitions
- Internships/thesis guidance



Key resources to support user engagement

- Website
- Data and metadata platforms
- Paper publications

- Seminars and workshops?
- Social media?
- Media? (collaboration – series in newspaper or radio?)
- School books?
- ??

- NISR staff!



Development of a user engagement strategy – key components

- Determine the main **goal** of the user engagement strategy and how to achieve the goals
- **Identify users** and key stakeholders
- Identify and understand their **needs**
- **Types of engagement and** channels of communication
- **Trainings or workshops** that might need to be developed to engage with the various users
- **Measurement and feedback**





Guide to presenting statistics*

**Based on Making Data Meaningful Guides from UNECE Statistics*

<https://www.unece.org/stats/documents/writing/>



Some tips on using numbers to tell stories in VNRs

- Present the **most important facts first!**
 - Readers lose interest quickly
 - Consider an inverted pyramid—most important facts first, followed by subsidiary points in decreasing importance.
 - Executive summary
 - Include a leading paragraph that summarizes key points at the beginning of the document.

GOOD EXAMPLE of a lead paragraph:

Net profits of non-financial companies in the Netherlands amounted to 19 billion euros in the second quarter of 2008. This is the lowest level for three years. Profits were 11 percent lower than in the second quarter of 2007. The drop in net profits is the result of two main factors: higher interest costs - the companies paid more net interest - and lower profits of foreign subsidiaries.

Source: Statistics Netherlands

Source: http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf

Complex methodologies and details can be presented in the annex/references



Some tips on using numbers to tell stories in VNRs

- Keep it short and simple (KISS): applies to not just text but also visuals and graphs
- Clear and simple messages are NOT the same as “dumbing down”. Plain language conveys a clear and concise message. It is used with the reader in mind and with the right tone of voice.
- Avoid jargon when possible

Some tips for clear writing:

- Use short sentences;
- Aim for one idea per sentence;
- Break up long sentences;
- Start each paragraph with the most important message;
- Keep paragraphs short;
- Keep your writing crisp.

Sourced from : http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf



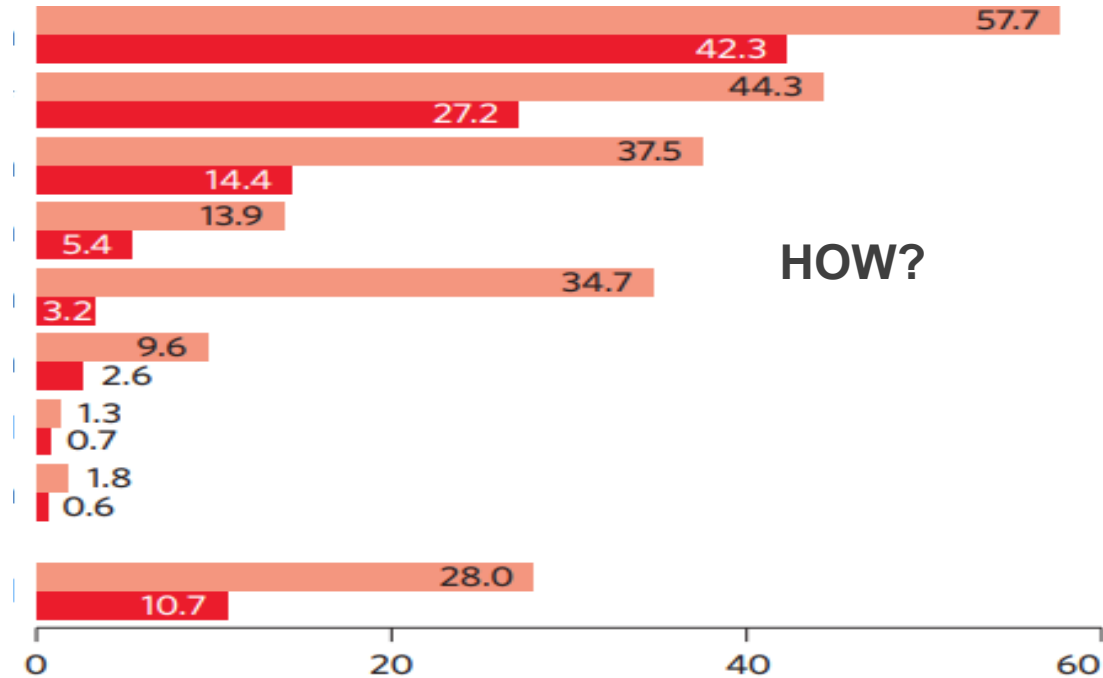
Presenting statistics: charts and tables

- Tables
 - Summary tables
 - Larger reference tables (statistical annexes)
- Charts
- Tables/charts should be able to stand alone, whether published within a report, article, publication or web page.
- Key elements
 - Table title: what, where, when?
 - Unit of measurements
 - Footnote and sources



A chart without key elements

WHAT?



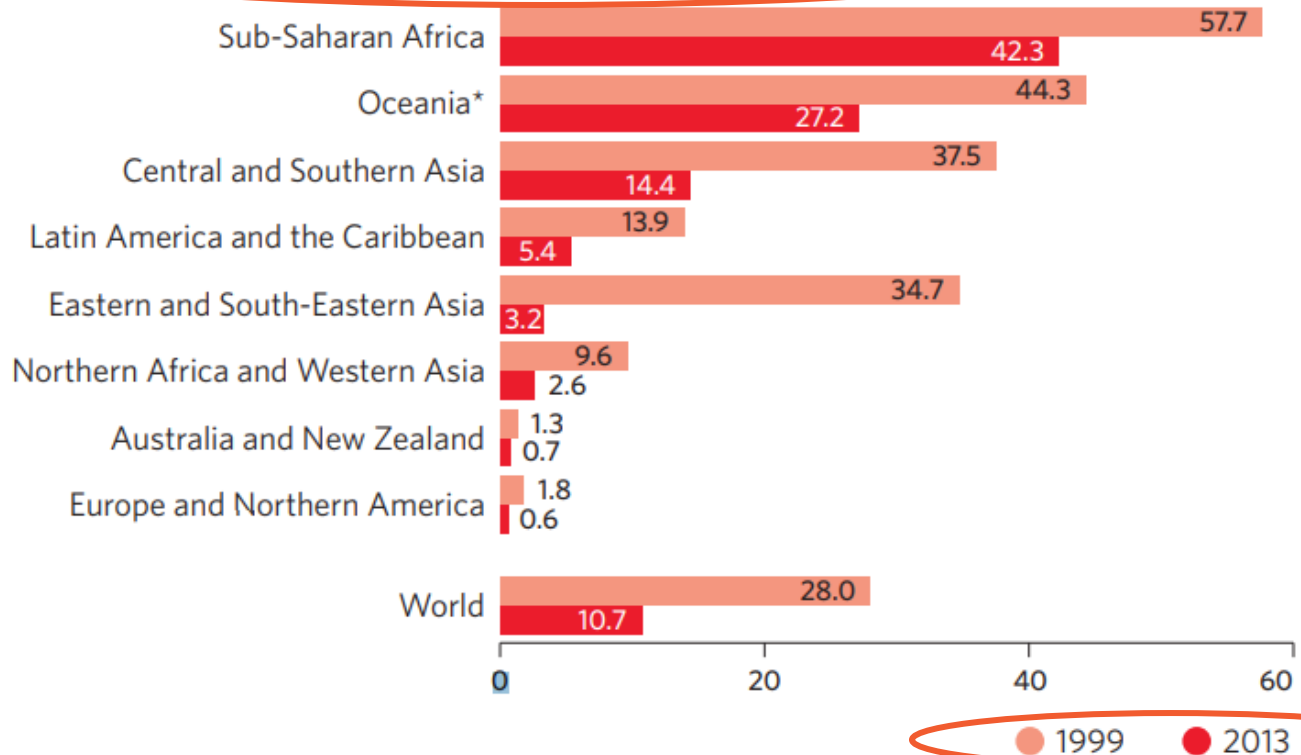
HOW?

WHEN?

WHERE?

Main elements present

Proportion of the population living below 1.90 US dollars a day, 1999 and 2013 (percentage)



Note: Oceania* refers to Oceania excluding Australia and New Zealand throughout the publication.



Tips for tables

- Avoid unnecessary text
- Display data in chronological order or some standard classification
- Use a minimum decimal places to the extent that you do not lose information
- Use thousands separator. Using spaces vs. a symbol (, or .) can avoid problem of translating between languages
- Align the numbers on the decimal point (or on the right in the absence of decimal places) so their relative value is clear



Examples: tables

What are the problems?

GOOD EXAMPLE	BAD EXAMPLE
1 320 000	1324567
1 670 000	1673985
1 830 000	1829456

GOOD EXAMPLE	BAD EXAMPLE
93.2	93.2
1045.0	1045
385.6	385.63

GOOD EXAMPLE	BAD EXAMPLE
93.2	93.2
1045.0	1045.0
385.6	385.6

Source: http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf



Why use charts

- They are very helpful in demonstrating
 - **Comparison:** which item is bigger or smaller
 - **Changes over time:** how have things changed?
 - How are things **distributed**?
 - Are two things linked or **correlated**?
 - How does one item **compare to the total**?



Features of a good chart

A good chart:

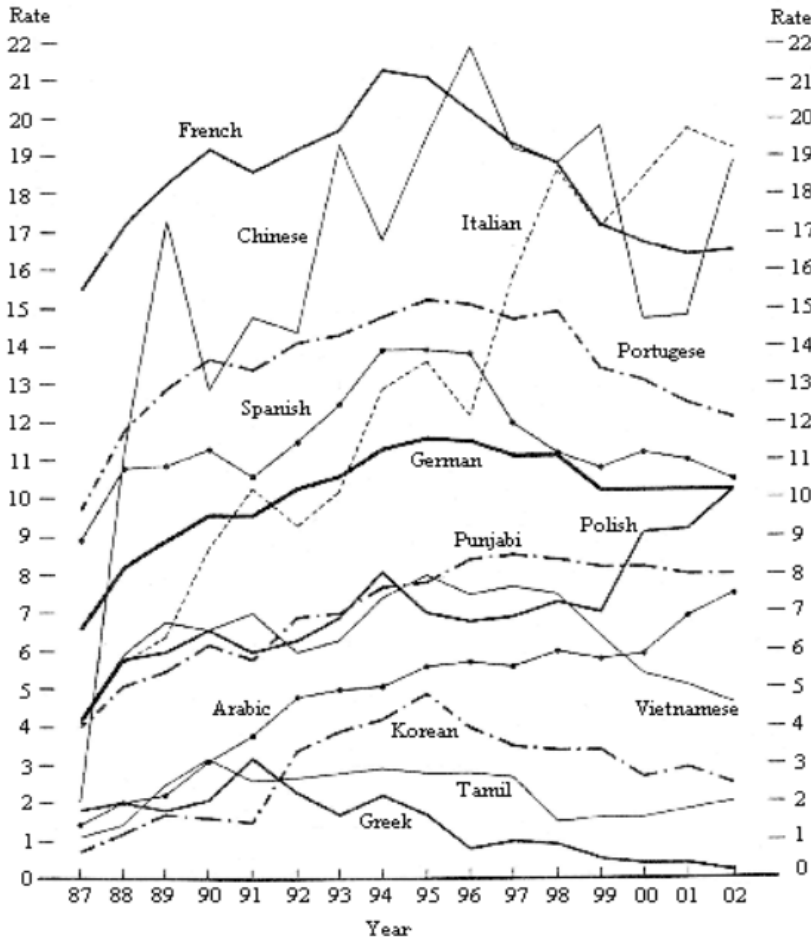
- grabs the reader's attention;
- presents the information simply, clearly and accurately;
- does not mislead;
- displays the data in a concentrated way (e.g. one line chart instead of many pie charts);
- facilitates data comparison and highlights trends and differences;
- illustrates messages, themes or storylines in the accompanying text.

Source: http://www.unecce.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf

Charts are not always appropriate

BAD EXAMPLE of a line chart

Number of students taking English as a second language at West High School, by first language spoken, 1987 to 2002



Source: Statistics Canada, *Learning Resources: Using graphs*⁵.

Source: http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf

- Charts are not useful, if they
 - Have very dispersed values
 - Have too few values
 - Have too many values
 - Show little or no variation



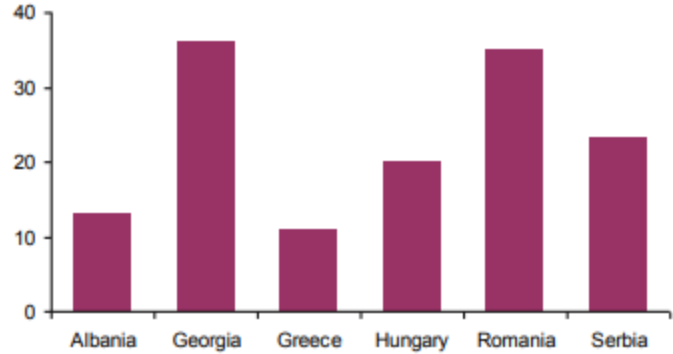

Which chart should I use?

It depends!

A good practice is to experiment with different types and see which one is most appropriate to convey the message



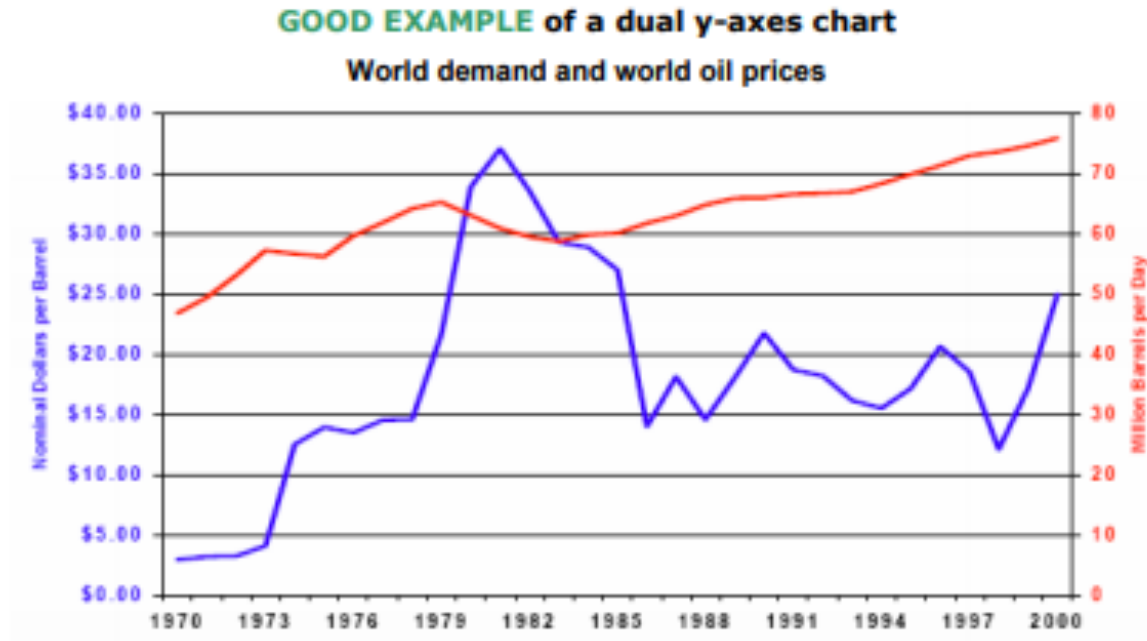
Good practices for conveying information in charts

BAD EXAMPLE	GOOD EXAMPLE																												
<p data-bbox="415 471 743 499">Adolescent fertility rate, 2006</p>  <p>The chart displays the adolescent fertility rate for six countries in 2006. The y-axis represents the rate, ranging from 0 to 40. The x-axis lists the countries in alphabetical order: Albania, Georgia, Greece, Hungary, Romania, and Serbia. The bars show the following approximate values: Albania (13), Georgia (36), Greece (11), Hungary (20), Romania (35), and Serbia (23).</p> <table border="1"><thead><tr><th>Country</th><th>Adolescent fertility rate (2006)</th></tr></thead><tbody><tr><td>Albania</td><td>13</td></tr><tr><td>Georgia</td><td>36</td></tr><tr><td>Greece</td><td>11</td></tr><tr><td>Hungary</td><td>20</td></tr><tr><td>Romania</td><td>35</td></tr><tr><td>Serbia</td><td>23</td></tr></tbody></table>	Country	Adolescent fertility rate (2006)	Albania	13	Georgia	36	Greece	11	Hungary	20	Romania	35	Serbia	23	<p data-bbox="1149 471 1477 499">Adolescent fertility rate, 2006</p>  <p>The chart displays the adolescent fertility rate for six countries in 2006. The y-axis represents the rate, ranging from 0 to 40. The x-axis lists the countries in order of increasing value: Greece, Albania, Hungary, Serbia, Romania, and Georgia. The bars show the following approximate values: Greece (11), Albania (13), Hungary (20), Serbia (23), Romania (35), and Georgia (36).</p> <table border="1"><thead><tr><th>Country</th><th>Adolescent fertility rate (2006)</th></tr></thead><tbody><tr><td>Greece</td><td>11</td></tr><tr><td>Albania</td><td>13</td></tr><tr><td>Hungary</td><td>20</td></tr><tr><td>Serbia</td><td>23</td></tr><tr><td>Romania</td><td>35</td></tr><tr><td>Georgia</td><td>36</td></tr></tbody></table>	Country	Adolescent fertility rate (2006)	Greece	11	Albania	13	Hungary	20	Serbia	23	Romania	35	Georgia	36
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<p data-bbox="231 906 937 1056">The data are presented by alphabetical order of countries. The values are very difficult to compare. Attention is on the first and last values, which have no specific relevance.</p>	<p data-bbox="966 906 1680 1056">The data are presented in order from smallest to largest values. It is easy to compare them. Attention is focused on the minimum and maximum values of the dataset.</p>																												

Source: http://www.unecce.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf

Good practices for conveying information in charts

Use dual axes with caution



Source: Blessing et al. (2003), *Cognitive Testing of Statistical Graphs: Methodology and Results*¹².

Source: http://www.unecce.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf

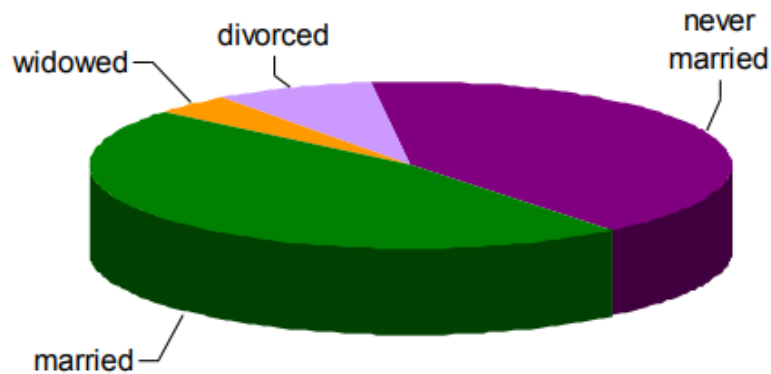


Good practices for conveying information in charts

Do not use unnecessary graphic features

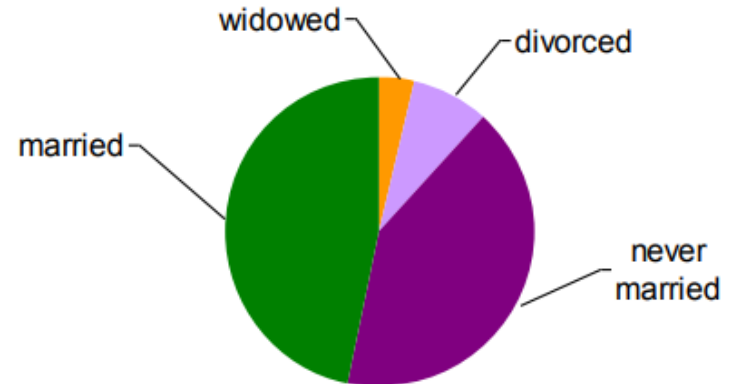
BAD EXAMPLE

Population aged 18+ by legal marital status
in Iceland, 2004

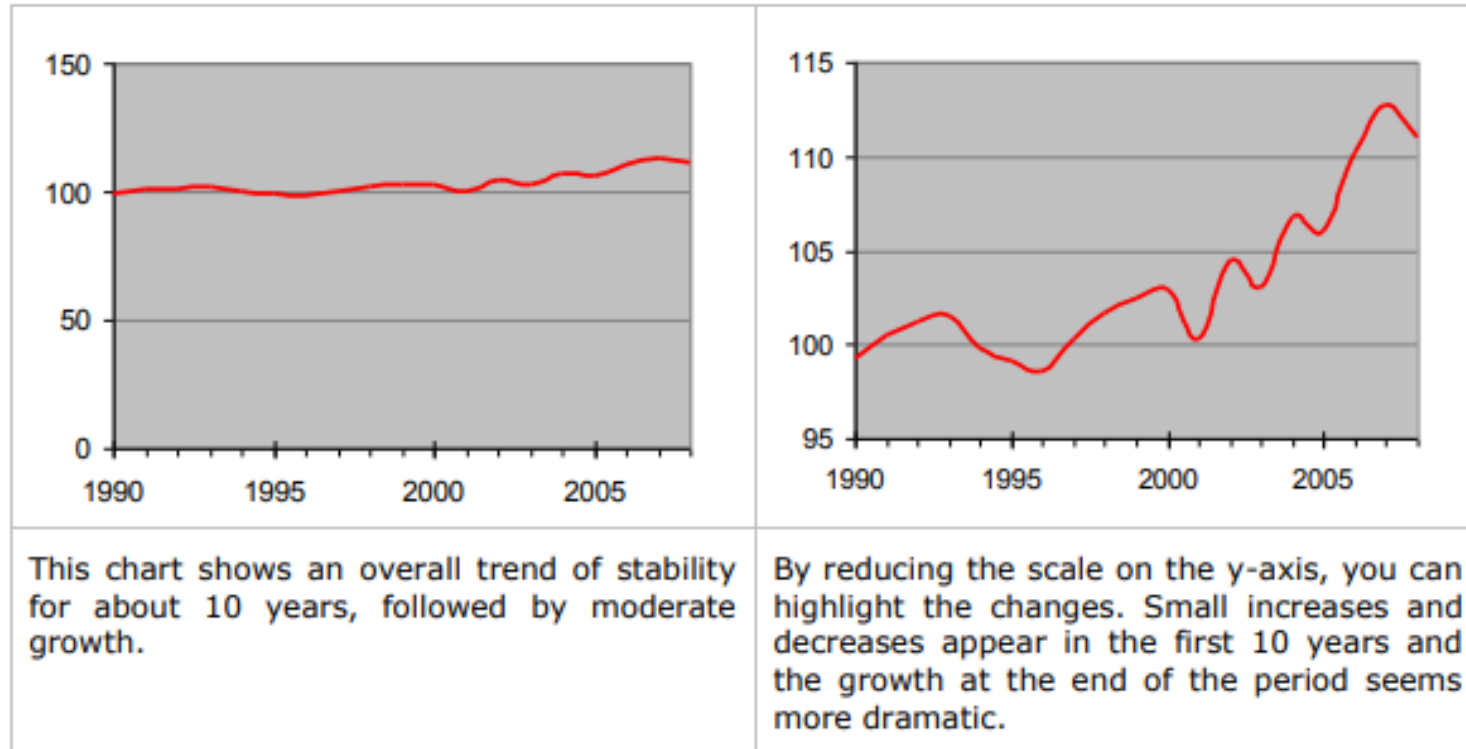


GOOD EXAMPLE

Population aged 18+ by legal marital status
in Iceland, 2004



Be careful to not mislead



Source: http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf



How to create key messages and infographics



The Sustainable Development Goal Report 2019

The Sustainable Development Goals Report 2019



تقرير أهداف التنمية المستدامة ٢٠١٩



<https://unstats.un.org/sdgs/report/2019/The-Sustainable-Development-Goals-Report-2019-Arabic.pdf>





Create key messages

Create Key messages and reporting on SDGs:

Providing the right people with the right information in the right format

Step 1: Consider Why, Who and What

- ✓ **Why** do you need them
- ✓ **Who** are your target audiences
- ✓ **What** are the main points you want the audience to hear, understand and remember
 - Make sure that your messages are data-driven and evidence-based.



Create key messages

Step 2: Draft your key messages

- **Clear:** easy to understand, avoid jargons
- **Concise:** Short and specific to the point, simple but interesting
- **Consistent:** core messages must build upon each other to create a consistent story
- **Tailored:** Communicate effectively with different target audiences by adapting language and depth of information
- **Telling good stories** with the appropriate presentation of data, including visualizations, infographics and others tools
- **Link data to people.**

Step 3: Review and revise



Create Headlines

How to draft Headline

- Know your audience
- Write the key messages first, then the headline
- Simple and clear, but powerful and pervasive
- Pick the most important issue and be specific
- Create a sense of urgency
- Check out newspaper, magazine headlines for inspiration
- Write several different headlines
- Pick the best one after consultation



Example 1: Key Message

Extreme poverty in the world:

- The share of the world's population living in extreme poverty declined to 10 per cent in 2015, down from 16 per cent in 2010 and 36 per cent in 1990. More than a billion people have lifted themselves out of poverty over the last 25 years.
- However, the pace of change is decelerating.
- Nowcast shows the 2018 rate of extreme poverty at 8.6 per cent, and baseline projections suggest that 6 per cent of the world's population will still be living in extreme poverty in 2030 if current trends continue.
- Extreme poverty remains stubbornly high in low-income countries and those affected by conflict and political upheaval, particularly in sub-Saharan Africa.





Example 1: Headlines

- **It is becoming less likely that the world will keep its promise to end extreme poverty by 2030**
- **Progress against poverty continues but has slowed, jeopardizing achievement of the Goal**
- **Conflict and political upheaval have slowed earlier progress to end extreme poverty globally**
- **Ending poverty by 2030 will require an intense focus on sub-Saharan Africa**



Use of Infographics

Key considerations

- Know target audience
- Keep it simple and easy to review
- Focused: one topic a time
- Focus on the flow: streamlined
- Create your short key messages with data
- Work with graphic designers
- Choose appropriate icons
- Balance visual and written information
- Review and revise

Resource: Noun Project <https://thenounproject.com/>

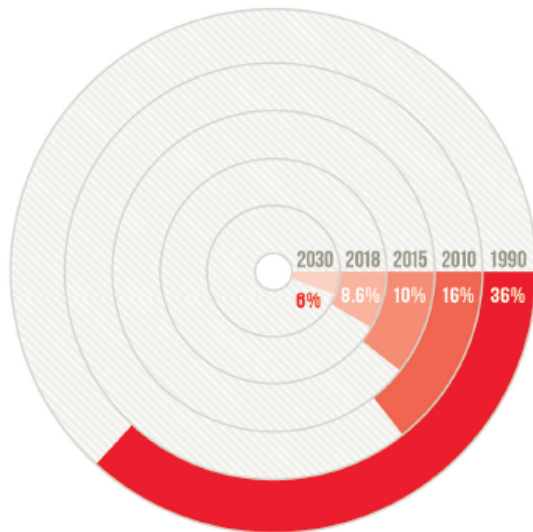
Example 1 on Goal 1

The world is not on track to end poverty by 2030.

-- Data point for infographics: 36% in 1990, 16% in 2010, 10% in 2015, 8.6% in 2018, 6% in 2030 (projection).

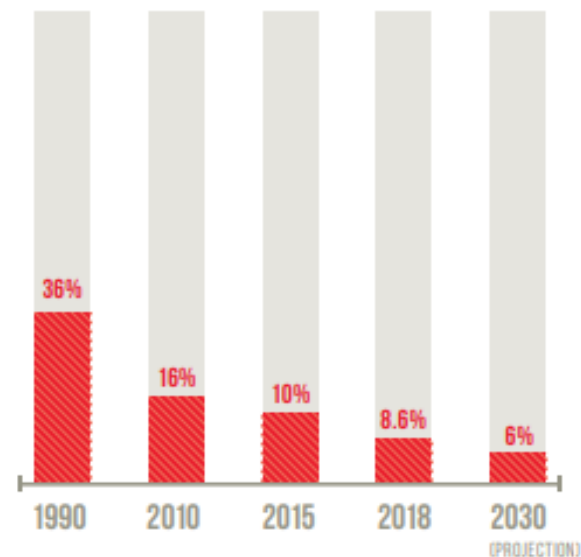
Bad example

THE WORLD
IS NOT ON TRACK TO
END POVERTY BY **2030**



Good example

THE WORLD
IS NOT ON TRACK TO
END POVERTY BY **2030**



Example 2 on Goal 1

55% of the world's population have no access to social protection

Bad example



OF THE
WORLD'S POPULATION
HAVE NO ACCESS TO
SOCIAL PROTECTION

Good example



55%
OF THE
WORLD'S POPULATION
HAVE NO ACCESS TO
SOCIAL PROTECTION



Example 2 on Goal 5

24% of national parliamentarians are women

Bad example



Good example



Thank you for your attention!



Infographic Exercise #1

Icon Creation from Key Messages

Data

- Vaccinations resulted in an 80 per cent drop in measles deaths between 2000 and 2017
- 1 in 5 children between 6 and 17 years old are not attending school
- The proportion of fish stocks declined from 90 per cent in 1974 to 67 per cent in 2015

Sample Icons

