PARiS 21
Strategic Data Communications for Climate Action
Outline

Communicating data for impact

Identifying issues that matter

Defining the target audience

Developing a communication product from data

Review and feedback
Why communicate data for impact?
The Mental Health of Canadian Farmers

Anxiety

57% of farmers had possible cases of anxiety (according to a 2016 research survey).

Stress

High levels of perceived stress affect:

- 45% of farmers (2016)
- 20.4% of the general population (2020)

Depression

Possible cases of depression affect:

- 34% of farmers (2016)

83.9% of Canadian farm operators live in rural areas (2016 Census of Agriculture)

There is 1 psychologist for every 28,500 people in rural areas.

53.4% of households in rural areas have access to high-speed broadband Internet.

Rural Areas

Compared to 1 psychologist for every 3,848 people in urban areas (2015).

Compared to 89.5% of households in Canada as a whole (2022).
"We can improve the value of statistics by putting users of statistics truly at the center.

However expertly and professionally produced, official statistical products are of no use unless they meet someone's needs."

- UN Economic Commission for Europe 2018
Importance of data use for development

Data is crucial to achieving:

1. **Impactful policy making**

   - Data underpins all development plans and planning processes
   - Without data, policies cannot be monitored to evaluate their efficiency and policy areas that need support cannot be easily identified
Importance of data use for development

Data is crucial to achieving:

2. **Effective mobilization and use of resources**
   - Data serves to scrutinize government’s spending during the review and approval of budgets
   - Inform resource mobilization to support development programs

3. **Efficient public service delivery**
   - Data helps ensure that plans are being implemented and allocated funds are being used for the right purposes
Data in national development planning process

- Problem Identification
- Policy Design
- Policy Implementation and Oversight
- Policy Adoption
Example: Data for impact
Coral reef risk in Belize

NASA Satellite data used to determine the risks to coral reefs, such as development, overfishing, pollution, and climate change.

Creation of a vulnerability index

Used to inform Belize's Coastal Zone Management Plan
Example: Data for impact
Jamaica food supply and US drought

Supply chain and trade data can highlight potential vulnerabilities to climate change impacts

Jamaica is highly dependent on US for maize imports.

A drought in the maize-producing US Midwest can pose food risks to food security in Jamaica and other import-dependent countries.

This data can shape trade policies, provide insights into the most vulnerable communities, and support adaptation measures.
Talk to a neighbor:
In your experience,
Who are main users of climate related statistics?
What works and what doesn’t work when communicating data to them?
Group Activity: at the end of this session, you will have a note for a policy-maker in your country
Defining the audience of your data/information
Strategic communications: a first step

The first step is to identify the purpose of your communications product.

**Consider, for example:**

Answering a request:
- Do you know why your audience needs this evidence/data?
- How will they use it?
- Which of audience's key functions does it relate to?
- Do they have a preferred format to receive the information?

Proactively developing a product:
- Are you raising awareness about the importance of an issue-'putting it on the radar'?
- Are you aiming to increase knowledge about an issue?
- Are you showing the implications of different possible courses of action?
Understanding your audience’s data needs

Example: Climate Change

Video: NYC Climate data dashboard
### Group Activity: Strategic communication planning

<table>
<thead>
<tr>
<th>AUDIENCE</th>
<th>MESSAGE</th>
<th>CHANNEL</th>
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<tbody>
<tr>
<td>What role do they play?</td>
<td>What is the most important thing the audience needs to know?</td>
<td>How and where can you reach your audience?</td>
</tr>
<tr>
<td>Are they specialists in the topic or are they non-technical?</td>
<td>Why is this issue or information important/urgent right now?</td>
<td>How does this audience best receive information?</td>
</tr>
<tr>
<td>What might they need to know? What are they currently working on?</td>
<td>How does this issue affect your target audience? Why should they care?</td>
<td>Do you know how they tend to prefer communications?</td>
</tr>
<tr>
<td>How can they use your information?</td>
<td>‘So what’?: what are the implications for your audience and/or what action can they take based on the situation?</td>
<td>What has worked well in the past, and what has not? For example, is it better to approach them for a meeting or develop a written summary?</td>
</tr>
<tr>
<td>Did they ask for the information?</td>
<td>What background/contextual information is needed to support the messages?</td>
<td></td>
</tr>
</tbody>
</table>
Identifying an issue that matters and finding its data
Explaining issues through causes and consequences: Youth marriage

<table>
<thead>
<tr>
<th>Underlying causes</th>
<th>Issue</th>
<th>Consequences/effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>Girls getting married at a young age</td>
<td>Health risks at childbirth</td>
</tr>
<tr>
<td>Tradition and attitudes</td>
<td></td>
<td>Lack of education</td>
</tr>
<tr>
<td>Protection</td>
<td></td>
<td>Domestic violence</td>
</tr>
</tbody>
</table>
Example: Mozambique

- 48% poverty rate
- 48% of girls married before 18
- 46% of girls aged 15-19 were pregnant or already mothers
- 49% of girls completed primary education

Sources: Ministry of Health Mozambique 2015, Household Budget Survey 2015, UNESCO 2018
Explaining issues through causes and consequences: Food insecurity

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<tr>
<td>Poverty</td>
<td>People not having access to food (food insecurity)</td>
<td>Hunger / malnutrition</td>
</tr>
<tr>
<td>Import dependence</td>
<td></td>
<td>Conflict</td>
</tr>
<tr>
<td>Climate change</td>
<td></td>
<td>Migration</td>
</tr>
</tbody>
</table>

Without doing complicated statistical analysis, you can provide a holistic picture!
Example: Jamaica

19% poverty rate
20% food imported
41% of population is food insecure
40% of children are malnourished

Sources: Statistical Institute of Jamaica, The Planning Institute of Jamaica
Group Activity

1. Choose your topic
2. Identify causes and consequences
3. Start looking for data on what you identified
When to use proxy indicators

1. When data on the required indicator is not available

2. When data relevant to the required indicator is available but incomplete (e.g. different classification or coverage)

3. When you are seeking a quantitative measurement of a contextual issue such as socioeconomic wellbeing
Proxy indicators: Examples

Socio-economic wellbeing
- The possession of household assets (e.g., a television, computer etc.) can be good proxy indicators for household income than just earnings from a job.
- The replacement of thatched roofs with corrugated iron roofs may be an indication that the economic situation of a household has improved.
- The payback rate in a micro-credit programme gives some indication of the quality of the project management (preliminary clarifications with the borrowers, customer care, etc.)

Governance
- A proxy measure of improved governance could be, in some cases, the number of political parties and voter turnout.
- The number of female members of a chamber of commerce, for example, is a proxy indicator of the percentage of female business owners or executives.

Anti-Corruption
- Complicated bureaucratic processes such as 254 steps and two years to get a building permit may be a key proxy indicator for corruption.
- A proxy indicator for payroll fraud in the civil service could be the number of ghost workers.
- An indicator of patronage in some countries could be how many senior civil servants change jobs after a change in government.

Source: www.annmurraybrown.com/single-post/what-are-proxy-indicators
Developing a communication data product that matters to the audience
Reflections

1. Are there other things you would be interested to know and from whom?

2. What would you want to communicate to the planning unit at the municipal assembly, of which you are an ex officio member?

3. What would you be communicating to the minister for water and sanitation/minister of finance?

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**Ghana Water Company connection in two districts from 2009 to 2019**

- **New Juaben South District**
  - Percentage of households: 74.01%
  - Within a 10 year period, the New Juaben South District has had more households connected to Ghana Water Company than the Hohee District.

- **Hohee District**
  - Percentage of households: 25.99%
Tips for effective messaging

• Responds to the purpose
  • Meets audience needs
  • Appropriately timed

• Contextually relevant
  • Frame within and respond to development context
  • Links to actions or real-life implications

• Clear and concise
### Writing about data: Dos and Don’ts

<table>
<thead>
<tr>
<th>POOR</th>
<th>BETTER</th>
<th>TIP</th>
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<tr>
<td>&quot;The largest contributor to the monthly increase in the CPI was a 0.5% rise in the transportation index.‘&quot;</td>
<td>&quot;Higher auto insurance premiums and air fares helped push up consumer prices this month.‘&quot;</td>
<td>Get straight to the point</td>
</tr>
<tr>
<td>&quot;Working seniors were also somewhat more likely than younger people to report unpaid family work in 2004 (12% versus 4%).‘&quot;</td>
<td>&quot;About 12% of working seniors reported unpaid family work in 2004, compared with 4% for younger people.‘&quot;</td>
<td>Avoid using proportions in brackets</td>
</tr>
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<td>&quot;The proportion of seniors who were in the labour force rose 5% from 15% in 2003 to 20% in 2004.‘&quot;</td>
<td>&quot;The proportion of seniors who were in the labour force rose five percentage points from 15% in 2003 to 20% in 2004.‘&quot;</td>
<td>Don’t confuse percentage changes with percentage point changes.</td>
</tr>
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<td>&quot;Two out of every five Canadians reported that they provided care for a senior in 2001, compared with one in seven in 1996, according to the census.‘&quot;</td>
<td>&quot;About 40% of Canadians reported that they provided care for a senior in 2001, up from 14% in 1996, according to the census.‘&quot;</td>
<td>Avoid changing denominators</td>
</tr>
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<td>&quot;Of the $246.8 billion in retail spending last year consumers spent $86.4 billion on cars and parts, and $59.3 billion on food and beverages.‘&quot;</td>
<td>&quot;Of every $100 spent in retail stores last year, consumers spent $31 on cars and parts, compared with only $23 on food and beverages.‘&quot;</td>
<td>Reduce big numbers to understandable levels</td>
</tr>
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Source: UNECE Making Data Meaningful
Some key tips: readability

• **Titles matter**: short, concrete, to the point

• **Summary of key messages** in bullet points/pop-out box at the beginning

• ‘**Stand first**’: 1-2 sentences to explain what the document is about

• **Headings**: clear and concrete, enabling quick scanning

• ‘**So what?**’: recommendations or implications are clear, ideally no more than 3, and linked to the mandate/actions of the audience
Reflections on communicating data: Oxfam and ‘killer facts’

This guide from Oxfam’s policy and practice section focuses on how to use ‘killer facts’: ‘punchy, memorable, headline-grabbing statistics’ that can be used in reports and visualisations.

**Tips include:**
- Big numbers: a single statistic that shows the scale of the issue
- Juxtaposition to highlight injustices and double standards
- Absurdity and surprise to make a juxtaposition more memorable
- Humanising abstract issues and showing human scale
### Activity

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<td>Does the audience need any background information to support the messages?</td>
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What types of visuals do you use when communicating in an official setting?

How comfortable are you producing visuals to communicate evidence?

In what situations or for what purposes do you use visual communication approaches?

Are there any situations in which you wouldn’t use a visual communication approach?
Data visualisation as a tool

The tool has two uses:

**Exploratory**
It can help you find the story in data

**Explanatory**
It can help you present your findings effectively
The female unemployment rate in Belgium has gone down since 1990.

In 1990, the female unemployment rate was 12%, more than twice that of men.

Since 2011, female unemployment has been lower than or at the same level as male unemployment.
What is data visualisation?

Visual representation of properties of data:
- Bars
- Lines
- Circles
- Squares
- Colour

Properties of data:
- Volume
- Size
- Duration
- Quantity
- Frequency
Visual cues for data visualisation

- **Length**
- **Area**
- **Color**
- **Slope**
Common mistakes
1. Numbers do not add up

**2012 presidential run**
GOP candidates

- BACK PALIN: 70%
- BACK HUCKABEE: 63%
- BACK ROMNEY: 60%

Add up to 193%

**The World Cup’s big guns**
% of team’s runs scored by top scorer

- RAHMAT SHAH: 14.8%
- WILLIAMSON: 30.23%
- KUSAL PERERA: 18.16%
- ROHIT: 29.05%
- ROOT: 19.07%
- POORAN: 20.01%
- DU PLESSIS: 21.06%
- SHAKIB: 28.25%
- BABAR: 24.51%
- WARNER: 25.02%

Add up to 230.16%
2. Numbers are not comparable

Income in China and the US

- Monthly income in China: $x,000 yuan
- Annual income in the US: $y,000 US dollars
Average monthly income in China and the US, 2019

Monthly income in China

Monthly income in the US

Note: Values reflect current prices
3. Incomparable samples

Average annual economic growth

*Up to 30 June 2016
Source: BEA

58 years

7 years
4. Pay attention to the scale

**NBC2 viewer note**

Nbc-2.com

How concerned are you about ZIKA virus?

- Very: 34%
- Somewhat: 28%
- Not very: 25%
- Not at all: 13%

Source: NBC
How concerned are you about ZIKA virus?

- Very: 34%
- Somewhat: 28%
- Not very: 25%
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Source: NBC
Good practices
Order matters

Types of debt

The total owed by the average US household

- Credit cards
- Mortage
- Auto loans
- Student loans
- Others

Source: 2019 American Household Credit Card Debt Study
Colours should be used purposefully

Source: Karina Korpela
Keep your charts concise
Keeping your charts concise

Global corn exports
Per cent share by nation

Source: Steve Smith (2016)
Reviewing your visualisation draft: a checklist

- Have you double-checked the data in your visual is correct? Does it make sense?
- Is it showing ONE clear message? Would additional or less data help improve the story?
- Is the design easy to follow? Does the title frame the content correctly? Are colors used purposefully? Is data in the right order?
- Is the story presented self-contained? Does someone else understand the visualization without prior explanation?

Could you also produce an infographic?
Recap

When reviewing data, consider:

1. Where it came from
2. What it shows
3. What it doesn’t show

...and when you have reached your decision, be transparent about what data you drew on.
Review and feedback by groups
Peer-review feedback:

1. Is a main message clear from the product?

2. Does the main message match the needs of the specific audience?

3. Is data used purposefully and does it provide a holistic view of the issue?
Plenary Recap:

1. What were your main takeaways from this activity?

2. What will you take home?
Thank you