







# Approaches/elements to data sharing

### At formal level:

- Legal basis
- Formal agreement or Memorandum of Understanding
- Exchange of letters
- Coordination committees
- ➤ Does not always lead to action/implementation



### At practical level:

- Practical template, fex in excel
- Detailed questionnaire
- Electronic exchange (interoperability?)

Needs to be structured/regulated

# Flexible approach



Elements which may influence what level of formality is needed:

- Is a Statistics Act in place?
- And is it accepted/acted upon?
- Are data currently being shared?
- Will aggregate or also micro data be shared?

May differ between actors in a country

# Scope of agreement?

- SDG data sharing only?
  - Sharing of indicators or micro level data?
- Other data exchange as well?
- Amount of data shared?
- Is a feedback or quality assurance mechanism needed?

# Aggregation level of data sharing

### Aggregate data

- Already processed by data owner – work already done
- Difficult for recipient to do further work (disaggregation)
- Difficult for recipient to assess quality of data

### **Microdata**

- Ideally cleaned, but allows for further processing
- Recipient can structure data according to own requirements
- Possible to assess quality
- Requires confidentiality agreements

### Need for a feedback mechanism?

### One way sharing

- Most common as most NSOs interpret confidentiality rules as not being able to share back
- Sufficient for aggregated data

### Feedback mechanism

- Gives value back to data owner
- Providing feedback on data received from owner should be ok as long as assessment is based on data provided alone or in combination with other data which owner also has access to.
- Very helpful for microdata
- Trust and understanding between agencies needed

# Quality assurance



Fundamental Principles of Official Statistics



National Quality Assurance Frameworks (<u>link</u>)

# Quality assurance and assessment

- Establish processes where quality is assessed at every stage
- Establish feedback mechanisms
- Consider external control peer reviews or similar

 Collaboration across agencies – can consider giving NSO a quality assessment role – giving all data a quality stamp before publishing.



# Who could provide data?

- Public agencies and ministries who have administrative data
- Private sector
- Civil society and non-Governmental organizations
- Other?

## Experience from Ghana

- NSO has started collaboration with NGOs
- Much interesting data also with specific aspects of disaggregation
- Many NGOs lack knowledge on data quality
- NSO helps establish proper sampling frames and provides other quality guidance
- Investment to receive more data in the future



Sample data sharing agreement

### An agreement on data sharing

	<data owner=""></data>	
	and	
	<nso></nso>	
	Place and date:	
<name data="" of="" owner="" the=""></name>	<nso></nso>	
<head agency="" department="" of=""></head>	<head nso="" of=""></head>	

#### **Purpose**

The purpose of this agreement is to establish the terms and conditions under which data is shared between the <data owner> and the NSO. It aims to ensure that the parties to the agreement have a common understanding of the process and their responsibilities in making SDG data available to the NSO for dissemination and reporting on progress in achieving the Sustainable Development Goals. The objectives of this agreement are as follows:

- To regulate practical conditions concerning the timely and reliable delivery of data for SDG monitoring by <data owner> to the NSO pursuant to the Statistics Act.
- To ensure collaboration between NSO and <data owner> toward the improvement of data quality.
- 3. To streamline the flow of data within the NSS thereby reducing processing time, resource use and the overall reporting burden.

# Elements of data sharing agreement

**Parties** 

Purpose

Duration

Obligations/responsibilities of the parties

Responsible parties/focal points

Data and metadata

Annex: Description/metadata, periodicity, format, means of transmission

Legal basis

Confidentiality

Amendments

### Data and metadata

### **Description of data**

- detailed description of the data to be shared: exact data fields listed and defined.
  - Indicators?
  - Variables?
  - Which disaggregation dimensions if aggregated data?

### Data and metadata

### Metadata

- All data should be provided with detailed metadata
- Particular emphasis should be placed on the completeness of metadata, allowing for the correct interpretation of the data.

### **Periodicity**

Continuity; specify when and how often new data should be shared.
For example, data sharing could occur annually, bi-annually, monthly, on an ad-hoc basis, and so on.

### Data and metadata

### **Format**

- The format in which the data and metadata are to be transmitted.
- A standard electronic format for data transmission, such as Excel, CSV, SDMX, is preferred, as it greatly facilitates automation. If this is not feasible, other formats (PDF, hardcopy, etc.) can be specified.

### Means of transmission

• The means by which data will travel from one entity of the NSS to another. Common electronic routes include email attachments, uploading through a web interface, exposing via a web service.

## Involvement

To ensure that all aspects are included the following persons/roles should be involved:

- Subject matter specialists: To specify needs and data availability
- Legal experts: To ensure that the agreement is in line with other legal materials and
- Agency top management: To adopt and sign agreement

# Piloting the agreement

- Once the data sharing agreement is developed and agreed between the parties involved, it should be piloted over a period of several months to evaluate its effectiveness and make any necessary adjustments.
- The template or electronic exchange tools, unless already well established, should also be given sufficient time to be tested on a smaller scale before officially taken into use.
- The pilot should culminate in a stock-taking meeting and discussion which will inform subsequent implementation of the arrangements.



### Exercise

Think of a specific agency with which an agreement should be established and discuss what should be part of the agreement:

- Aggregate vs microdata?
- Data exchange only or also collaboration on quality assurance and processing of data?
- Which data and metadata should be shared, in which format etc?
- Fill in the annex with variables/indicators

# Sharing in practice



Using a template, fex in excel



Detailed questionnaire



Electronic exchange – common database – interoperable?

Which approach would you like to take? How should it be organized?

# Template in excel

- In the SDG context
  - one template for all (with all indicators) or a more detailed document for each data provider?
  - A sheet per goal?
  - How to specify disaggregation?
  - Use SDMX standard?
- For other data
  - Is a template needed?
  - If yes, which aspects are important?

# Electronic exchange

- Are the data following common standards?
  - Interoperability fex by using SDMX standard?
  - Metadata?
- Are data shared and stored safely?
- Need to agree on who has access to upload data
  - All data providing agencies?
- All with upload access should have a focal point
- Need an administrator (technical)
- Need a coordinator (management level)







