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Policy Brief “Citizen science data to track SDG progress: Low-hanging fruit for Governments and NSOs”

Elena Proden, Senior Specialist, UNITAR

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This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 872944

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Citizen science data – Policy Brief Definition

- **Data produced -by citizens who voluntarily contribute their time, knowledge, skills and/or their data** to help produce evidence, strengthen accountability or develop locally-rooted solutions.



Citizen science data – Examples

Citizens can

- Help define locally relevant indicators
- Collect data
- Analyze or classify data
- Share their personal data (ie. health and lifestyle)
- Donate their devices' computer power for modelling and simulations
- In other ways

Citizen science data – Institutional set-ups

Who runs CSD projects?

- Academia
- Research institutions
- Local civil society organizations
- Large international NGOs
- Communities
- NSOs or other national or international producers of official statistics

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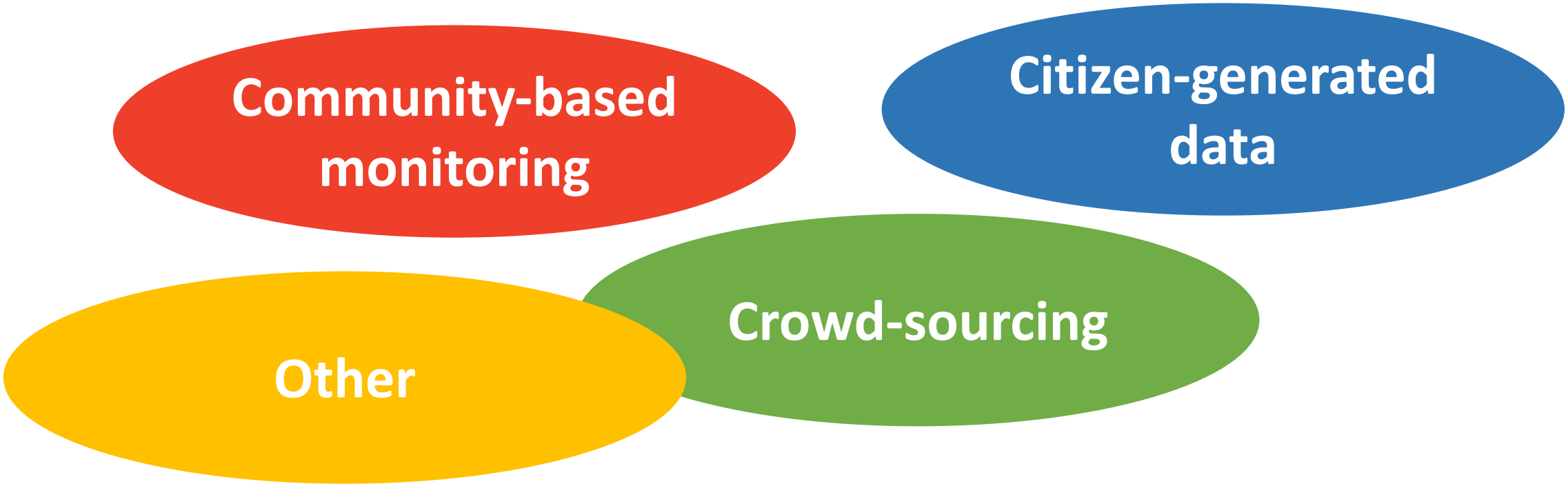
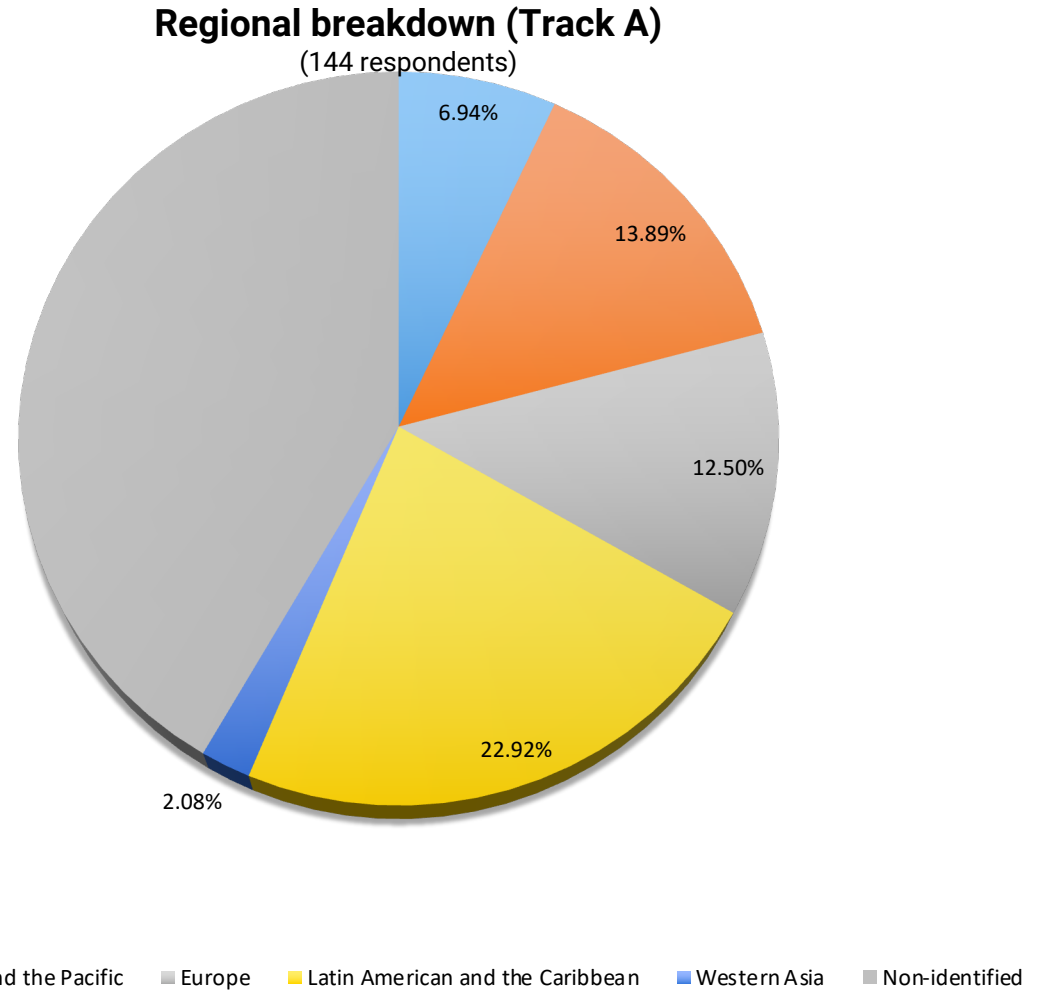
Citizen science data as UBMRELLA term for…



A study by Fraisl, D. (Fraisl, 2020), demonstrated that CSD has the potential to help to monitor 76 global SDG indicators

Crowd4SDG citizen science data survey

- **144 respondents from NSSs**
- **Around 10%** worked with citizen science data
- **Close to 17% of all** were aware of a CSD project run by their Organization



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Impediments by experienced CSD users and all

Experienced CSD users

- **Limited access** to data (67%)
- **Legal issues** with access to or use of data (60%)
- **Incoherent use or lack of use of statistical concepts** (53%)
- **Selection bias** (53%)
- **A lack of information about how the data are being produced** (53%)

All respondents

- **Lack of awareness** (68%)
- **Inability to ensure the use of statistical standard concepts**, definitions and classifications (58%)
- **Lack of methodological guidance** (56%)
- **Lack of human capacities** to run experimental projects (55%)
- **Technological limitations** (51%)
- **Lack of technical and financial support** (50%)

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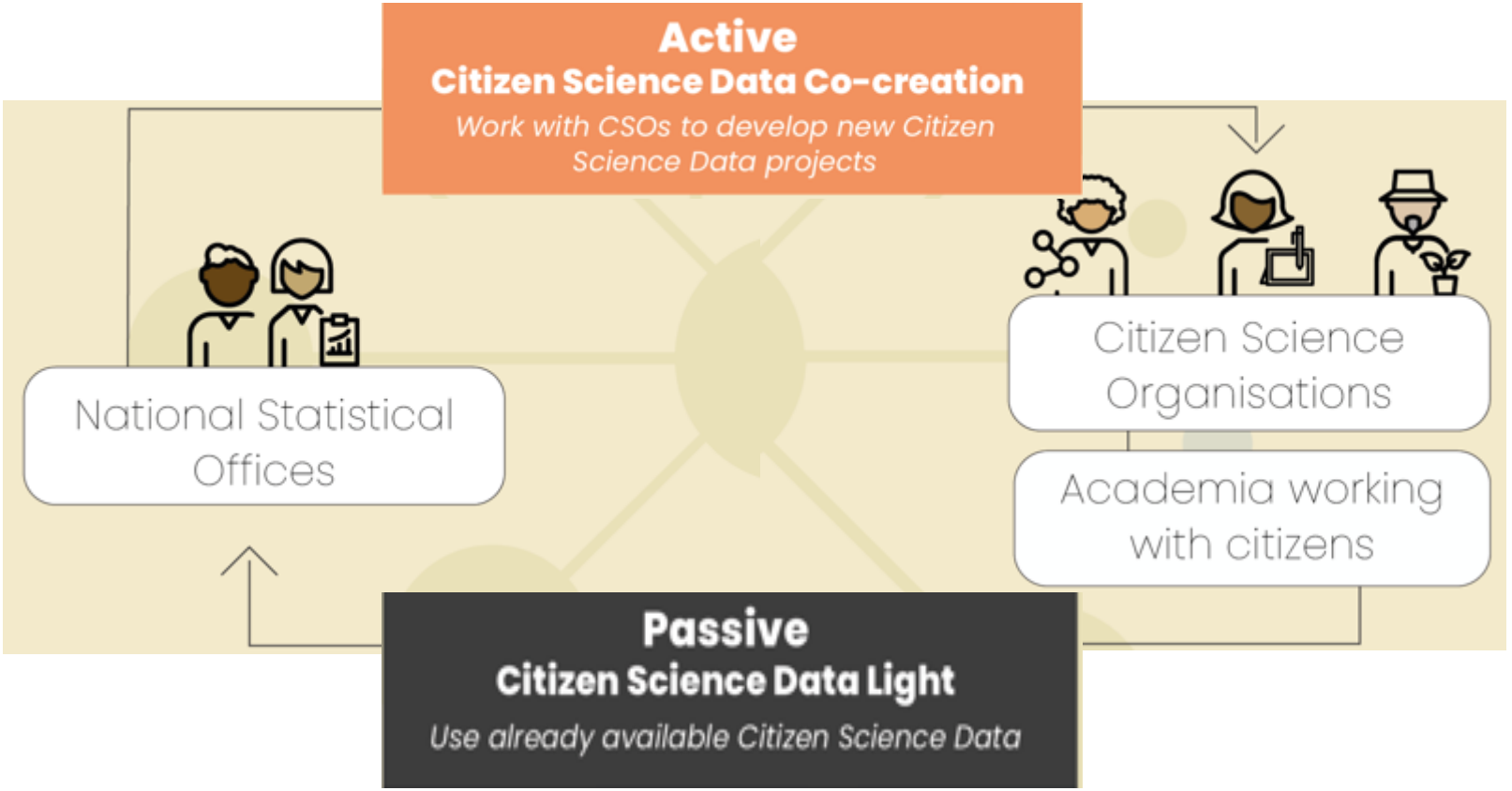
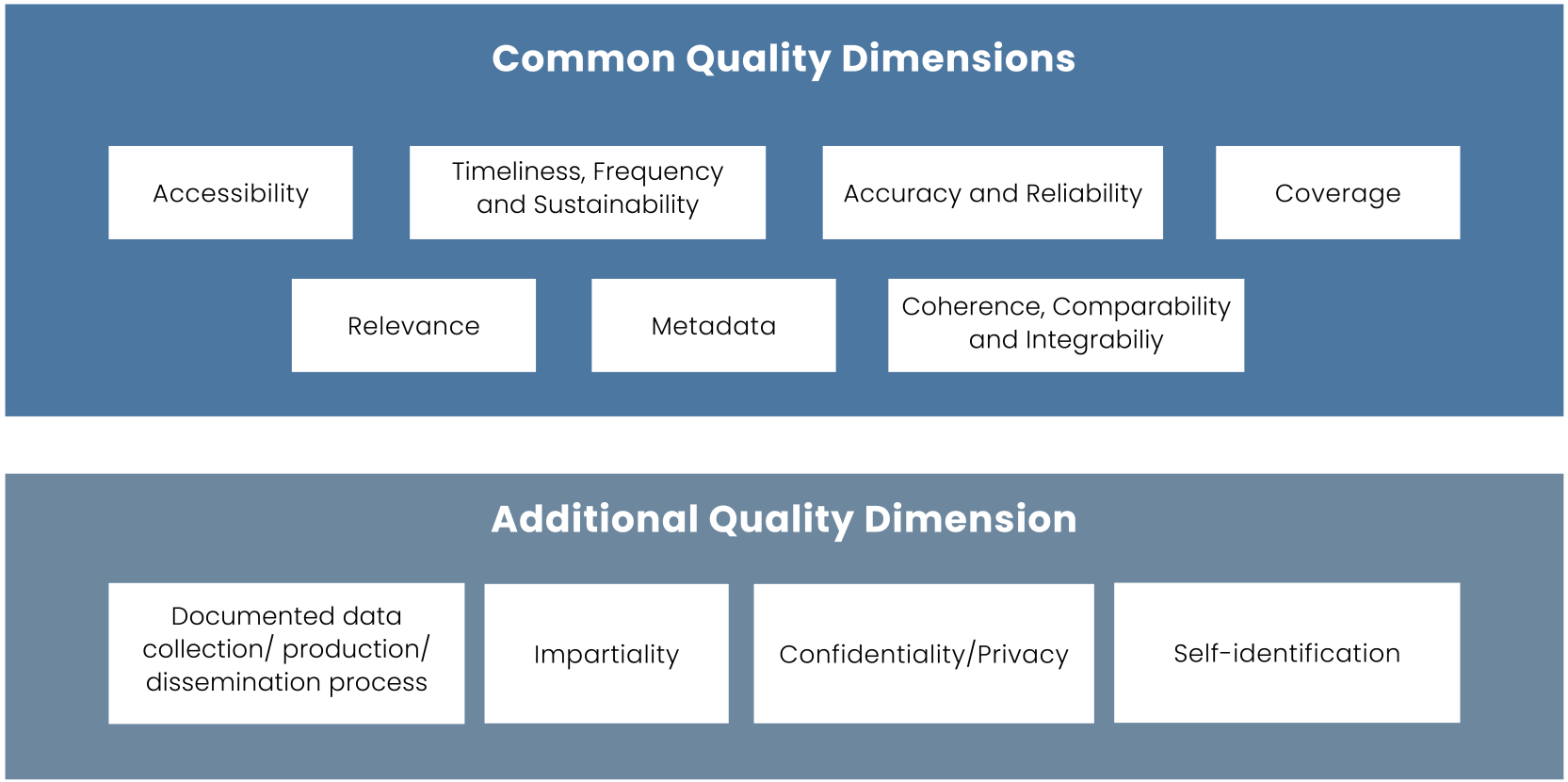
Which approach to use?



Quality Assurance Framework for CSD/ data from non-official sources



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Recommendations for NSOs

1. Undertake **mapping of CSOs and Academia** with potential to contribute citizen science data, incl. data they already produce, and their ability/interest to produce new/additional CSD;
2. **Updating if necessary the legal basis** to ensure NSOs have the mandate to engage with CSOs, Academia and communities
3. **Strengthening partnerships with CSOs, Academia and communities** who may potentially contribute to data production. This may include those who already produce data (passive approach) and those with whom NSO could engage on collaborative projects. Working with data user communities can help identify not only those Organizations that may already be producing data but also those who may be interested in collaborating on new projects.
4. **Defining clearly for what CSD will be used** as recommended by PARIS 21. This will also be relevant for collaborative projects
5. Defining **quality standards and criteria** for data quality and management
6. Introducing **quality assurance mechanisms**. This can be a scoring matrix with threshold values
7. Promote a **culture of innovation and collaboration with new data actors**. Leadership can play a decisive role on this matter
8. **Providing training and capacity development for stakeholders** involved in citizen data production to enhance statistical literacy (for CSOs), improve the knowledge of the principles of official statistics (also important for Academia) and the awareness about the needs and the work of NSOs

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Example of a scoring matrix

CRITERIA	Score	Notes	CRITERIA	Score	Notes
Accessability		1	Coherence, Comparability and Integrability		1
Timeliness, Frequency and Sustainability		1	Documented data collection/production/ dissimenation process		2
Accuracy and Reliability		2	Impartiality		2
Coverage		1	Confidentiality/Privacy		2
Relevance		1	Self-Identification	na	
Metadata		2	**TOTAL**		**1.5**

0 – zero compliance, 1 – partially compliant, 2 – fully compliant (based on UK's approach)

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Policy Brief Contributors

- Elena Proden (UNITAR)
- Karen Bett (GPSDD)
- Jillian Campbell (UNCBD)
- Sara Duerto Valero (UN Women)
- Dilek Fraisl, Linda See (IIASA)
- Gabriel Gamez, Luis Gonzalez, Vibeke Nielsen, Haoyi Chen, Yongui Min (UNSD)
- Stephen MacFeely (WHO)
- Rosy Mondardini (CSCZ)

Other outputs

- Crowd4SDG Report with Recommendations 2021
- Crowd4SDG Report with data sets assessments 2021

Crowd4SDG pilot work in Maldives – Initial stage

- **Indicator 14.1.1:**

(a) Index of coastal eutrophication; and (b) plastic debris density

- **Indicator 14.2.1:**

Number of countries using ecosystem-based approaches to managing marine areas

Thank you!

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