

of Material Fluxes and of Resources

# Indicators and Indices in the World of Water Quality Assessment: Lessons Learned

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X.4 Building-Up Monitoring and Reporting on SDGs Based on Sub-National and National Efforts

## **SDGs and water quality**

#### SDGs and water quality

SDG 6.3 Target: Improve the quality of waters

SDG 6.3.2 Indicator: Proportion of water bodies with good

ambient water quality

# SDGs and water quality monitoring and reporting

Correct monitoring and reporting based on indicators and indices big challenge for public authorities



# **Objectives**

# Identifying specific challenges in the application of water quality indicators and indices

- Quantitative challenge: Approaching the scope of the problem
- Qualitative challenge: Identifying criteria for prioritizing case specific water quality indicators

THIS DOES NOT INCLUDE: Discussing thresholds for indicators



Lessons learnt for scientists and practitioners

### **Methods**

#### Literature review and expert discussions

- Compiling and prioritizing water quality indicators from 9 standards for measuring water quality
- Identifying criteria for the application of indicators based on discussions with experts

#### In Process: Online questionnaire

 Understanding the application of indicators and indices in practice





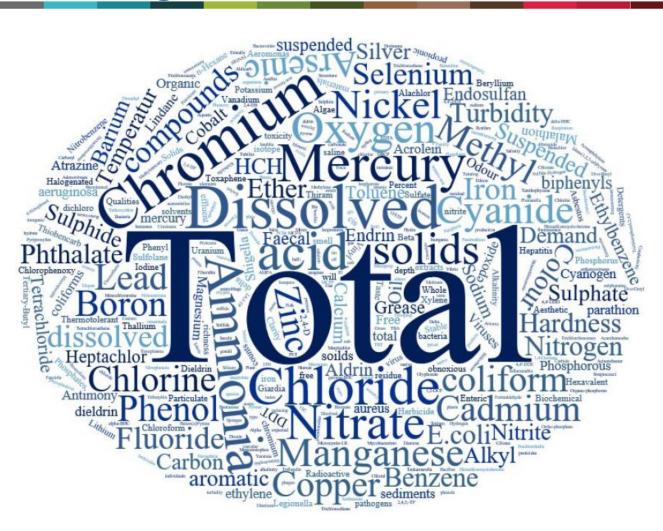
### **Quantitative Challenge**

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Based on 9 standards from various contexts

Total of 474 indicators

Indicators mentioned 1-9 times





## **Implications**

#### **Opportunites = Challenges**

Possibility to find indicators for a specific case

Challenge to find the right indicator for the specific case

#### **Need for support!**

- Facilitate the identification of relevant indicators
- Interdisciplinary and transdisciplinary approach

## **Prioritizating indicators**

#### Criteria for prioritization based on experts discussions:

- What are the main driving factors for monitoring and measurement?
- What type of water body is in focus?
- How challenging is the application of indicators?

Monitoring challenges			
Providing the technical equipment for monitoring	not challenging	1 2 3 4	very challenging
Providing human skills for monitoring	not challenging	1 2 3 4	very challenging
Providing financial means for monitoring	not challenging	1 2 3 4	very challenging

# Online survey on water quality indicators



# Goal: Specify current application challenges in different contexts

Addressees: Water quality experts from

- Science (mainly natural scientists)
- Practice (e.g. public authorities, RBOs)

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#### Scope:

- International survey, available in all six UN langues
- Case-specific knowledge at various scales

# Online survey on water quality indicators



#### **Examples for Networks**

- Water Science Alliance
- International Water association
- Global Waters Operators' Partnerships Alliance
- Global Water Partnership
- Gesellschaft für Internationale Zusammenarbeit
- ...

#### Link to participate:

https://flores.unu.edu/en/about/media/releases/call-for-water-professionals-to-fill-out-survey-on-water-quality-indicators.html#info

### And then?

#### Developing research questions, e.g.

- Clustering of indicators for various contexts
- Decision support tools for identifying indicators

Revising capacity development programmes based on specific needs, e.g. human capacity, financial equippment

Better addressing SDG 6.3, hereby fostering well-being and a healthy environment with high biodiversity

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## Thank you!

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