

Statistics on Climate Change Adaptation (CCA)

Introduction to the session 3

Session Chairs:

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Why a session on CCA?

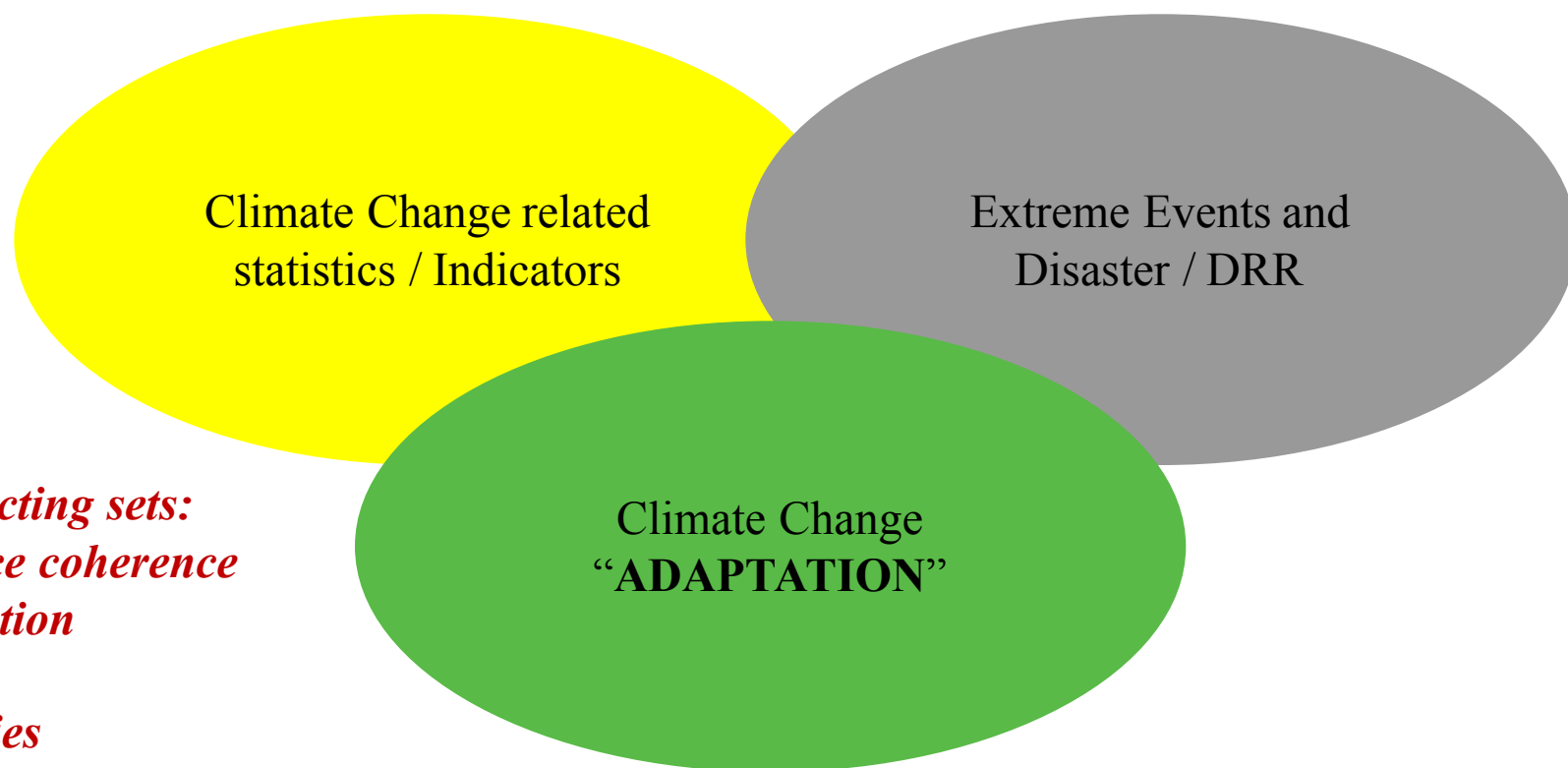
Results from “*Report on countries’ progress in climate change related statistics*” (2016): **only 7% of NSOs compile such statistics on a regular basis, this area has been recognized as particularly challenging** by the TF on a Set of CCRSI and by the 2017 Expert Forum, **that requires most methodological work and capacity development.**

Issues of climate change adaptation (CCA) feature prominently both in **targets of the 2030 Agenda for Sustainable Development** and the **UNFCCC Paris Agreement**, but there is **no internationally harmonised set of CCA indicators**

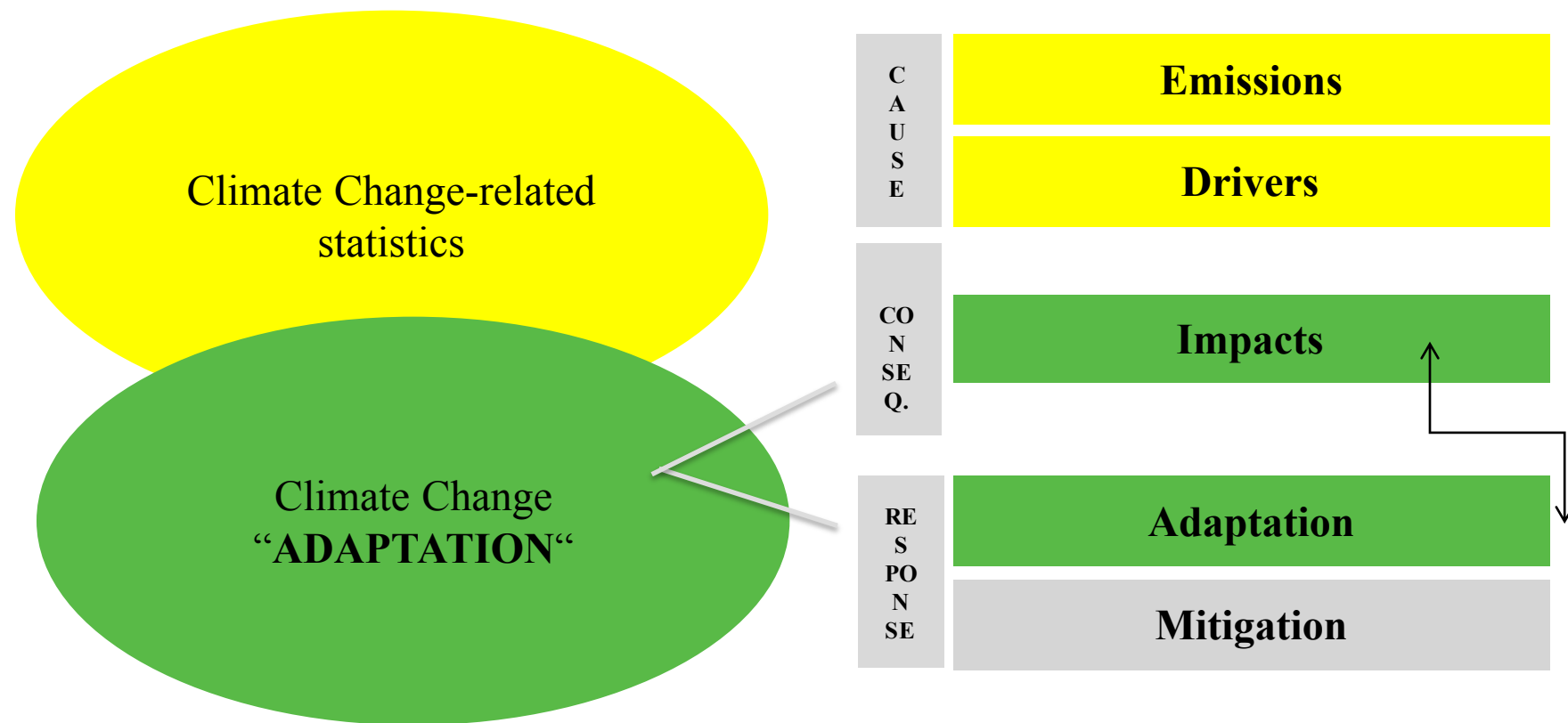
Which is the aim of the session?

- **Inform about recent developments on impact, vulnerability and CCA indicators**
- **Review the current availability of adaptation statistics at national level**

Overview «Climate Change Adaptation Statistics»: different perspectives of a global challenge



Climate Change «ADAPTATION» & CCRS indicators



“Adaptation” as an area of CCRS; broadly CCA stat. embrace Impacts area + integration with ‘mitigation’ response to CC: **“Systemic approach”**

| Area | Sub-area | No. | Indicator |
|------------|---|-----|---|
| Drivers | National total | 1 | Total primary energy supply (TPES) |
| | | 2 | Share of fossil fuels in total primary energy supply (TPES) |
| | | 3 | Losses of land covered by (semi-) natural vegetation |
| | | 4 | Total support for fossil fuels / GDP |
| | Production | 5 | Total energy intensity of production activities |
| | | 6 | CO2 intensity of energy for the economy |
| | | 7 | Emission intensity of agricultural commodities |
| | Consumption | 8 | Energy consumption by households / capita |
| Emissions | National total | 9 | Total GHG emissions |
| | | 10 | CO2 emissions from fuel combustion |
| | | 11 | GHG emissions from land use |
| | Production | 12 | Total GHG emissions of production activities |
| | | 13 | GHG emission intensity of production activities |
| | Consumption | 14 | Direct GHG emissions from households |
| | | 15 | Carbon footprint |
| Impacts | Physical conditions | 16 | Annual average surface temperature |
| | | 17 | Percentage of land area suffering from unusual wet or dry conditions (Standard Precipitation Index) |
| | Water resources | 18 | Level of water stress: freshwater withdrawal as a proportion of available freshwater resources |
| | Land, land cover, ecosystems and biodiversity | 19 | Cumulative number of alien species |
| | | 20 | Carbon stock in soil |
| | | 21 | Proportion of land that is degraded over total land area |
| | Extreme Events and Disasters | 22 | Number of deaths and missing persons attributed to hydro-meteorological disasters, per 100,000 population |
| | | 23 | Occurrence of extreme weather events |
| | | 24 | Direct economic loss attributed to hydro-meteorological disasters in relation to GDP |
| | | 25 | Number of people whose destroyed dwellings were attributed to hydro-meteorological disasters |
| | Human settlements and environmental health | 26 | Distribution of cases of vector-borne diseases |
| | Agriculture, forestry and fishery | 27 | Heat-related mortality |
| Mitigation | Energy resources | 28 | Renewable energy share in the total final energy consumption |
| | Expenditures | 29 | Share of climate change mitigation expenditure relative to GDP |
| | | 30 | Share of energy and transport related taxes as percentage of total taxes and social contributions |
| | Environmental Governance and Regulation | 31 | Total climate change related subsidies and similar transfers / GDP |
| | | 32 | Average carbon price |
| | | 33 | Mobilized amount of USD per year starting in 2020 accountable towards the USD 100 billion commitment |
| Adaptation | Expenditures | 34 | Share of government adaptation expenditure to GDP |
| | Water resources | 35 | Change in water use efficiency over time |
| | Human settlements and environmental health | 36 | Proportion of population living in dwellings with air conditioners or air conditioning |
| | Agriculture, forestry and fishery | 37 | Progress towards sustainable forest management |
| | | 38 | Proportion of agricultural area under productive and sustainable agriculture |

Climate Change “ADAPTATION”

Wide topics involved:

- **Weather- and climate-related natural hazards** (temperatures, precipitations, wet & dry conditions, costal changes... etc)
- **Extreme events and disasters** due to CC (hydro meteorological)
- **Water resources**, scarcity, uses
- Impacts on human **health**, **food** security, **well-being**
- Impact on infrastructure, **transports**, cities, urban areas, green areas, dwellings
- **Agriculture**, forestry and fishery
- **Land**, land cover, land use
- Impacts on **environmental and ecosystems**, **biodiversity**
- Air quality
- **Disaster loss data**
-

International Frameworks - Comprehensive perspective

Indicators integration - A unique Global Challenge

Figure 2.3: The components of the FDES



FDES
UNSD



SEEA



United Nations
Framework Convention on
Climate Change



UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Conference of European Statisticians Recommendations on
Climate Change-Related Statistics



CCRS



MEED

CCRS: 5 Areas/Sectors 39 Indicators

SDG: 17 goal, 169 targets, 240 indicators

SDG



SENDAI



OEIWG on Indicators &
Terminology relating to DRR

OEIWG: 7 Targets +38 Indicators

-> Climate Change “ADAPTATION” -> scattered
across

| | |
|----------------------|--|
| 10:20 - 12:30 | Session 3: Statistics on climate change adaptation Session Chairs: Sergio Castellari, European Environment Agency and Giovanna Tagliacozzo, National Institute of Statistics of Italy |
| 10:20 - 10:25 | Introduction to the session (Giovanna Tagliacozzo, National Institute of Statistics of Italy) |
| 10:25 - 10:40 | UNFCCC process on national adaptation goals/indicators and their relationship with SDGs and Sendai indicators (Livia Hollins, United Nations Framework Convention on Climate Change - UNFCCC) |
| 10:40 - 11:00 | Coffee/tea break |
| 11:00 - 11:15 | Current and planned activities of the Copernicus Climate Change Service (C3S) and the European State of the Climate 2017 (Carlo Buontempo, COPERNICUS) |
| 11:15 - 11:30 | Ready or not? Findings of the evaluation of the EU Adaptation Strategy (Max Linsen, DG CLIMA of the European Commission) |
| 11:30 - 11:45 | EEA activities on climate change adaptation and disaster risk reduction: reports and Climate-ADAPT (Sergio Castellari, European Environment Agency) |
| 11:45 - 12:00 | The use of climate change adaptation indicators in Portugal (José Paulino, Portuguese Environment Agency) |
| 12:00 - 12:30 | Discussion and closing of the session (Sergio Castellari, European Environment Agency) |

Questions to the audience

- Does your NSO produce publication(s) specifically on climate change adaptation?
- Are statistical and geographical data integrated for producing statistics on climate change adaptation?
- What are the main problems the NSO is facing when compiling or contributing to the compilation of statistics on climate change adaptation?
- Which are the priority areas in statistics on climate change adaptation for which guidelines, recommendations, best practices, international standards, etc., would be needed?