

Strategies to develop a governmental data sandbox to
NUTS-2 level place-based transformations towards
sustainability and resilience: A case study on an
exercise to monitor SDGs in the EU regions

DANIEL POP, FSPAC, BABEȘ-BOLYAI UNIVERSITY

Structure of the presentation

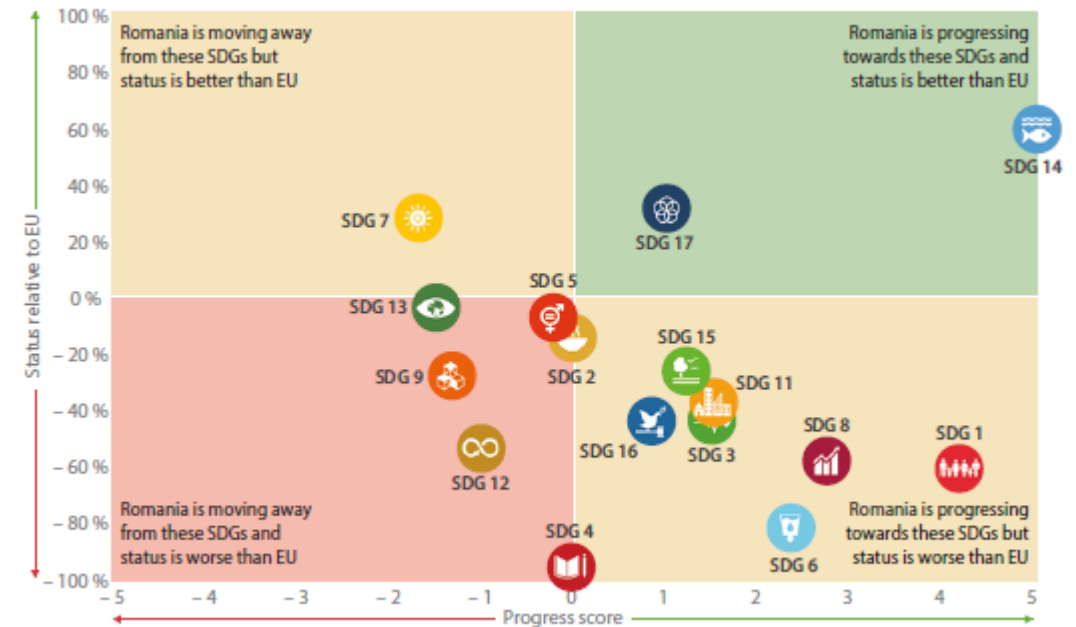
- Introduction:
 - The overview of status and progress of EU member states towards the SDGS
 - The Regions 2030 – monitoring the SDGs in the EU regions initiative
 - Sandboxing to strengthen local data ecosystems
- Case study SDGs monitoring at the level Romania's Nord-Vest region
- Lessons

Overview of status and progress of EU Member States towards the SDGs

Overview of EU progress towards the SDGs over the past 5 years, 2023
(Data mainly refer to 2016–2021 or 2017–2022)



Romania

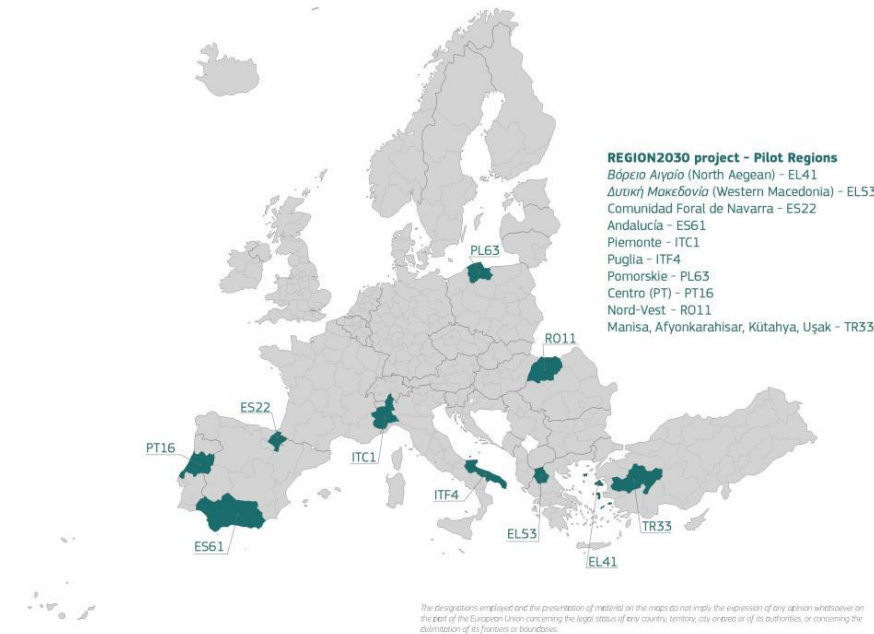


Source: Eurostat

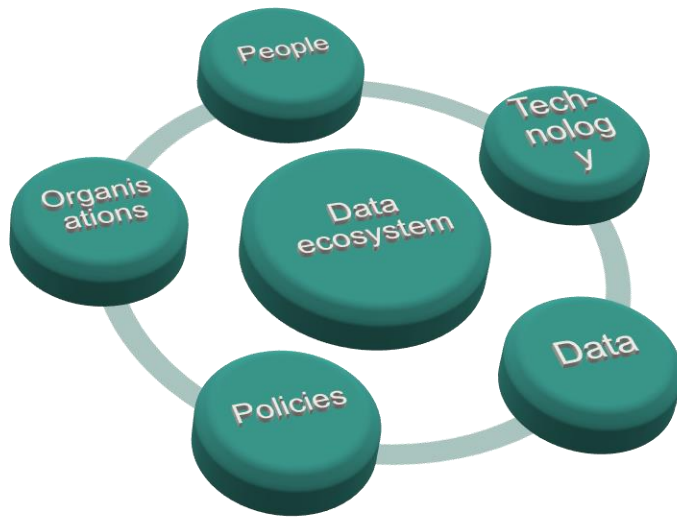
Source: Eurostat. *Sustainable development in the European Union: monitoring report on progress towards the SDGs in an EU context*. Publications office of the European Union, 2017. doi:10.2785/846970. KS-04-23-184-EN-C

Regions 2030 – Monitoring the SDGs in the EU regions

- The European Commission's Joint Research Centre, in collaboration with the Directorate General for Regional and Urban Policy for Eurostat and with the support of the European Parliament and the European Committee of Regions have implemented the pilot project 'Monitoring the SDGs in the EU regions – Filling the data gaps – REGIONS2030'.
- The initial survey resulted in a database of 83 indicators (covering all 17 SDGs, and 54 targets) at EU level for NUTS2.
- Of the 83 indicators 57 are official one, and 26 experimental.



Data ecosystem for monitoring SDGs at regional level



- To create regional level SDGs data framework to enable sharing of data on the 17 goals, 169 targets and 248 indicators.
- Ensure interoperability solutions for digital public services using information from location
- To implement the European Data Strategy

SDGs data ecosystems in the Nord-Vest region

- To establishment a relevant and applicable set of indicators for monitoring the achievement of the SDGs at NUTS2 regional level.
- The review was developed within the framework of the pilot project entitled “REGIONS2030: Monitoring the SDGs in the EU regions – Filling the data gaps”, launched by the European Commission’s Joint Research Centre (JRC) in collaboration with the Directorate General for Regional and Urban Policies (DG REGIO) and ESTAT, and supported by the European Parliament.
- The analysis focuses on identified the availability of official and alternative indicators to the Regions 2030 – Monitoring the SDGs in the EU regions database

The Nord-Vest region Romania:

NUTS2: inter-municipal cooperation framework for the realization of development objectives and implementation of EU programs

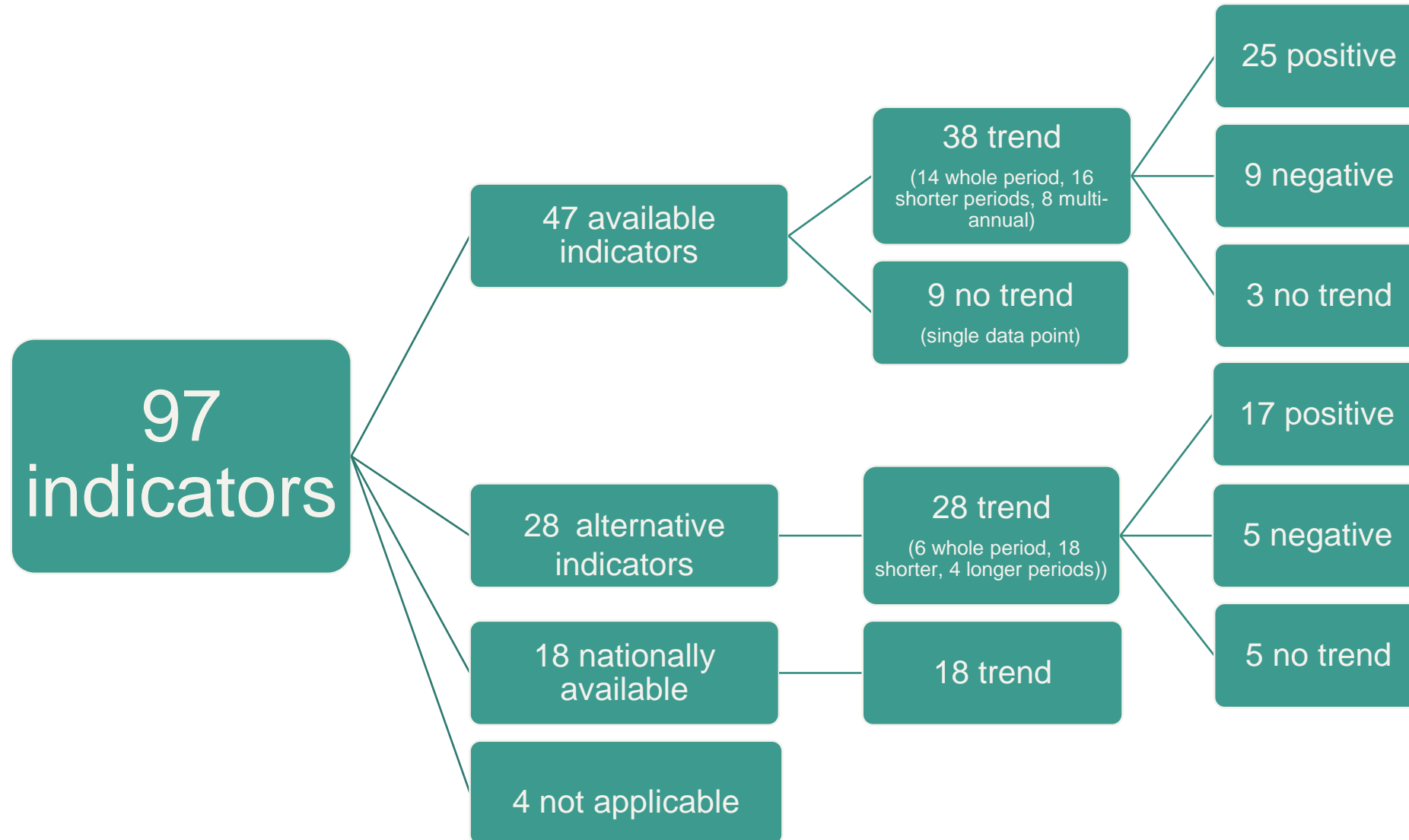
LAUs: 6 COUNTIES; 6 county seat municipalities; 9 municipalities, 28 cities; 403 communes (1,752 villages)

SURFACE: 34,159 km² (14.3% of country)

RESIDENTS (2020): 2,542,441 (13.2% of country)

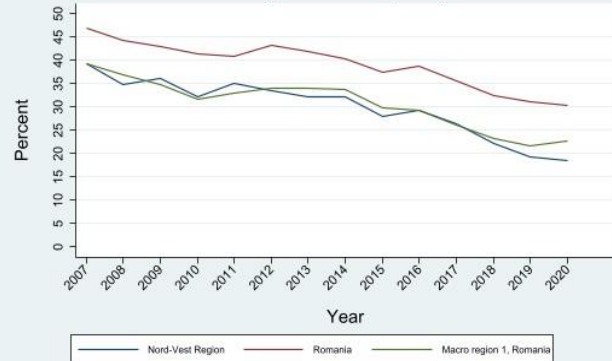
GDP (2021): 20,500 (EURO PPS per inhabitant)

Available indicators benchmarked to the Regions2030 initiative



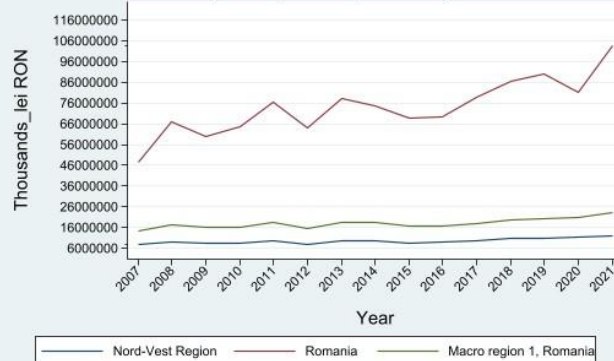
Internationally available official regional-level data - examples

SDG 1. Persons at risk of poverty or social exclusion
Target 1.2 Reduce poverty



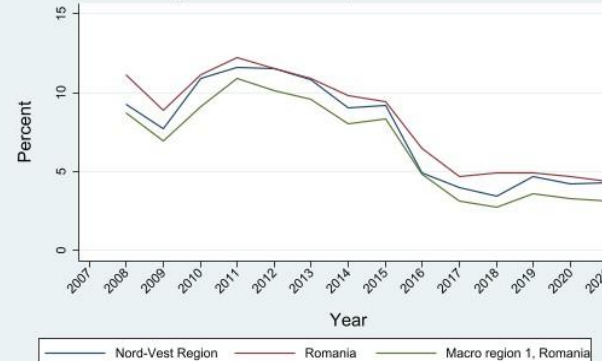
Source: Eurostat - Regional statistics by NUTS classification (rilc_mdspd, ILC_MDS08)

SDG2 Gross Value Added (GVA) of agriculture; livestock and fishing
Target 2.3 agricultural productivity



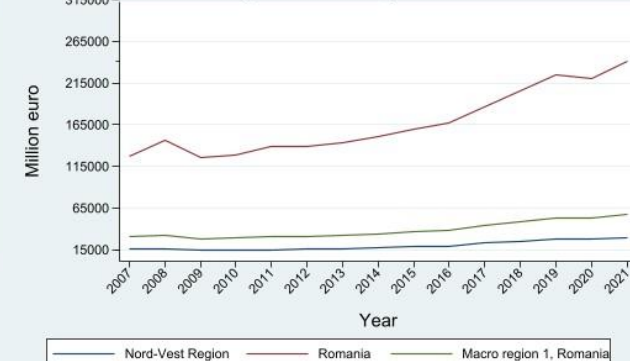
Source: INS - Agricultural branch production by macro and development regions [TEMPO_AGR206A]

SDG 3. Self-reported unmet needs for medical examination
Target 3.c health financing and recruitment



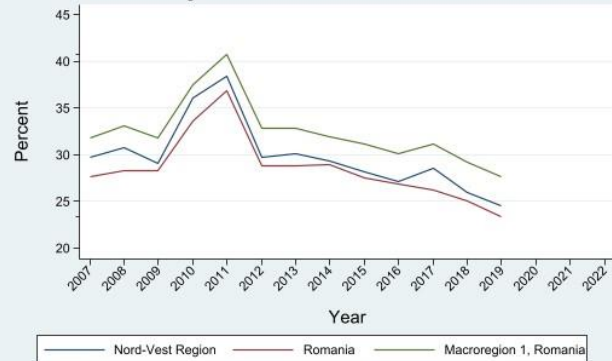
Source: Eurostat - Regional statistics by NUTS classification [HLTH_SILC_08_R__custom_5027441]

SDG8 Gross domestic product (GDP) at current market prices
Target 8.1 economic growth



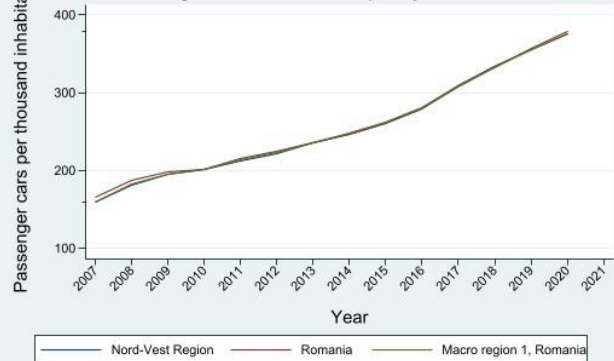
Source: EUROSTAT - Regional statistics by NUTS classification [NAMA_10R_2GDP__custom_5046720]

SDG9 Share of Gross value added of the industry
Target 9.2 Sustainable industrialisation



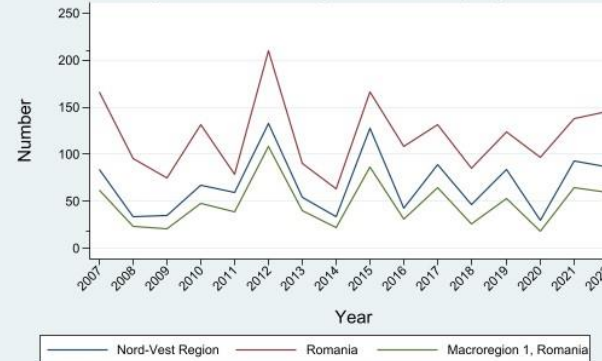
Source: Romanian Statistical Yearbook

SDG11 Stock of vehicles (passenger cars)
Target 11.2 access to transport systems



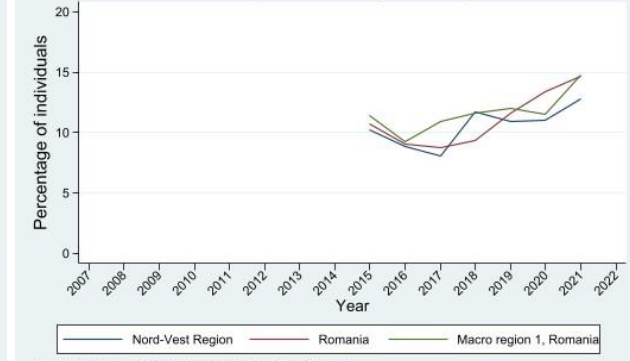
Source: EUROSTAT - Regional statistics by NUTS classification [TRAN_R_VEHST__custom_5054602]

SDG13 Cooling degree days
Target 13.2 climate change measures into policy



Source: EUROSTAT - Regional statistics by NUTS 2 regions [Table: reg_eng_nrg, code CHDDR2_M]

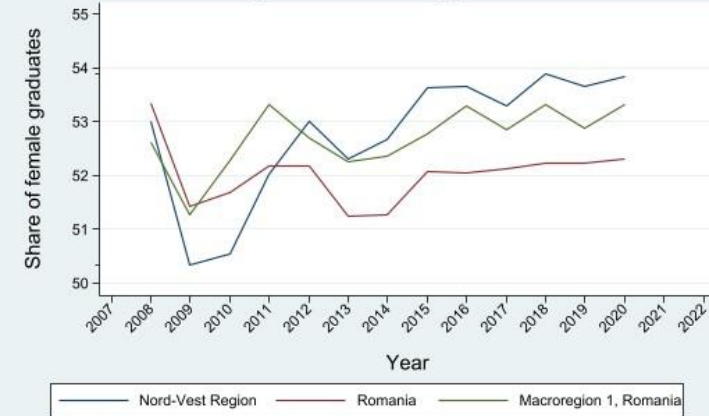
SDG 17 Individuals who used the internet for interaction with public authorities
Target 17.8 enabling technology



EUROSTAT - Employment [ISOC_R_GOV_I]

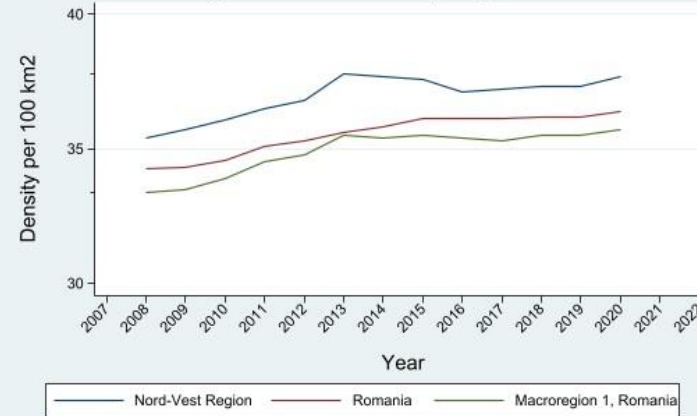
Nationally available official regional-level data - examples

SDG4 Share of female graduates at all levels of education - %
Target 4.5 Graduates by gender



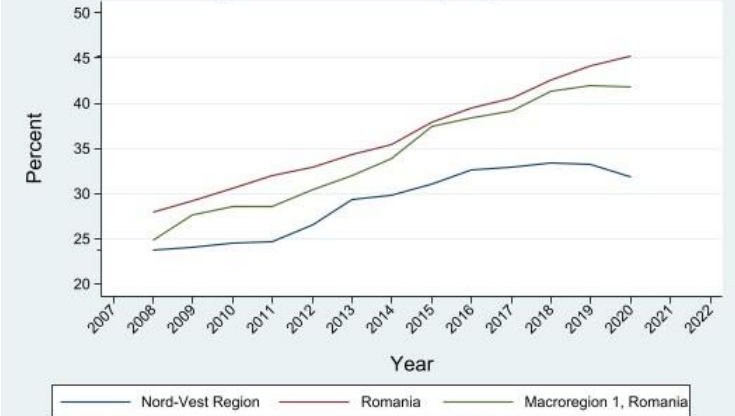
Source: Romanian Statistical Yearbook

SDG11 Density of public roads per 100 km2 of territory
Target 11.2 Access to transport systems



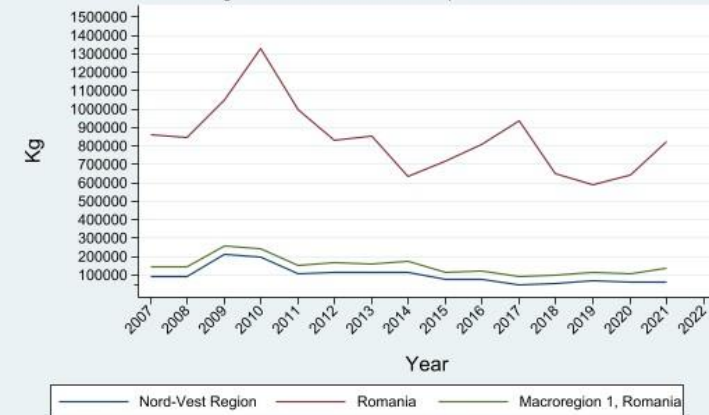
Source: Romanian Statistical Yearbook

SDG11 Share of modernised public roads
Target 11.2 Access to transport systems



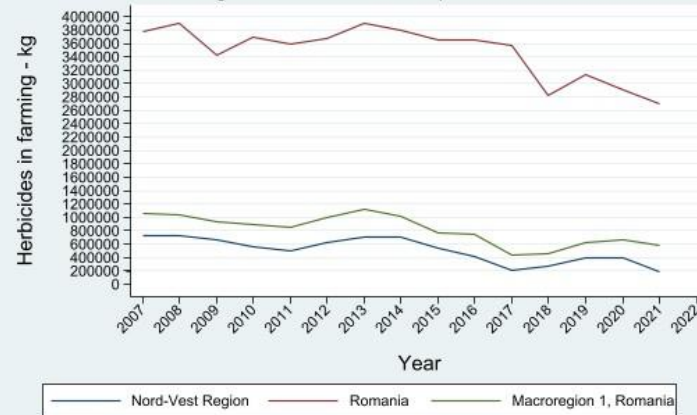
Source: Romanian Statistical Yearbook

SDG2 The use of insecticides in farming
Target 2.4 Sustainable food production



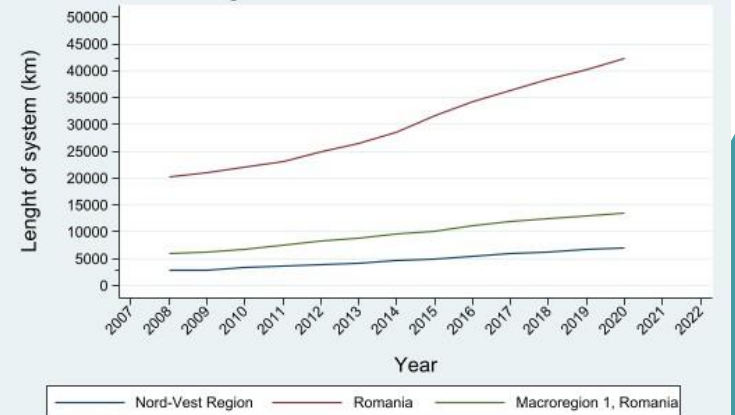
Source: Ministry of Agriculture and Rural Development_TEMPO_AGR106A

SDG2 The use of herbicides in farming
Target 2.4 sustainable food production



Source: Ministry of Agriculture and Rural Development

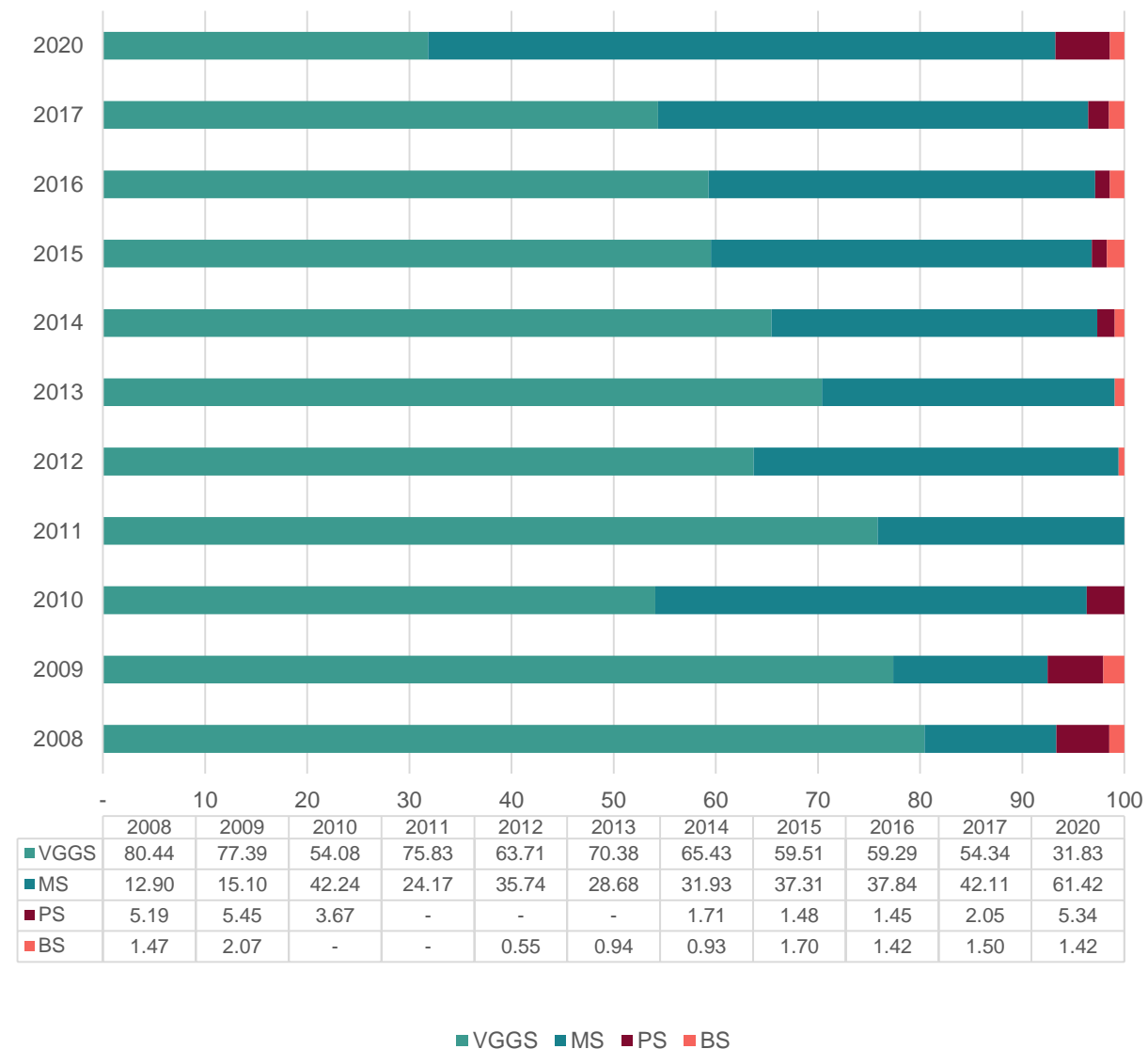
SDG6 Length of public sewerage system
Target 6.1 Universal access to water



Source: Romanian Statistical Yearbook

Example of data collected locally

SDG6. Indicator 6.1. Water bodies that exceed a standardized quality rating (6.3 water quality)



Source:	The National Administration "Romanian Waters" through the Romanian Statistical Yearbook
Name of indicator:	Surface water quality for Hydrographic basins
Hyperlink (available API):	https://insse.ro/cms/en/content/statistical-yearbooks-romania
Visualisation:	https://crisuri.rowater.ro/ https://rowater.ro/
Availability and geographic coverage:	NUTS2
Unit of measurement:	km The quality rating includes four classes, which are: First and second class- Very good and good status (VGGS); Third class – Moderate status (MS); Fourth class – Poor status (PS) and Fifth class – bad status (BS).
Level of aggregation:	Water basin
Time coverage and frequency:	2009-2021 Data collected every year

Insights

- The identified data provide critical insights into the realization of SDGs at regional (NUTS2) level, but only for a limited number of indicators and targets.
- However, to strengthen the monitoring of SDGs at regional level could benefit from the articulation of a local data ecosystem – including data from all 6 county seat municipalities; 9 municipalities, 28 cities; 403 communes (1,752 villages).
- Expanding indicators analysis by expanding the data ecosystem to include besides descriptive and performance indicators also a group of welfare and sentiment indicators