

Delineating Cities and Rural Areas. Polish case study

Spatial and Environmental Surveys Department

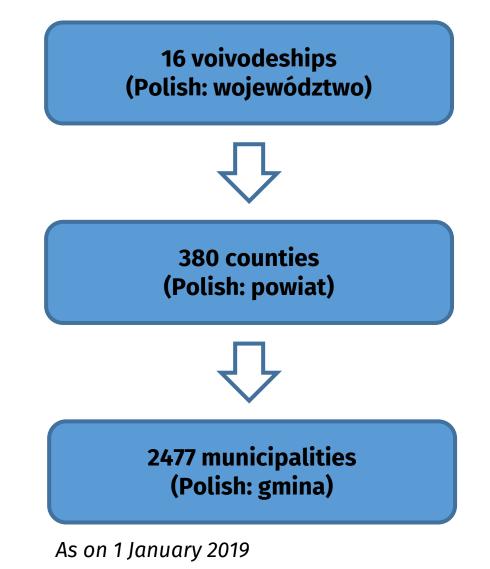
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Background – administrative division of Poland

• On January 1, 1999 the new administrative division was introduced in Poland.

The two stage administrative division used since 1975 has been replaced with a three-stage one that consists of voivodeships, counties, and municipalities (communes).

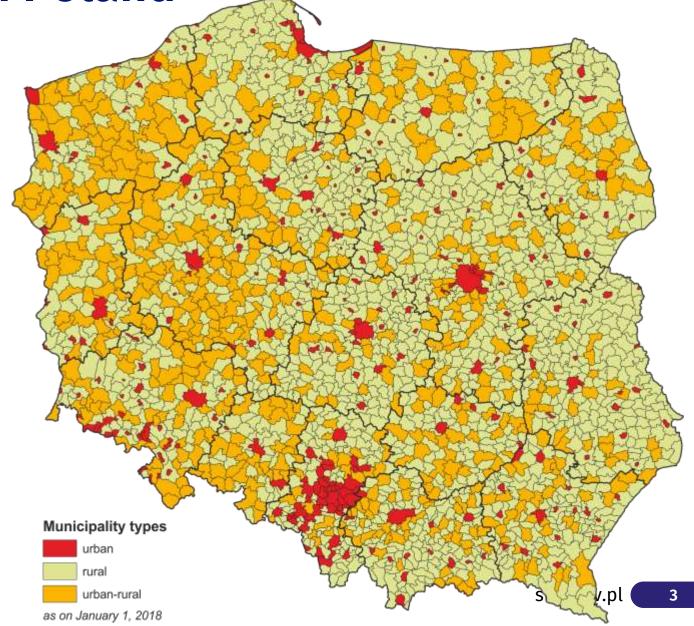
• The new administrative division has been slightly modified since its introduction.



Types of municipalities in Poland

The National Official Register of the Territorial Division of the Country (TERYT) which is based on administrative (formal) division of municipalities (Polish: gmina) into:

- urban municipalities (including only cities/towns) – 302 entities (as of 1 January 2018)
- rural municipalities (including only rural areas) – 1548 entities
- urban-rural municipalities (including both cities within their administrative borders and rural areas) – 628 entities



Urban and rural areas in Poland

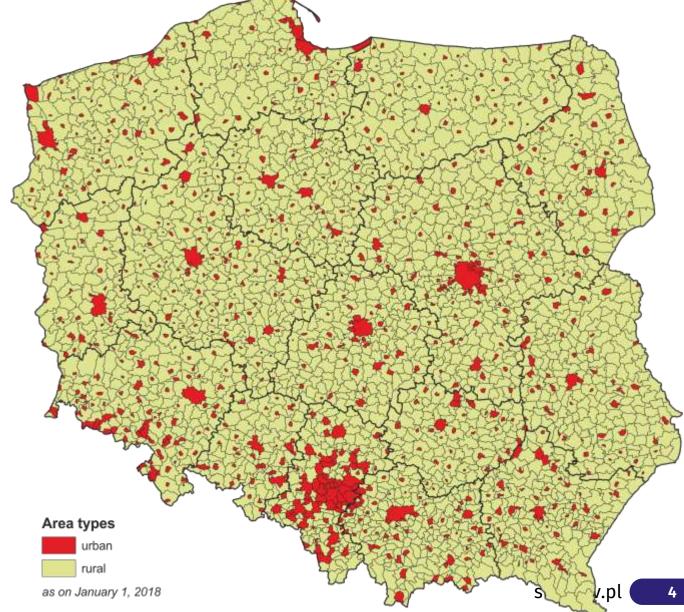
The division based on the National Official Register of the Territorial Division of the Country (TERYT).

Urban areas:

 areas within administrative boundaries of cities and towns (i.e. urban municipalities and urban areas of urban-rural municipalities)

Rural areas:

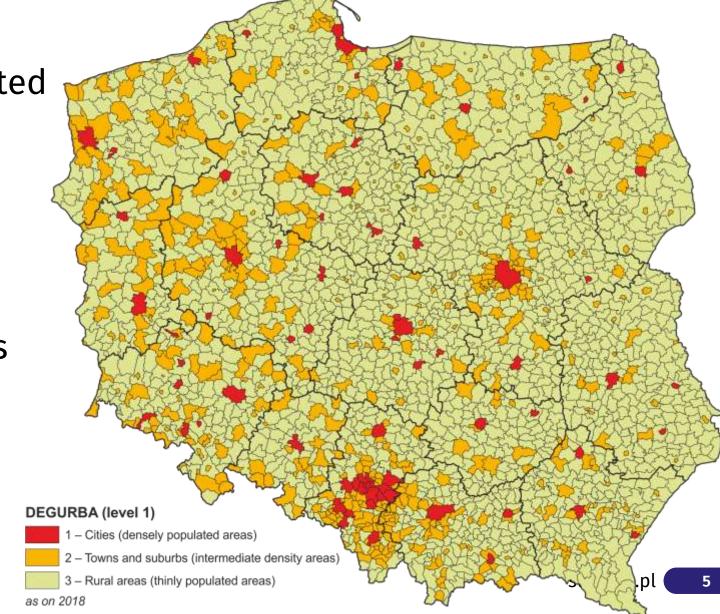
 areas outside administrative boundaries of cities and towns (i.e. rural municipalities and rural parts of urban-rural municipalities)



Degree of urbanisation (DEGURBA) in Poland

According to the degree of urbanisation (DEGURBA) elaborated by Eurostat there are:

- 74 municipalities classified as "cities"
- 527 municipalities classified as "towns and suburbs"
- 1877 municipalities classified as "rural areas"

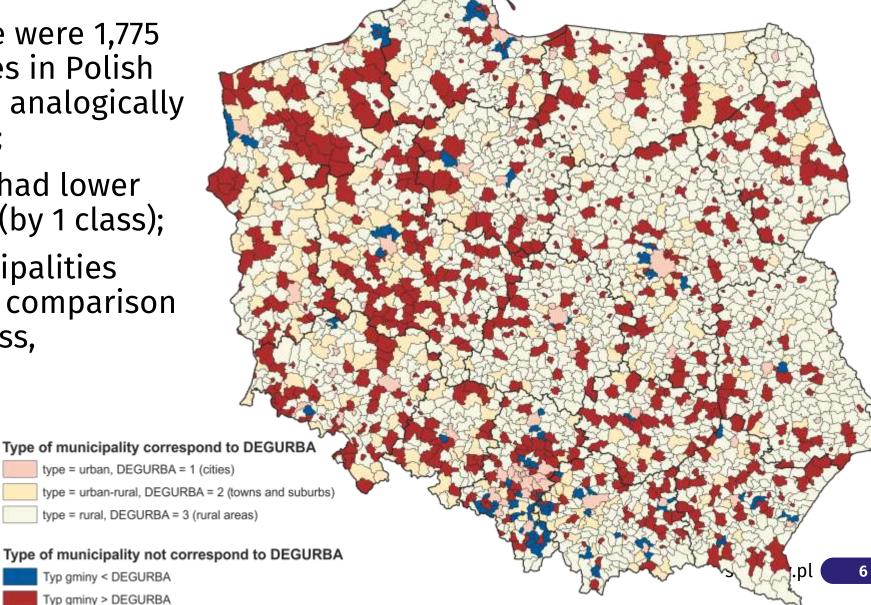


Comparison: Polish classification v. DEGURBA

In total (as of 2018) there were 1,775 out of 2,477 municipalities in Polish division (71.6%) assigned analogically to the DEGURBA division;

84 municipalities (3.4%) had lower assignment in DEGURBA (by 1 class);

assignment of 619 municipalities (25.0%) was overrated in comparison to DEGURBA (597 by 1 class, 22 by 2 classes)



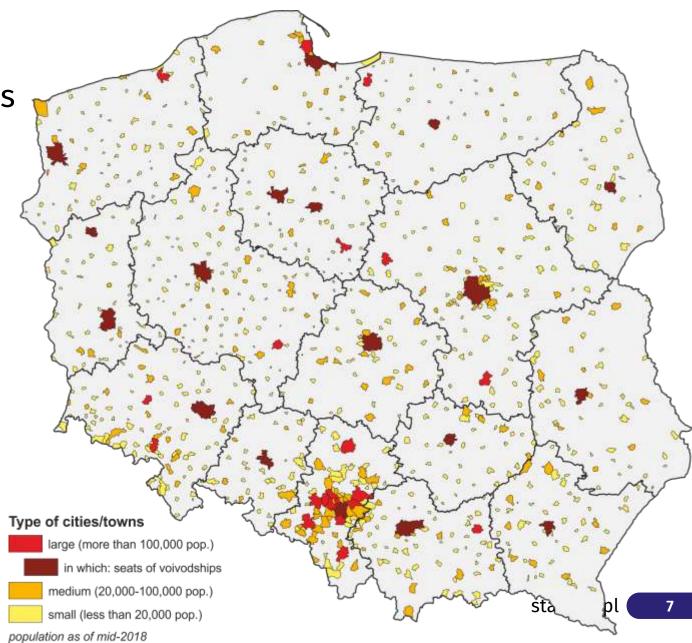
Main cities in Poland

There is no official definition of "main city" in Poland. For statistical purposes (as well as i.e. in the National Urban Policy) cities are categorized into:

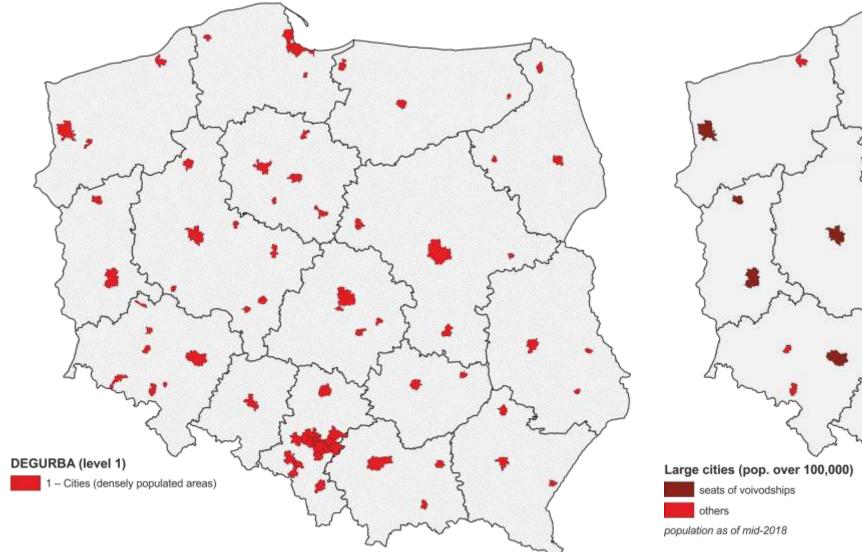
- small cities (with less than 20,000 inhabitants 712 entities),
- medium-sized cities (with 20-100 thousand inhabitants – 179 entities) and
- large cities (with over 100,000 inhabitants - 39 cities) is used.

In this manner, large cities might be considered as "main cities".

Moreover, capitals of voivodeships (18 cities) also tend to be considered "main cities"

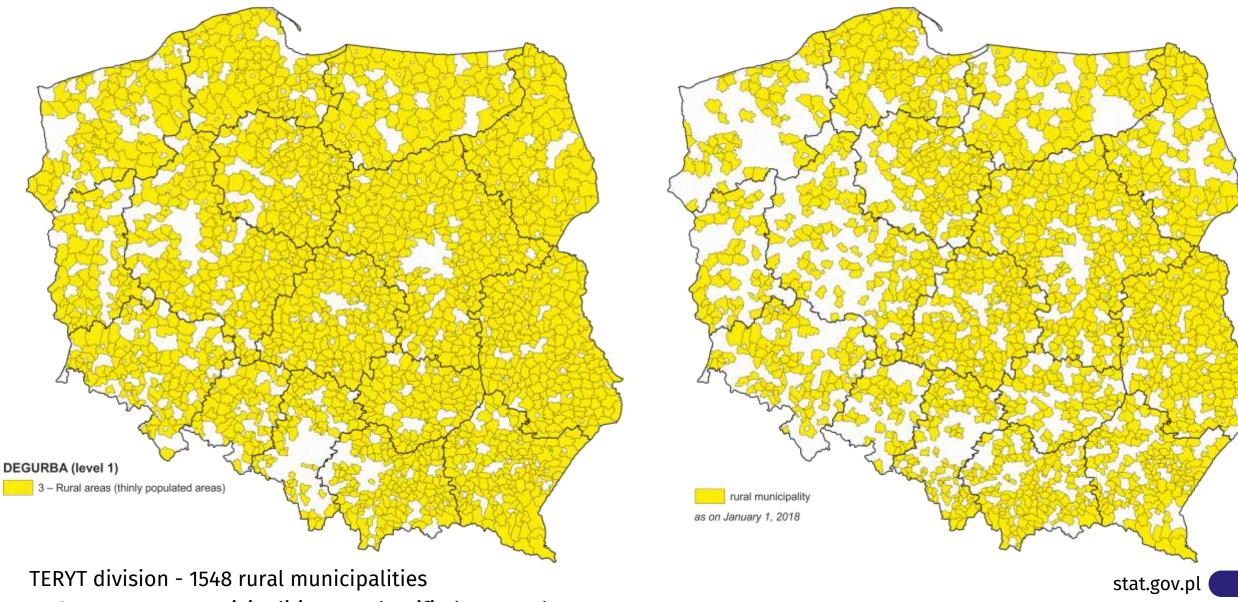


Cities: DEGURBA's "cities" vs. "large cities"



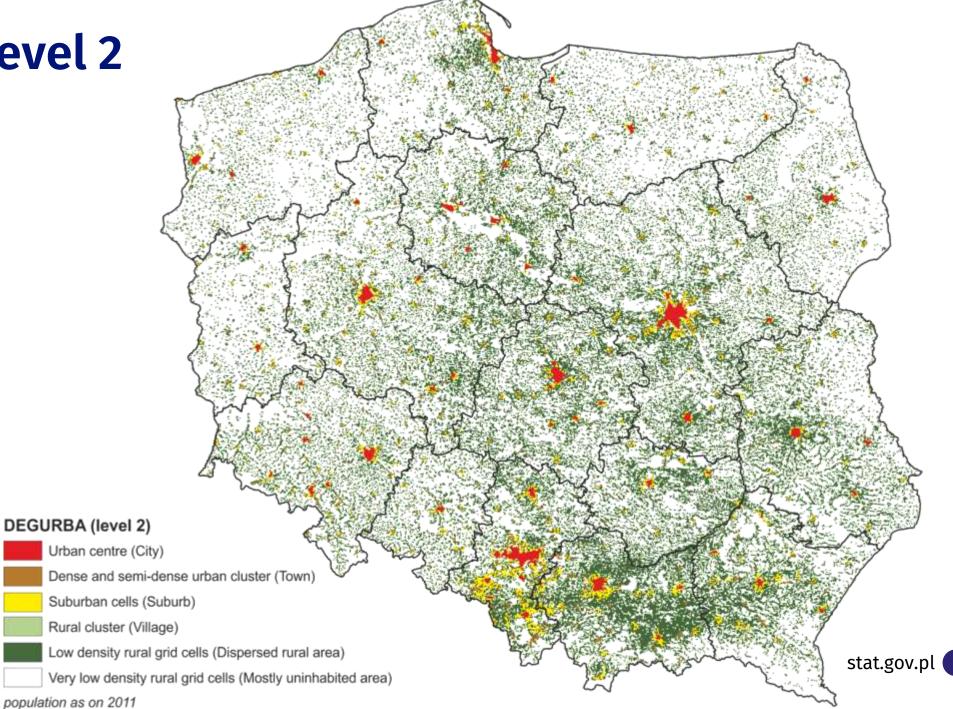
All large cities (and all capitals of voivodeships) are classified in DEGURBA as "cities".

Rural areas: DEGURBA vs. TERYT



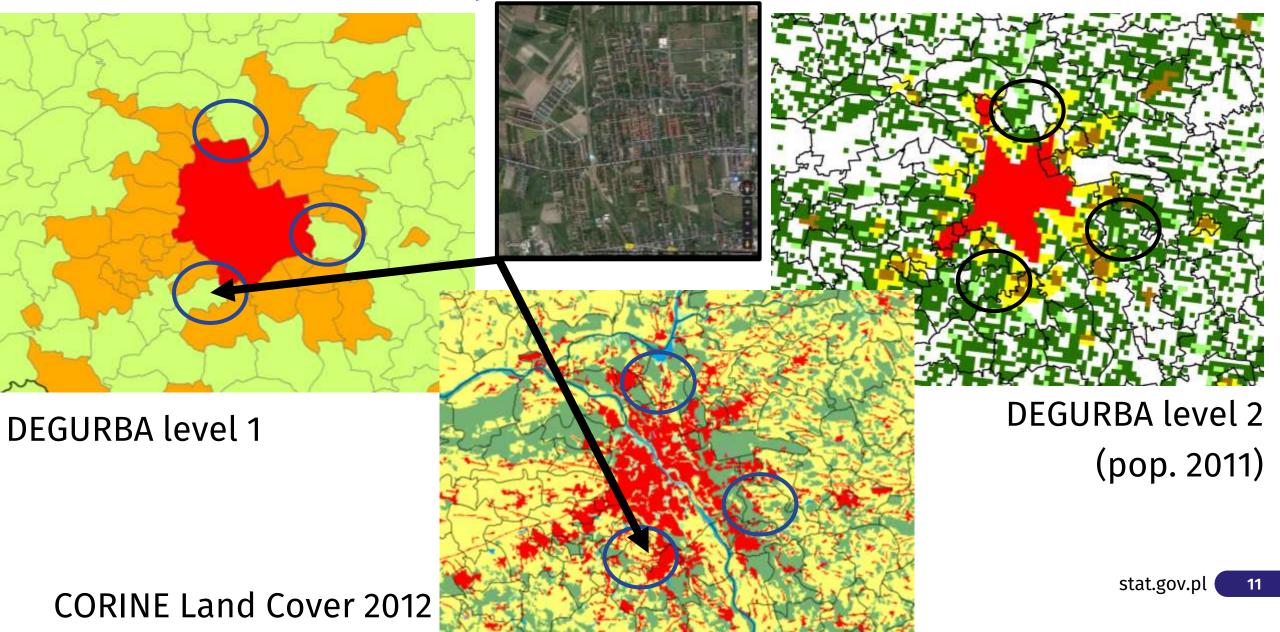
DEGURBA – 1877 municipalities are classified as "rural areas";

DEGURBA level 2

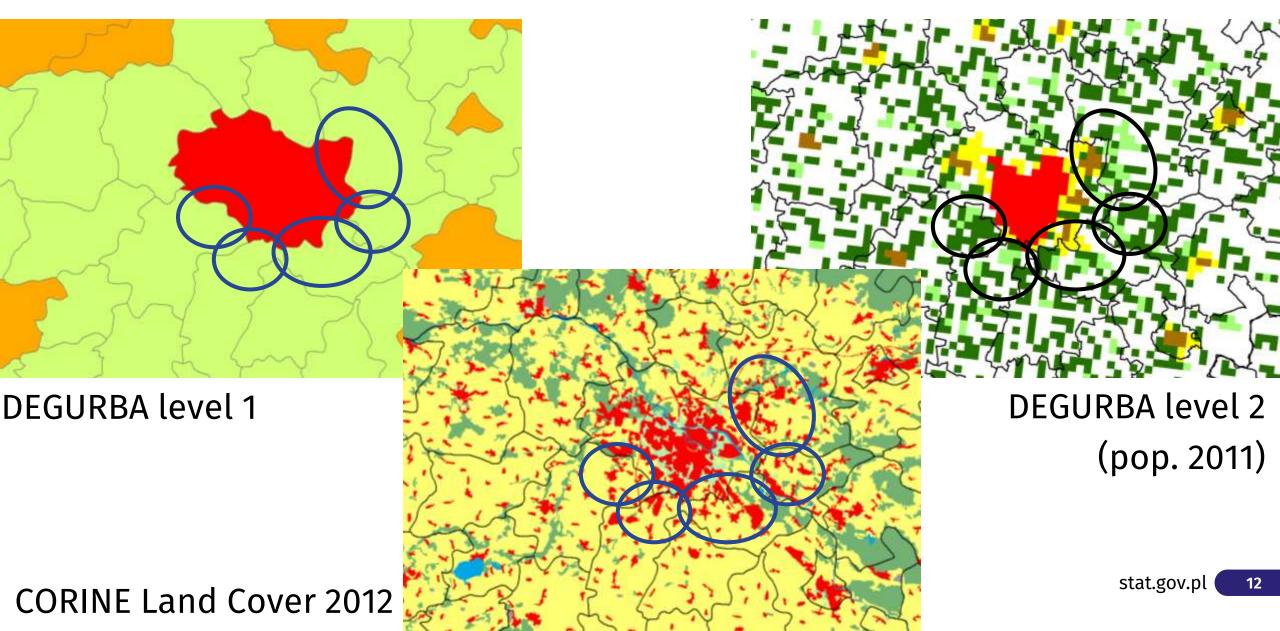


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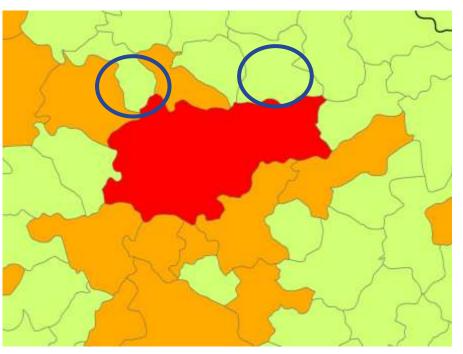
Suburbs – case study: Warszawa



Suburbs – case study: Wrocław

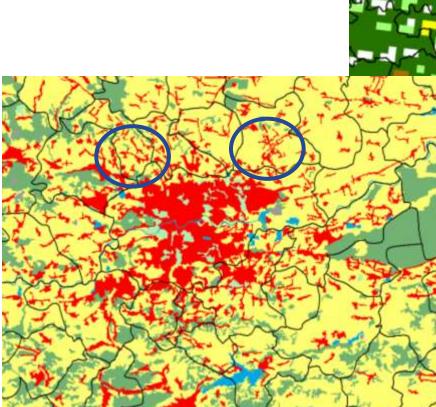


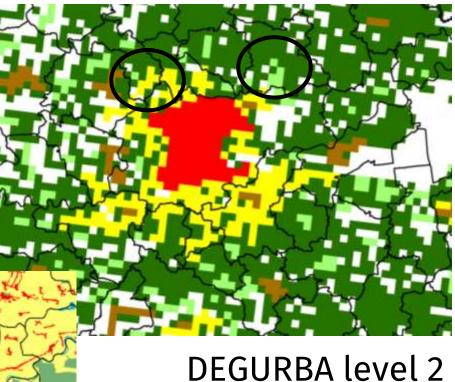
Suburbs – case study: Kraków



DEGURBA level 1

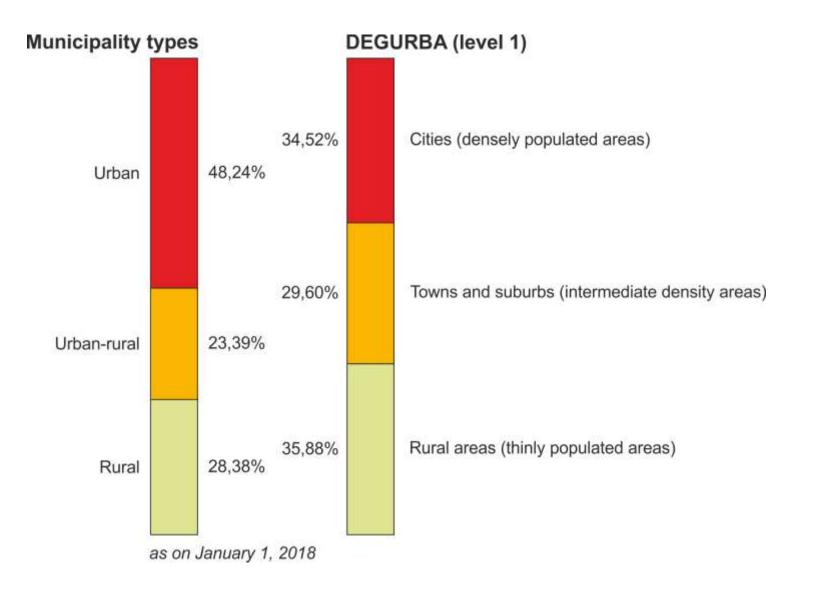
CORINE Land Cover 2012





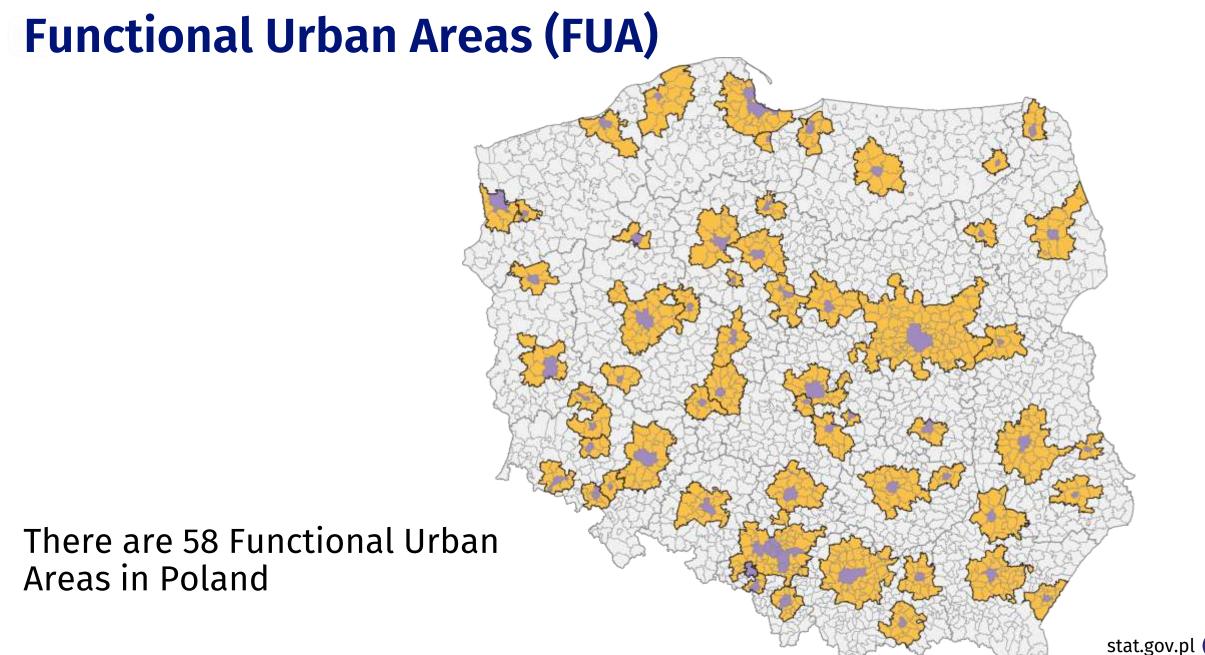
EGURBA level 2 (pop. 2011)

Population of types of units



14

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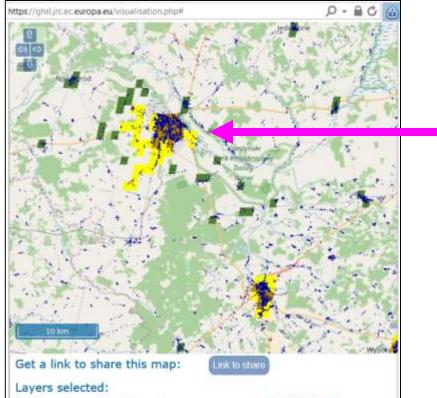
Areas of integrated territorial investments (ITI)

ZIT Gdańsk--Gdynia-Sopot **ZIT Koszalin-** Kołobrzeg-Białogard **ZIT Olsztyn** ZIT Szczecin ZIT Bydgoszcz--Torun **ZIT Białystok** ZIT Gorzów Wielkopolski ZIT.Warszawa ZIT Poznań 0 ZIT Kalisz-Ostrów **ZIT Zielona Góra** Wielkopolski ZIT Łódź **ZIT Wrocław ZIT/Jelenia** Góra 0 **ZIT Częstochowa** (Północny) **ZIT** Lublin **ZIT** Kielce ZIT Wałbrzych **ZIT Opole** ZIT Katowice-Gliwice (Centralny) ZIT Rzeszów ZIT Rybnik (Zachodni) ZIT Krakow ZIT Bielsko-Biała (Południowy) stat.gov.pl

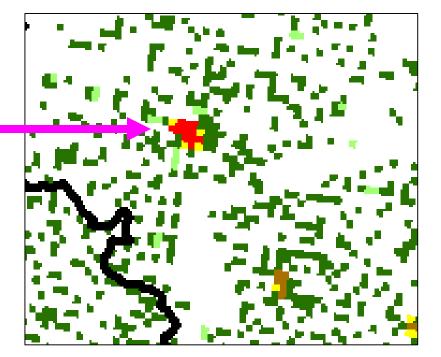
There are 24 areas of integrated territorial investments (ITI) in Poland

Degurba level 2 vs. Degurba level 2 – Łomża example

<u>Degurba model</u> in the GHSL framework (<u>SMOD</u>)



Built-up - Sentinel-1 (resolution: approx. 20m): Built 2016-Europe Built-up - P2016 (resolution: approx. 38m): none Residential population - P2016 (resolution: 250m): none Degree of urbanisation* - P2016 (resolution: 1km): SMod 2015 Base: Marker, OSM Degree of urbanisation level 2 of Europe in the coordinate system ETRS_1989_LAEA.



Closing remarks

- 1. Each unified methodology facilitates comparisons. The main question is whether the division of urban and rural population according to DEGURBA would become internationally accepted and applied by official statistics at international level.
- 2. In Poland it is possible to publish statistics at the municipal level by FUA and DEGURBA. Currently, the data range for 1×1 km grid is limited, mainly to the data on population. There is work underway to obtain additional data as part of the census in 2021.
- 3. The main problem is to collect data in a grid. Such data is actually collected only during censuses, once every 10 years. There is work underway to obtain data from available administrative sources.
- 4. The delimitation of the areas only is not enough to monitor the implementation of SDG. It is necessary to develop, agree and approve the methods for obtaining data for this division.



Thank you for your attention

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