



Population distribution in the Republic of Kosovo: a comparative analysis on urban population and its classification based on administrative and non-administrative criteria

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Summary

- Objectives of the study
- Data and materials
- What is nowadays urban/rural in Kosovo
- The new EU typology applied to Kosovo
- Results
- Conclusions

Objectives of the study

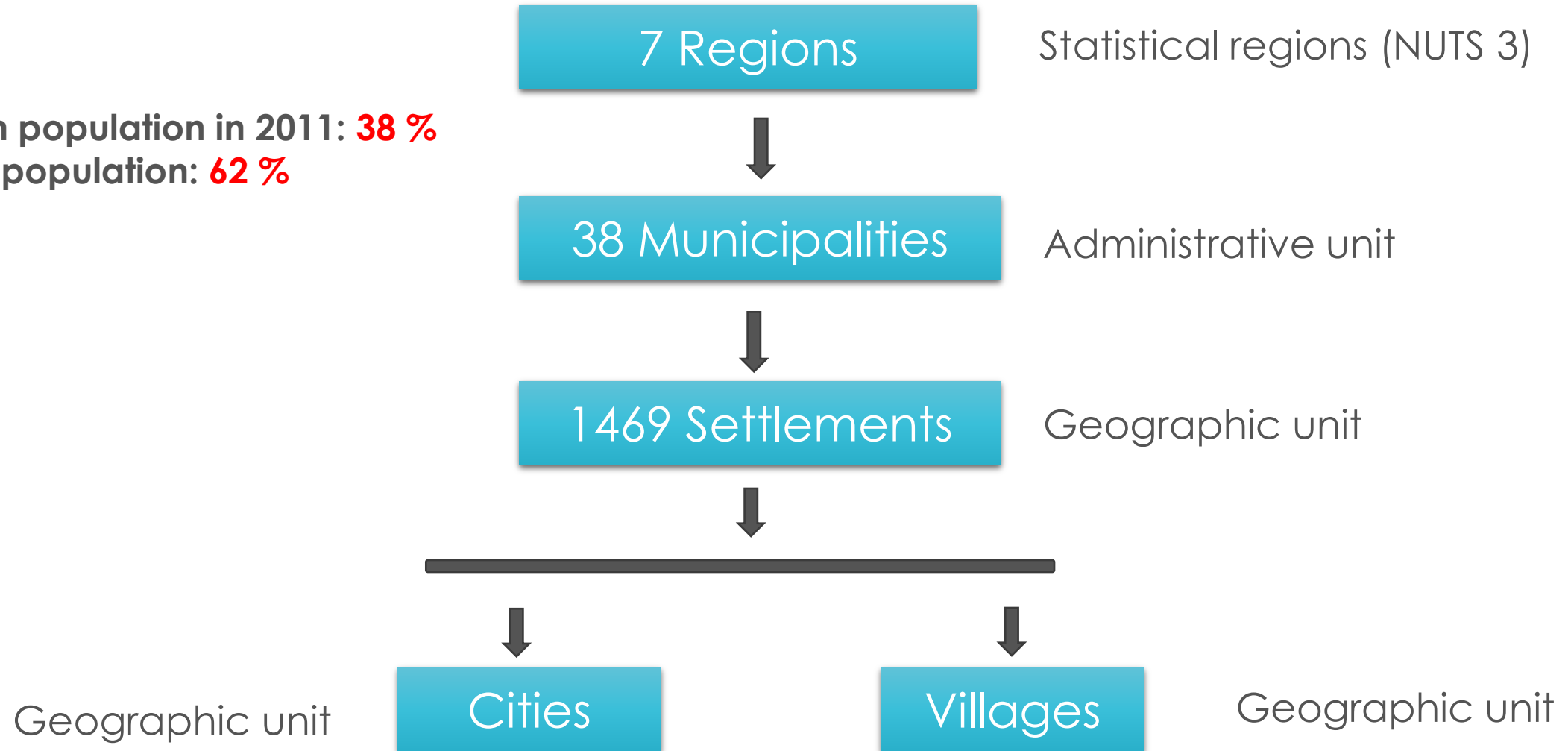
- To identify the urban and rural population in Kosovo (2011 censuses), according to **non-administrative criteria**, using grid-based typology
- To compare the results with the urban and rural population derived from **administrative criteria**
- To facilitate **data comparability** with European countries
- To indicate **differences on statistical indicators**, when a different urban/rural classification is used
- To stress the relevance on the **sample frame used for household surveys** of urban/rural classifications

Data and materials

- 2011 census data disseminated by Kosovo Agency of Statistics
- Georeferenced micro census data at building level for the development of the grid-based dataset - 1 km² population grid
- GIS census database implemented at Kosovo Agency of Statistics
- GIS software Esri ArcGIS for grid generation and spatial analysis

What is nowadays urban/rural in Kosovo

Urban population in 2011: **38 %**
Rural population: **62 %**



Urban population by administrative decisions of Municipalities

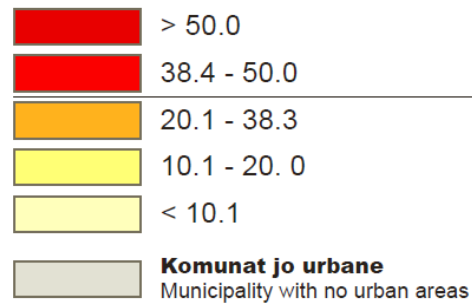
0 10 20 40 Km

2011

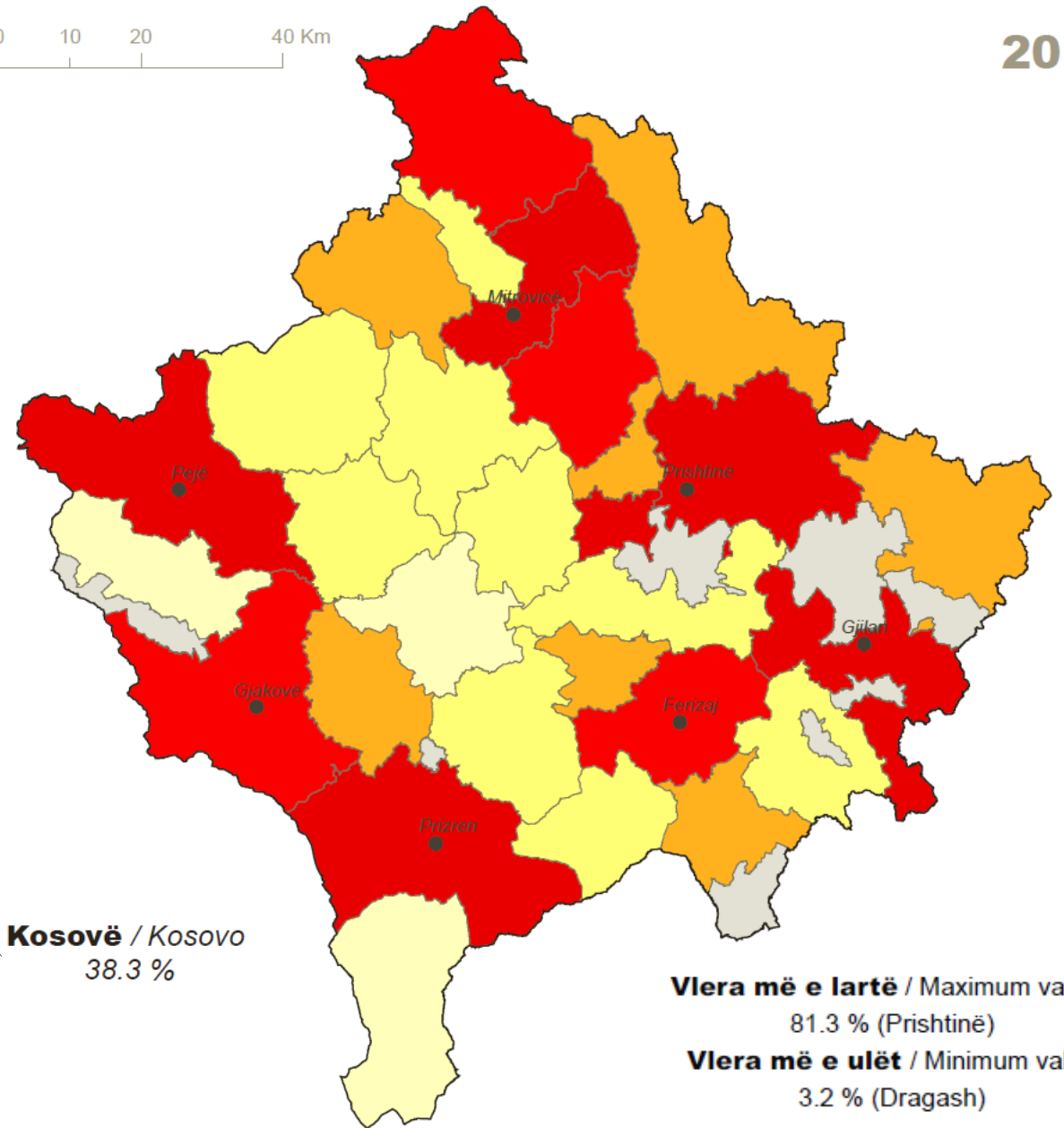
Urban population:

Ratio of persons in urban areas to the total population, in %.

Urban areas are defined at settlement level by administrative decisions of municipalities.



Kosovë / Kosovo
38.3 %



Vlera më e lartë / Maximum value
81.3 % (Prishtinë)

Vlera më e ulët / Minimum value
3.2 % (Dragash)

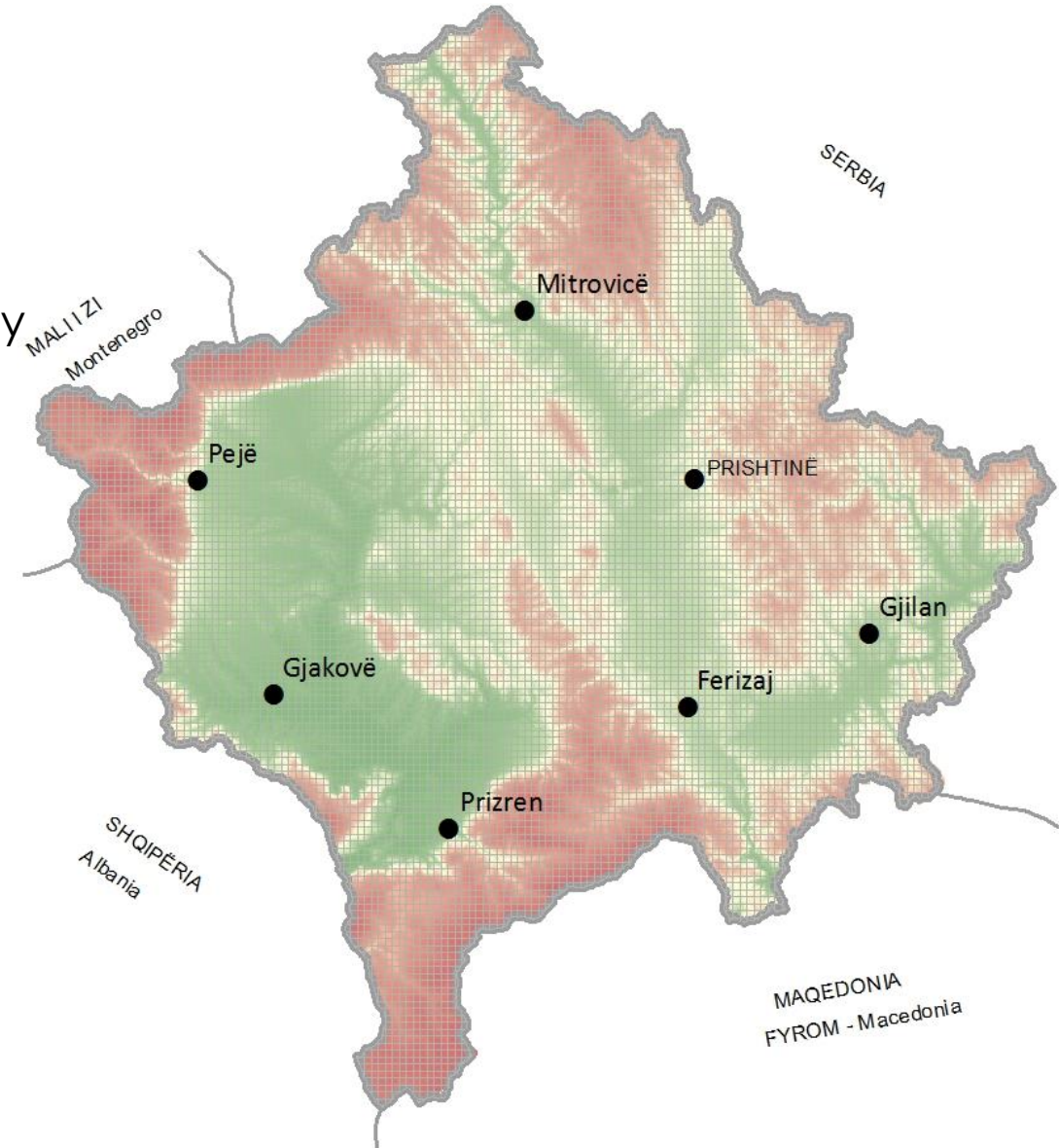
The new EU typology applied to Kosovo

1st phase:

Generation of a grid covering the entire territory of the country of 1 km²

- Tools developed by the European Forum for Geography and Statistics (EFGS) and Eurostat
- Compliance with **INSPIRE specifications** for European grids
- A table of attributes is also generated with a **unique ID for each cell**

Example of a grid 1 km²

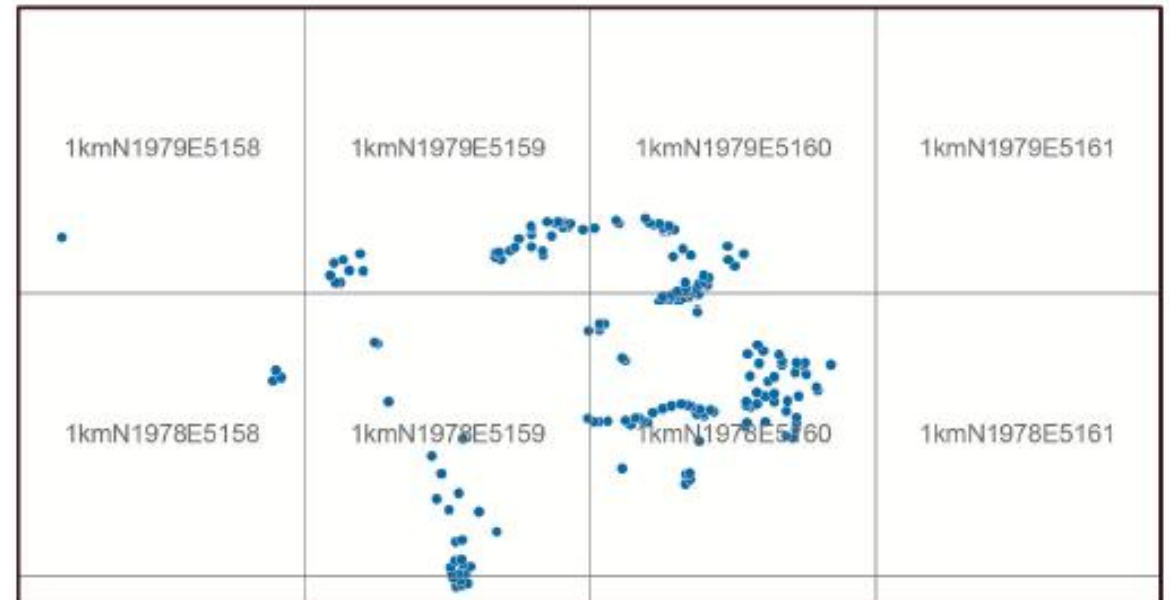


The new EU typology applied to Kosovo

2nd phase:

- Generation of the **buildings centroids** from the GIS geodatabase
- Aggregating census **population into grid cells**, on the basis of the **place of residence**

Example of a generated 1 km² grid with centroids of buildings



The new EU typology applied to Kosovo

3rd phase:

- **Intersection** of the centroids of the buildings with the 1 km² grid
- **Creation of a new GIS layer** of population at grid level with attribute table

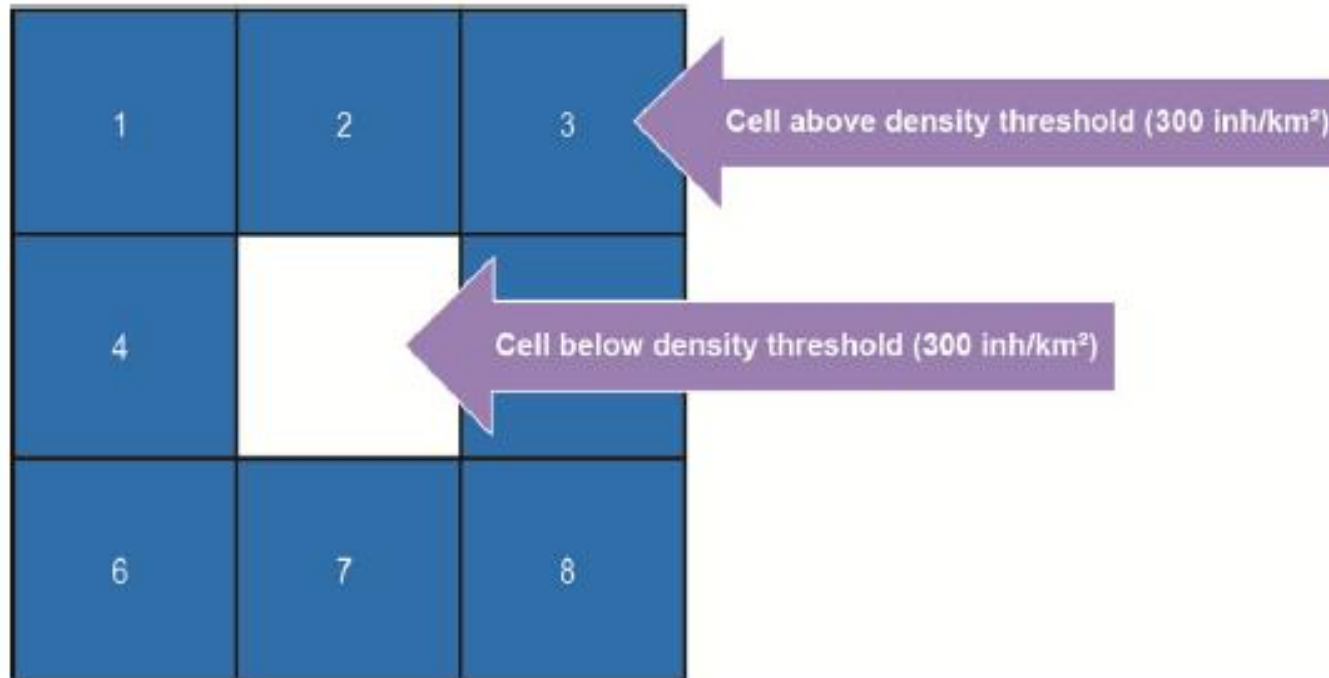
Example of a 1 km² grid GIS layer with census data (white cells are areas without population)

1kmN1979E5158	1kmN1979E5159	1kmN1979E5160	1kmN1979E5161
1kmN1978E5158	1kmN1978E5159	1kmN1978E5160	1kmN1978E5161

The new EU typology applied to Kosovo

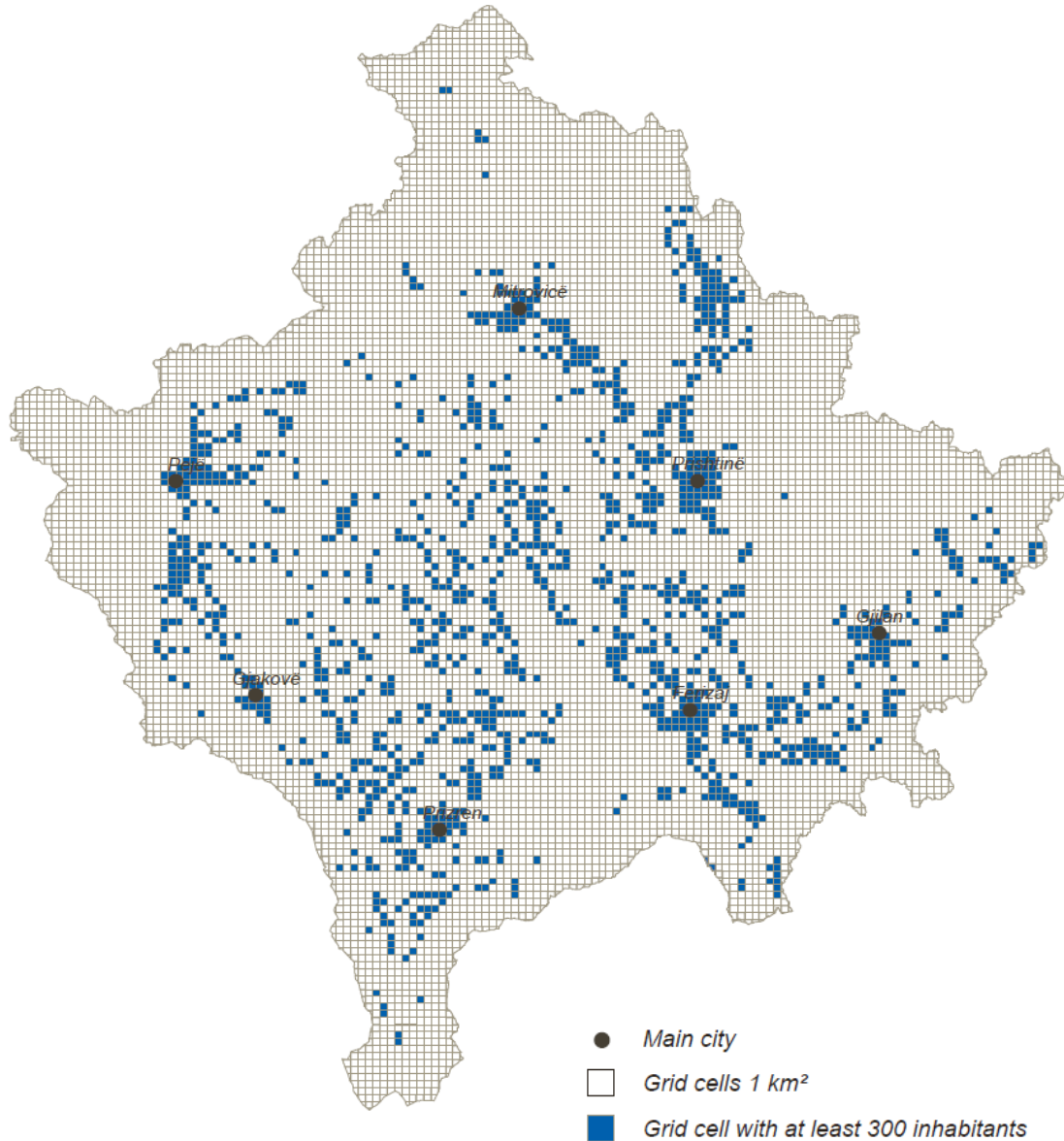
4th phase:

- Classification of cells:
 - **Rural** grid cells: grid cells outside urban clusters
 - **Urban clusters**: contiguous grid cells of 1 km² with a density of at least 300 inhabitants per km² and minimum population of 5 000

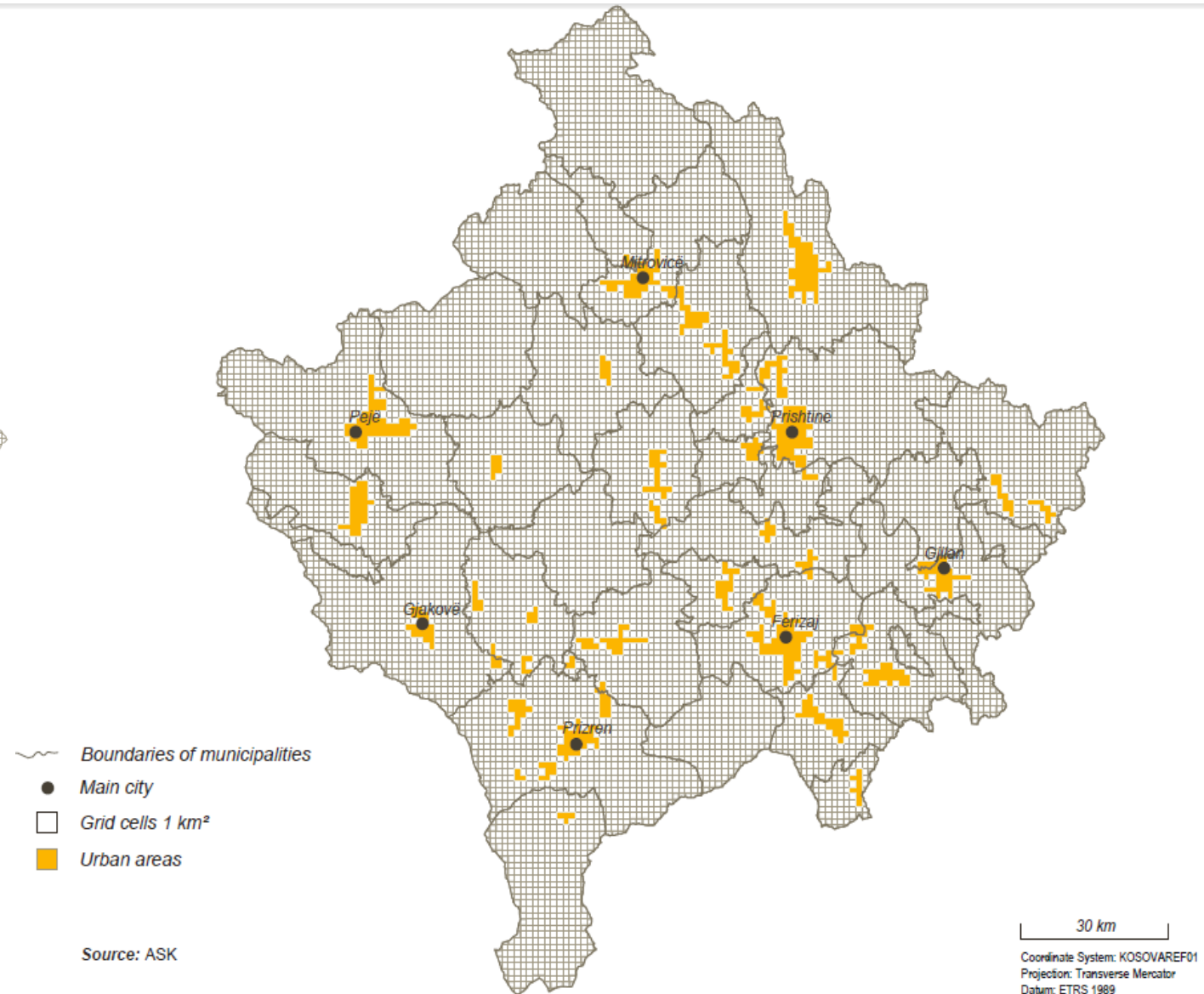


Results

Grid cells with at least 300 inhabitants per 1 km²



41 urban clusters in Kosovo – 2011



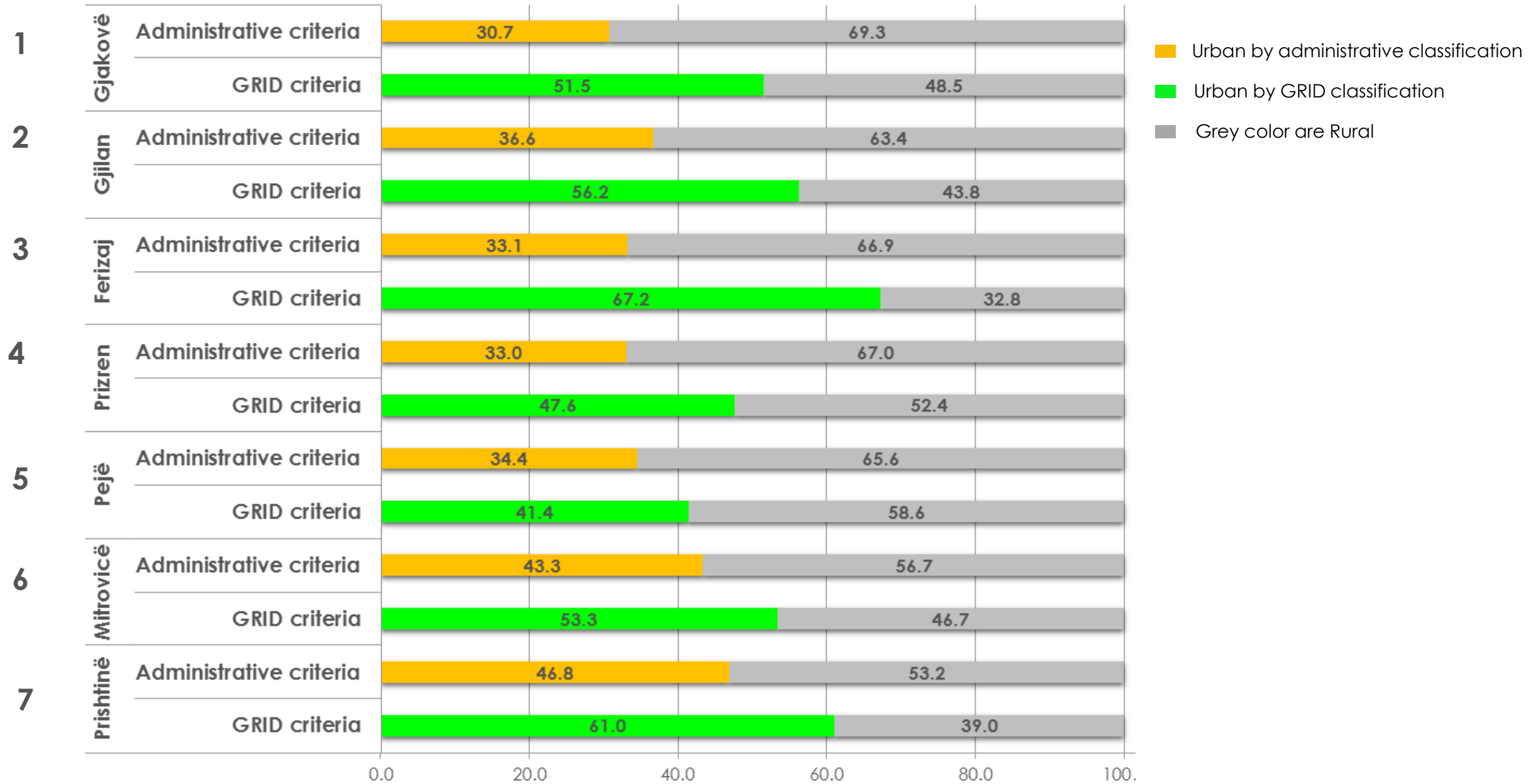
Contiguous grid cells with at least 300 inhabitants and minimum population of 5 000 (**urban areas**)

Results

- * According to the grid approach, the urban population of Kosovo in 2011 was **54.7%**.
- * According to administrative criteria was **38.2% (16.5% difference)**.
- * Urban areas of Kosovo: **41** grid approach, **39** administrative approach

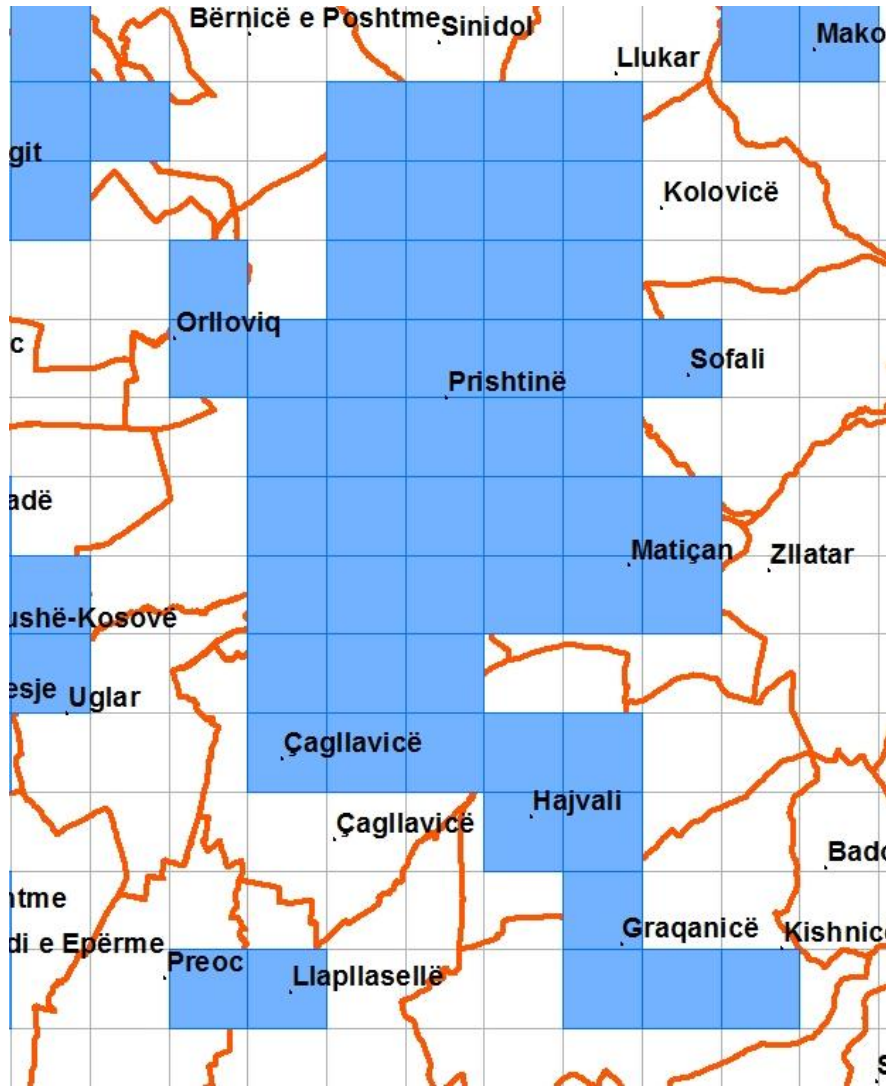
Results

Differences urban/rural at regional level



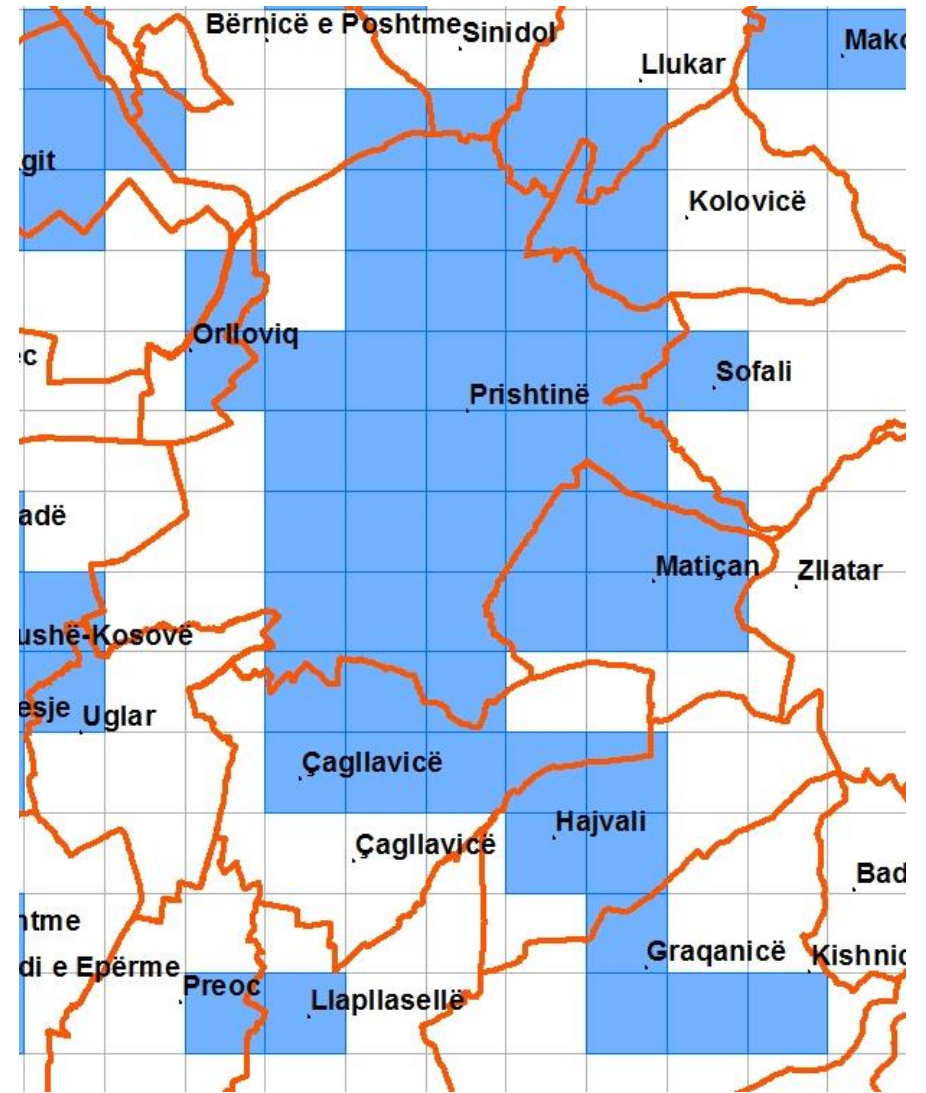
Results

Urban clusters and administrative boundaries



- Urban cluster of Prishtina
- Cadastral boundary

Source: KAS 2015



- Urban cluster of Prishtina
- Cadastral boundary

Source: KAS 2015

Conclusions

Administrative criteria for the definition and classification of urban/rural areas, like those used in Kosovo, seems not adequate for a reliable and up-to-date classification of the urban and rural population;

The high differences between the two classifications in the share of urban population at national level (about 16% in Kosovo).

The EU grid-based approach proposed in this analysis may be one option to be considered by countries to develop reliable definitions and classifications on what is urban and what is rural, ensuring international comparability as well.

Moreover, urban and rural definitions are not only relevant for the dissemination and analysis of statistical data. They have also particular value in the phase of production of data through sample surveys.

**Thank you
for your attention!**