

Rural-urban connectivity and employment characteristics

Luisa Franconi* and Daniela Ichim°

Istat

* Directorate for Environmental and Territorial Statistics
Environment, territory and register of geographic
and territorial units

° Department for Statistical Production

Outline

1. Labour Market Areas (LMAs)
2. Needs for LMAs
3. New need: LMA typology

Labour Market Areas (LMAs): functional areas that cover **the whole of the country**

- LMAs are designed by **commuter flows** between place of residence and place of work (Travel-To-Work flows) – **in all LAU2s** (municipalities)
- LMAs are regions built so that the majority of the labour force lives and works within their boundaries
- A Eurostat Task Force produced an harmonised concept based on the output of the final research report by Coombes et al. (2012)
- Thanks to a [Eurostat grant](#) Istat developed the R package [LabourMarketAreas](#) used by [several countries](#) to delineate LMAs

Needs for LMAs

- In Italy 611 LMAs based on commuting data from the 2011 population census
- **Produce statistical indicators at local level**
 - time series of the estimates of unemployment from 2006 to 2016 (available at <http://www.istat.it/it/archivio/200837>)
 - Labour productivity (year 2015) will be available as experimental data next week
- **Satisfy policy needs** of stakeholders:
 - Place based policy
 - Identification of industrial crisis areas and assessment of the effects of policies



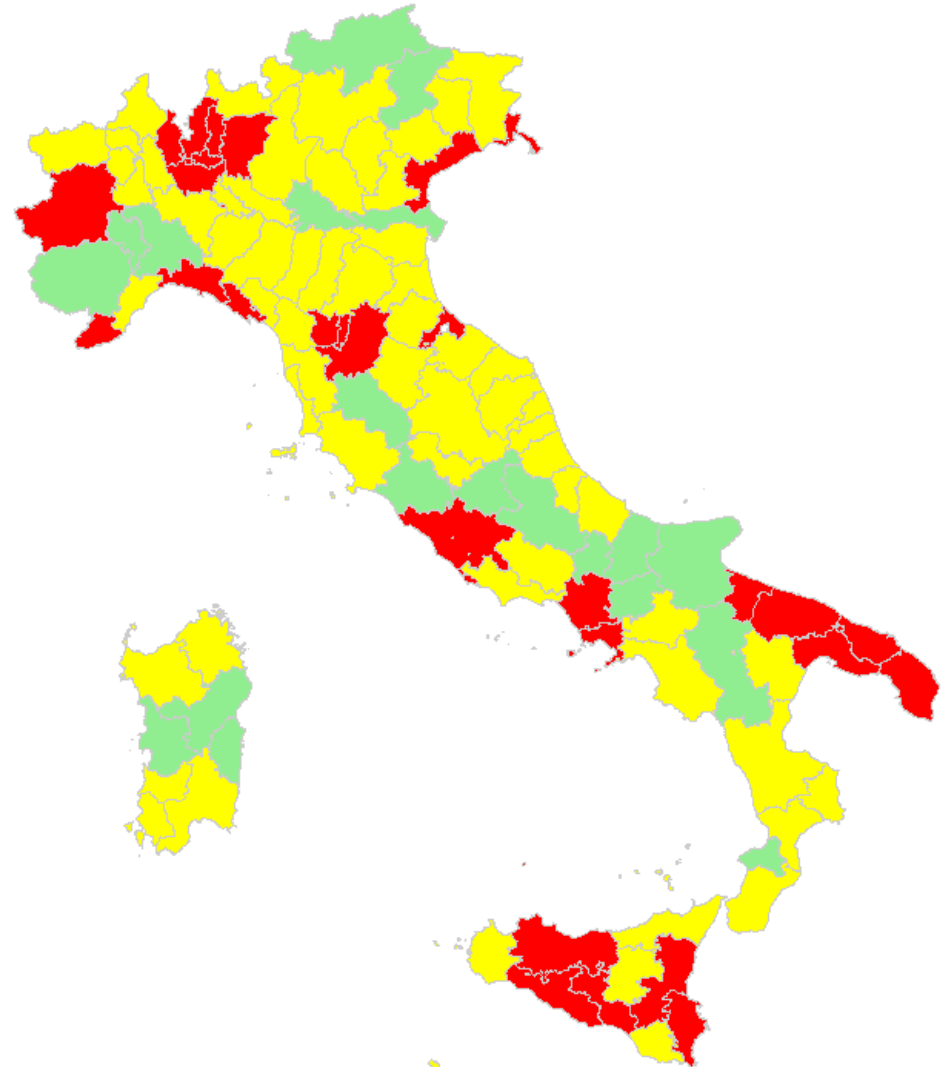
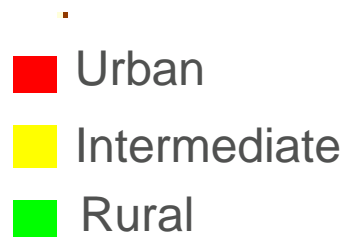
New need: identify **functional areas by classes of territory**

- Eurostat Task Force (March 2018): «Establishment of European set of LMAs» **work in progress!**
- Objective
 - Given a region with a certain typology (e.g. urban, **rural**)
 - Find suitable parameters for LMA algorithm to be applied EU-wide (**comparability**)
 - The LMAs in the region inherit the regional typology (**classification**)

Classes of territory based on NUTS3 Urban/rural typology

- ... but
- we are not convinced to constrain functional areas to administrative regions
- boundaries of LMAs change by changing commuting subsets
- there are LMAs that are in between 2 or even 3 NUTS3 regions
- we need to check whether the definition is “fit for purpose”: find statistics to be used as “goodness of fit” for the definition (occupational sector, size of LMAs, etc.)

Classes of territory based on NUTS3 Urban/rural typology



110 NUTS3 regions

20 rural NUTS3

119 LMAs in rural NUTS3

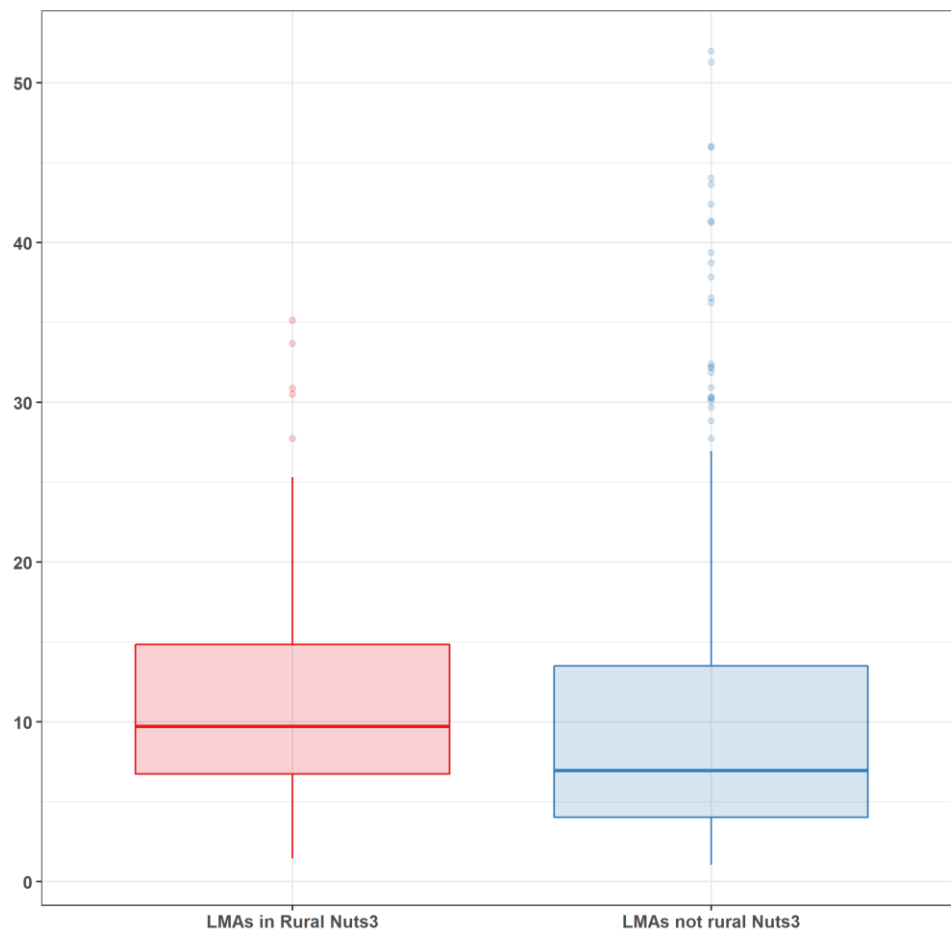
Classes of territory based on NUTS3 Urban/rural typology

Fit for purpose:

- % occupied in Agricultural sector

The LMAs in rural NUTS3 **are not different** from the other LMAs.

% occupied in Agricultural sector in LMAs in rural NUTS3



Classes of territory based on LAU2s Degurba typology

1. Identify the **Rural space** based on information available in all MSs
 - Degree of urbanisation typology (Degurba) for LAU2/ LAU1
 - grid
2. Define rural LMAs inside the rural space according to some criteria: eg. the distribution of LAU2 typologies/ distribution of population in typologies ...
3. Check whether the definition is “fit for purpose”
4. Find a way to allow for comparability between MSs

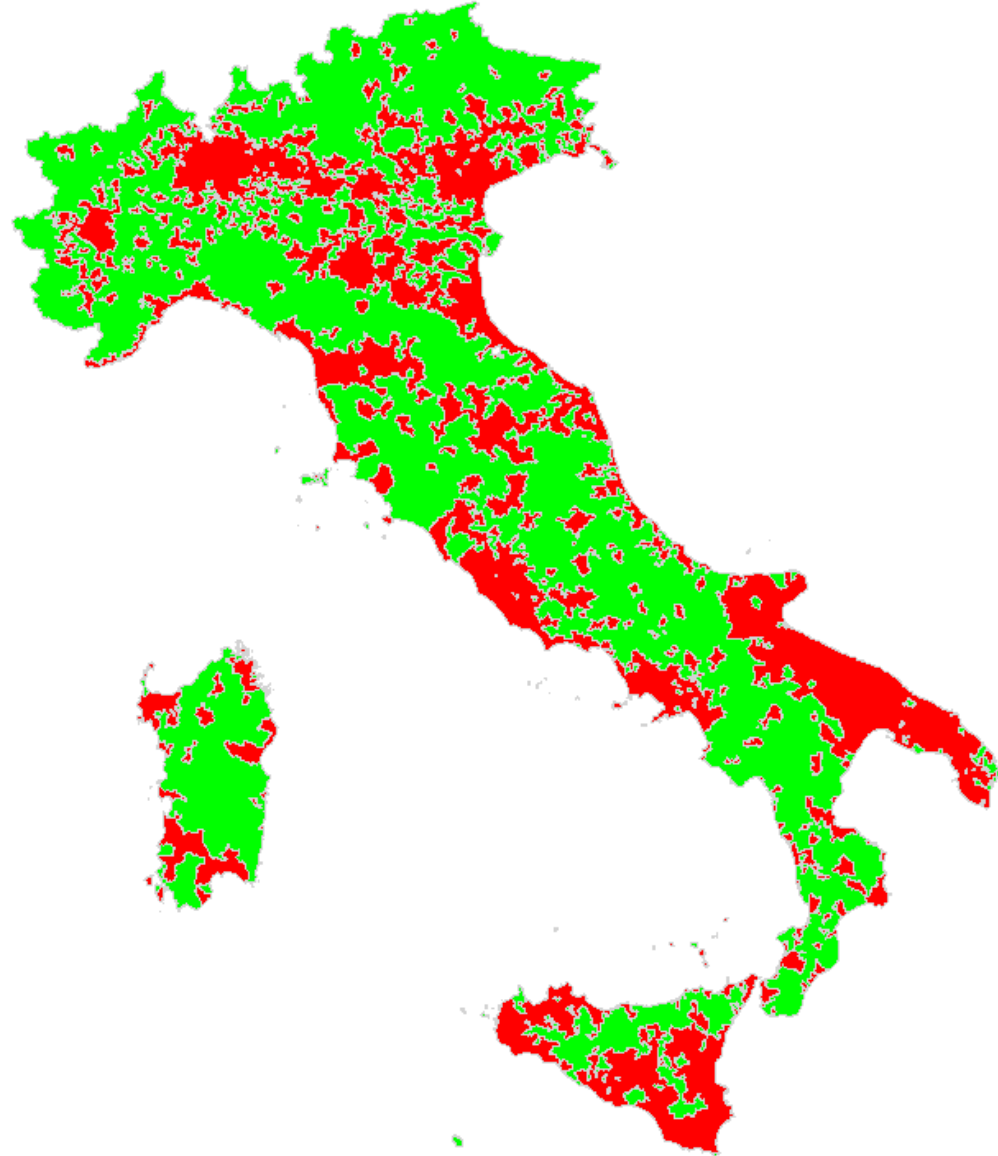
Rural space based on LAU2 Degurba typology

The *rural space* (**rural LAU2s**)

The *urban space* (**Towns and cities**)

Inside this rural space we
search for rural LMAs

(Esposti, R. Sotte, F. 2002)



Rural/Urban LAU2 connectivity

External commuters (commute outside of the LAU2 of residence)

- 60% of the commuters resident in a rural LAU2 are external commuters
- When the LAU2 is urban this percentage drops to 43%
- Dependence on labour outside the LAU2

Distribution of external commuters of rural LAU2 by typology of LAU2s of work:

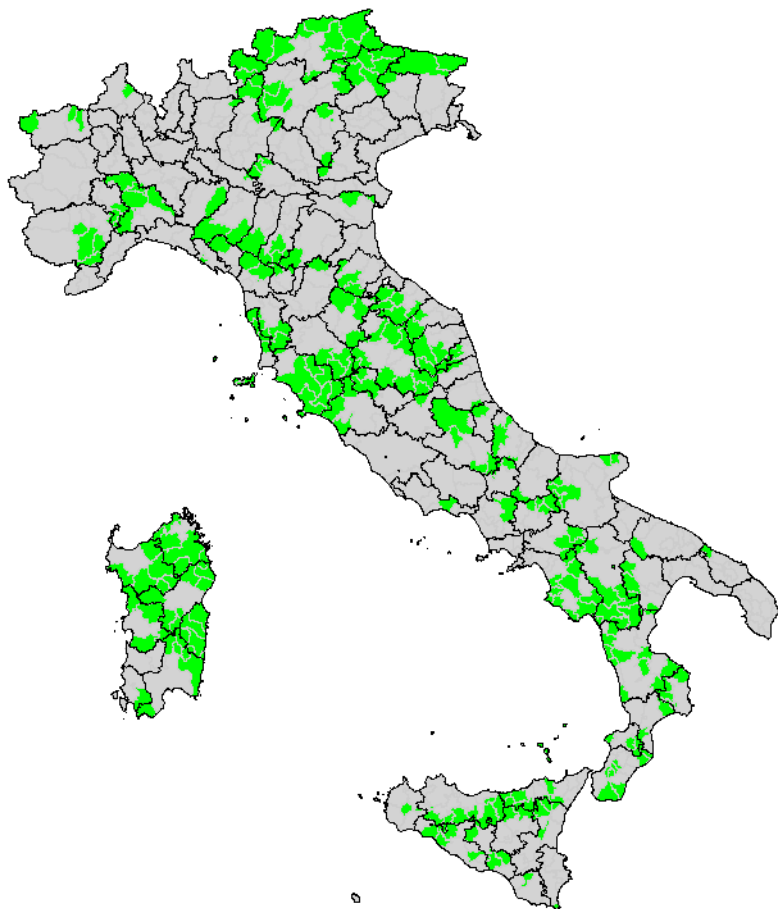
29.7% commute rural to rural

One third of the commuters depend on a rural labour market

49.4% commute rural to town/suburb

20.9% commute rural to city

First definition of rural LMA based on **prevalence** of rural LAU2s



LMA comprising of all rural LAU2s except one

118 LMAs all rural LAU2s

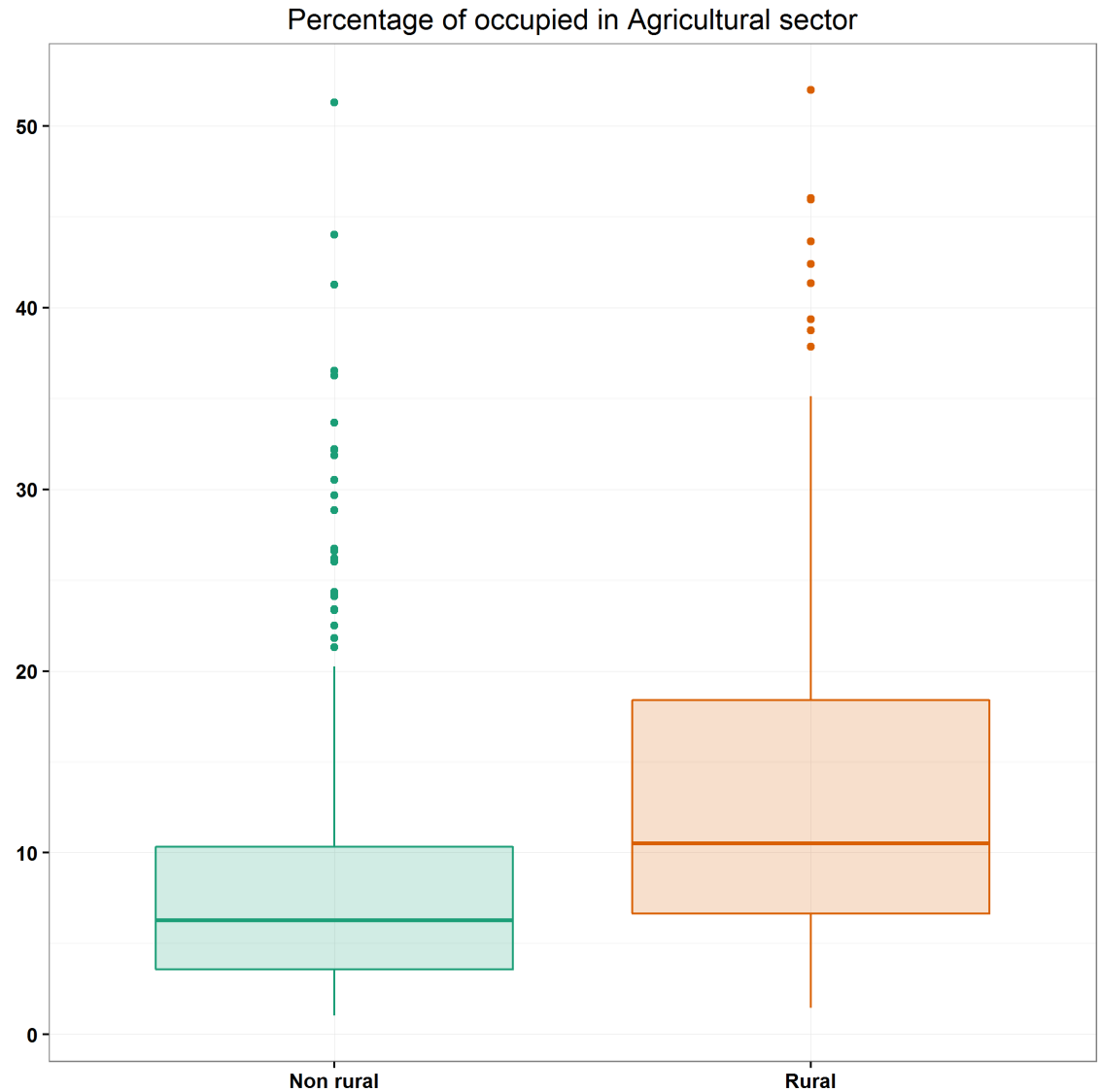
122 LMAs all rural LAU2s except one town

1 LMA all rural LAU2s except one city

241 Rural LMAs out of 611

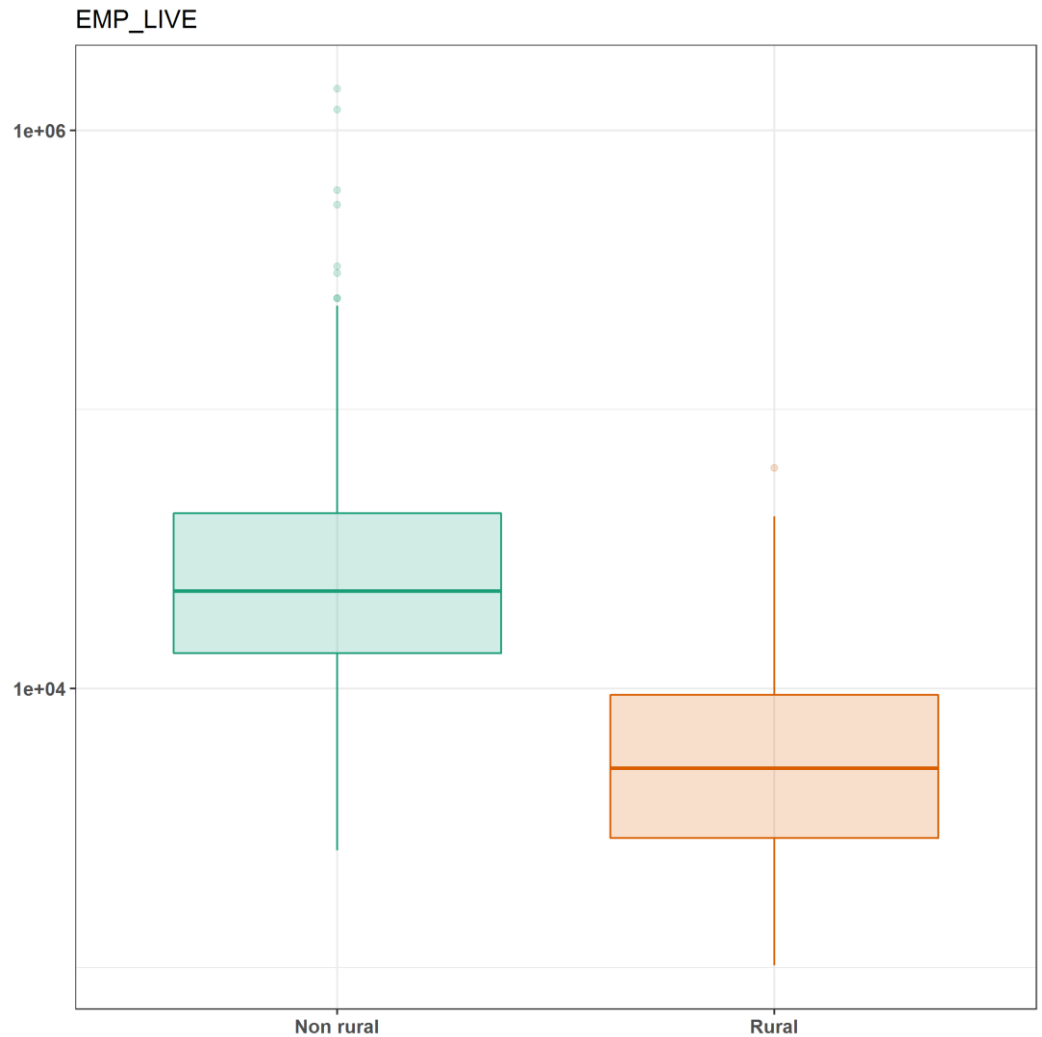
Prevalence criterion

Rural LMAs have higher percentage of occupied in Agricultural sector than non rural LMAs



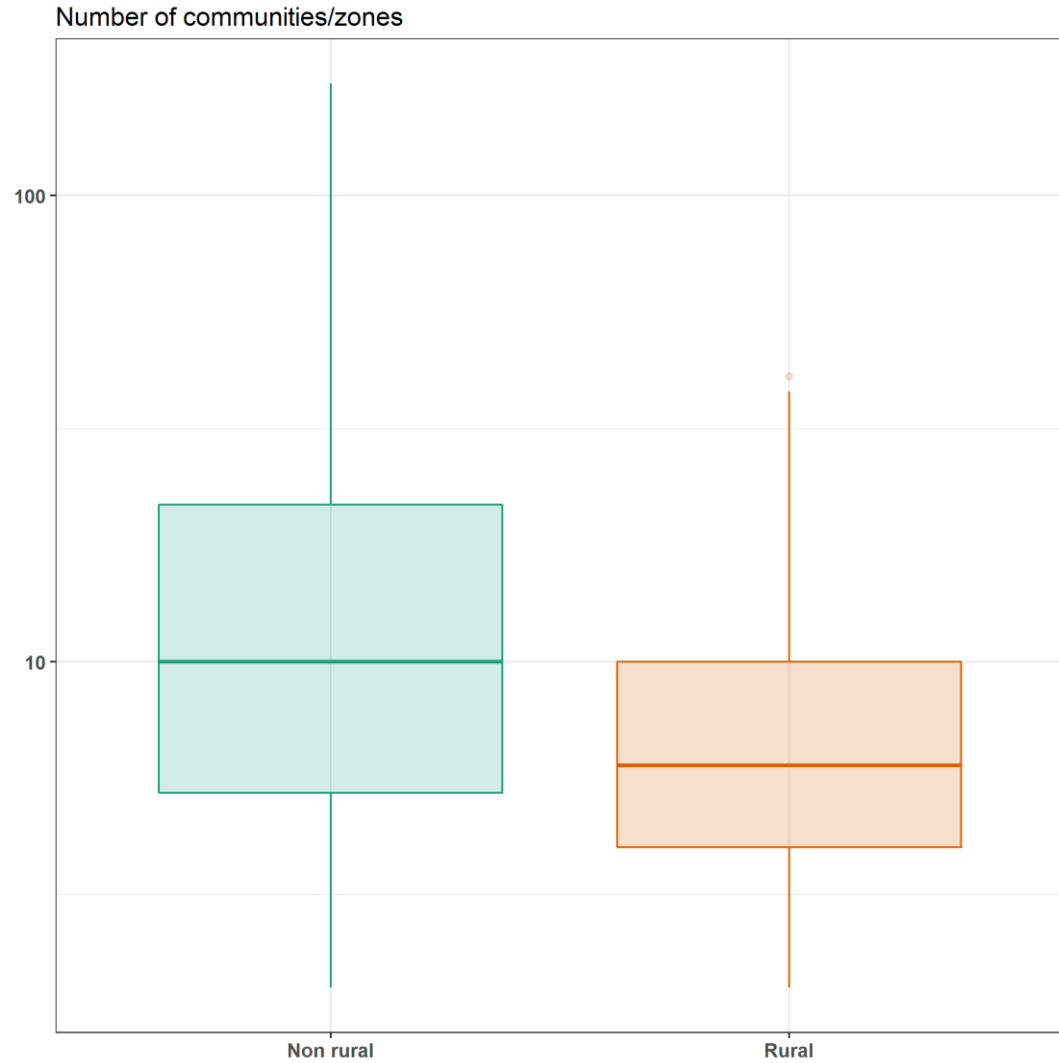
Prevalence criterion

Rural LMAs are smaller than non rural LMAs in terms of resident commuters



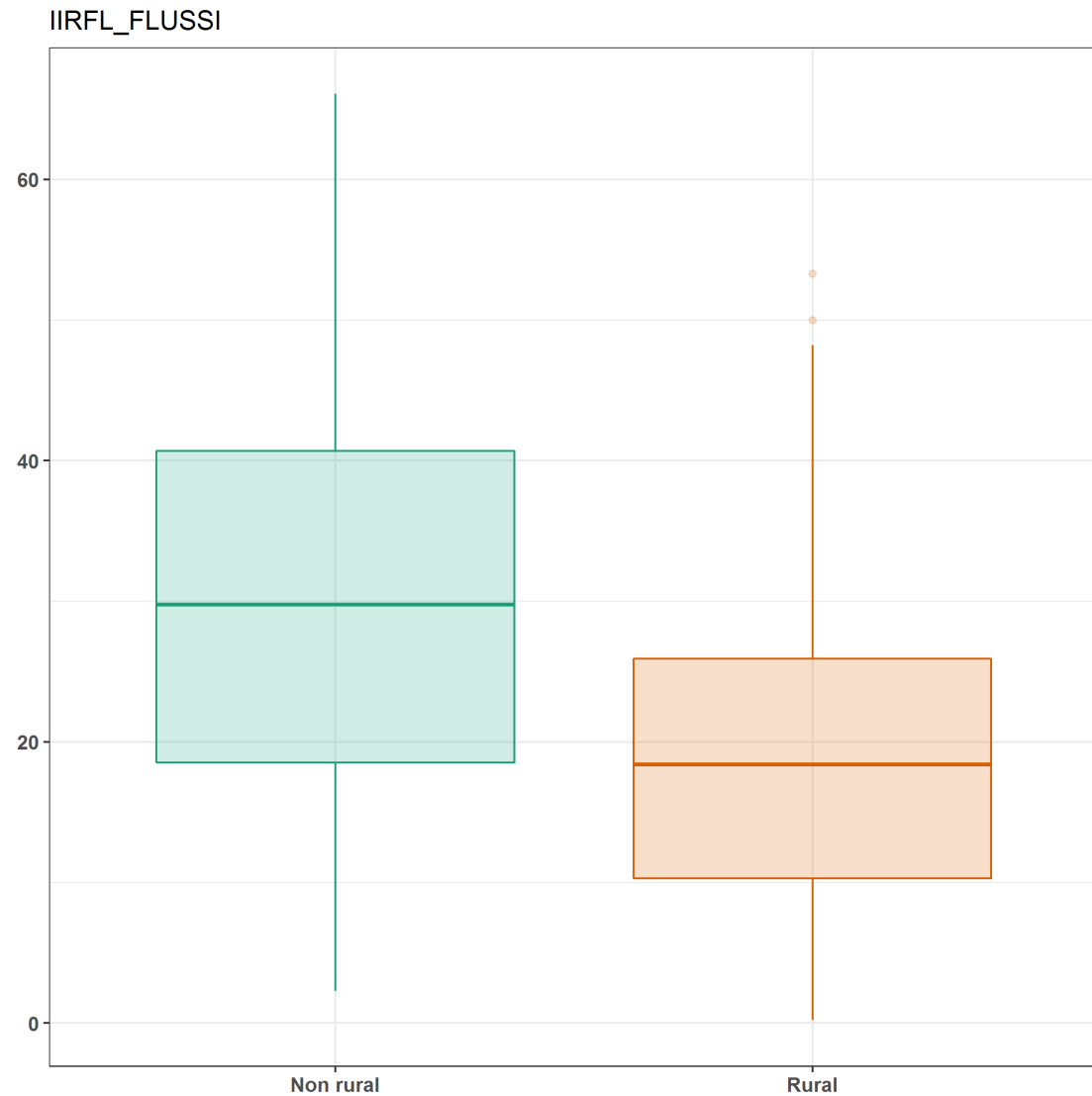
Prevalence criterion

Rural LMAs are smaller than non rural LMAs in terms of number of LAU2s



Prevalence criterion

Rural LMAs show smaller relational intensity (percentage of flows connecting different communities) than non rural LMAs



Further work

Further refinement in the definition of rural LMAs;

Further investigation linked to connectivity:

- Connectivity between LAU2s: analysis of the poles i.e. LAU2s that attract commuters. There are 451 LMAs that contain several rural poles
- Connectivity between LMAs (isolated rural LMAs vs inclusive rural LMAs)

Further investigation linked to comparability between MSs