

Official data and Population & Environment

Maria do Carmo Bueno, Álvaro D'Antona, Pier Francesco De Maria

Statistics have been published using geographic units, but it is important to delineate the physical and geographical underlying context that can be added to them to allow a better understanding of the social phenomena. In Population & Environment studies it is necessary to understand not only the mathematical distribution of the data but also its spatial distribution.

An issue concerning geography and statistics integration is the spatial unit for dissemination purpose, which must match a wider number of user's needs. Currently, many information producers are adopting the grid to reach this goal. Demographics obtained from Population Census or administrative records have been reported using grids and in the case of Environmental Accounting, it is recommended the use of grids as the basic spatial unit to report data related to physical aspects and environmental services.

We performed a study to evaluate the interaction between the increase of population between two consecutive census rounds and the changes in land cover/use in the same period, both reported in square grid cells sizing 1km.

The results obtained suggest that deforestation is related to human settlement, more precisely to the urban expansion, and its consequent increase of population. We can conclude that the use of official data reported in grid offers a spatial resolution without precedents to study human settlement processes that historically causes deforestation and it is also crucial for specifying policies to support a more sustainable planning.