

*INFRA-COMMUNAL LEVEL: ACCESSIBILITY AND TERRITORIAL INFORMATION
MANAGEMENT*

Breuer Christophe

Licencié en Sciences géographiques
Maître en Urbanisme et Aménagement du Territoire
christophe.breuer@ulg.ac.be, +32 4 366 57 47

Devillet Guénaël

Licencié en Sciences géographiques
D.E.S. en Urbanisme et Aménagement du Territoire
G.Devillet@ulg.ac.be, +32 4 366 53 19

Adresse professionnelle

Service d'Étude en Géographie Économique Fondamentale et Appliquée (SEGEFA)
Université de Liège
2, Allée du 6 Août, B-4000, Liège, www.segefa.be

Summary: This article deals with socio-economic and geographical data available for the local actors of the infra-communal level. The statistical data and cuttings are analyzed.

Résumé : Cet article traite des données socio-économiques et des données géographiques disponibles pour les acteurs locaux au niveau infra-communal. Les données et les découpages statistiques sont analysés.

Keywords: Statistical cuttings, indicators, territorial data

Mots clés : Découpages statistiques, indicateurs, données territoriales.

Infra-communal level: accessibility and territorial information management

I. Introduction

Within the framework of the coordination program caENTI (coordination action for European Network of Territorial Intelligence) financed by the European FP6 (Sixth Framework program), researches were carried out about the representation of the contextual data of the territories in support of the method CATALYSE. Research already attempted to isolate territorial information or useful indicators for actors (DEVILLET *and al.*, 2008), and their implementation on various scales (BREUER *and al.*, 2008). In a specification objective, we were brought to discuss the techniques implemented for cartography (PEHANI *and al.*, 2008), and the data relative on data (DAMY *and al.*, 2008). It was putted forward that the most relevant contextual data for the local actors, mainly implied in the socio-economic fields, are at the statistical sector scale.

The cartographic representation of the contextual data (socio-economic) can have an increased relevance with very fine cuttings. That is particularly true when the actors work on a communal or infra-communal level (district...). Consequently, it is possible to highlight disparities within the territory and to refine the comprehension of its dynamic. The reduction in the size of the zones considered also makes it possible to refine the statistics on geographically targeted populations.

This article briefly deals with the use of the infracomunal data by the local actors. It puts forward the operational requirements of these data.

II. Socio-economic data

The socio-economic data, and a fortiori the indicators, make it possible to give an account of the territory conditions. They are the bases of the analysis and, distributed by institutions, avoid having to prospect, carry out investigations or often skewed estimations.

1. Available data

The available data at the infra-communal level are very variable according to the country considered. Indeed, the main source of data for this territorial level is the census, whose sets of themes can vary from one country to another. Other methods can feed these statistics, although the topics are more particular: it is in particular a question of exploiting the data resulting from administrative procedures (imposition, etc).

Principal indicators or territorial information (unemployment rate, total population, foreigners rate...) are naturally evaluated at the statistical sector level, within the framework of the censuses. Other data are moreover available. Indeed, it is mainly at the time of the censuses that the residences, the structure of the households, etc. are evaluated.

Considering the contents, the main variable is thus the schedule of conditions of each country on the matter, although the tendency is at the harmonization of the approached topics.

On their side, the methods of calculating and the definitions of the indicators vary between the various countries. Among the traditional indicators, we will retain the unemployment rate or the size of the households whose acceptances can strongly vary from one country to another. Information have thus to be carefully interpreted, in particular by knowing the metadata for each indicator.

2. Accessibility of the data

The data resulting from the censuses are primarily distributed by the national statistical institutes, at a price which can be important for the wide geographic coverages or the precise data. Some countries give access to the data of this infra-communal level for free: we will primarily retain the Netherlands which in addition of the data distribution, makes it possible to visualize them in the Google Earth software, what increases its visibility.

The statistical data thus generally have a high cost on this level, regularly to expensive for the local actors. After their purchase, the data are available in directly exploitable tabular format.

III. Statistical cuttings

1. Methods of cuttings creation

The method of creation of statistical cuttings strongly varies from one country to another. In Belgium the division in statistical sectors is primarily based on the morphology of the built spaces, notably by isolating the rural environment in the built-up areas. In France the base of the cutting is the system IRIS 2000, which contain between 1800 and 5000 inhabitants by gathering several continuous small islands. Other systems can prevail in certain European countries, in particular based on historical cuttings (old parishes, etc).

This variability of the cutting methods, notably considering the population thresholds or the town and country planning morphology, has an influence on the statistics themselves. Indeed, more important population numbers can have moderating effects on the collected data. In addition of the consideration of the absolute surface and thus the spatial precision of the data, these elements must be taken into account for the interpretation.

2. Accessibility of the geographical data

The geographical data concerning infracommunal cuttings make it possible to chart the statistics. The mode of presentation is often in the “shapefile” format of file, owner format but largely widespread in the world of the cartography.

Several types of suppliers were noticed in the European Union:

- the statistical institutes (or ministries) which sub-contract the digitalization of the entities and resell the finished product;
- the institutes of cartography which creates a cartographic product and distributes it such as other products of this kind;
- the third companies to which the statistical institutes (or comparable) give the right to sell the cartographic files.

The price of these data strongly varies from one country to another, in particular following the precision and the extent of the map. The noted prices are from about several hundred euros to several thousands of euros according to the products.

IV. Example : the Commune of Seraing (Wallonia – Belgium)

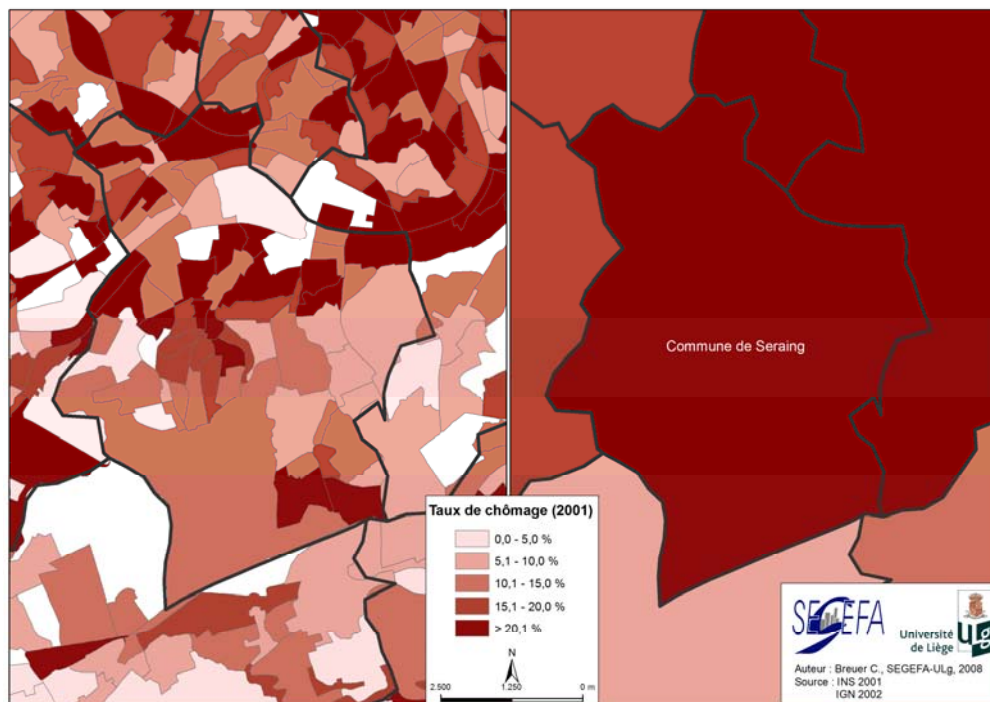
The commune of Seraing belongs to the urban center of Liege (Belgium) and knows similar problems, related to the strong industry decline in this area (specialization in steel). Although an important part of the population still lives thanks to this industrial sector, some neighborhoods of Seraing encountered a strong population gentrification. This dynamics is however not spatially continuous, and certain neighborhoods of the Commune accommodate relatively young and dynamic populations, with an unemployment rate lower than the average.

In order to fight the social problems generated by this situation, various associations with different objectives work in the Commune. The working scale appreciably differs from one organization to another, it goes from the neighborhood scale to the scale of the Commune, or even more.

The territory disparities imply that the analysis on the commune scale is not very relevant. It is for example necessary to be at the statistical sectors level to perceive the neighborhoods the more affected by unemployment. The observation of the poorest populations present in bottom of the valley could also have been noticed on the field, but the situations are not necessarily so clear.

The cartography intervenes then as a tool of decision-making aid for the policy and operational options, in particular in terms of public expenditure and/or human means to allocate for the populations. In the long run, this

cartography must also show the effect of the policies on the territory within the framework of a control of the effectiveness of the action undertaken.



V. Conclusion

The communal level as a base for the analysis is relevant because it is, in Europe, a democratic level presents in each country, even if the names can differ. However, a finer analysis, in particular the level of the statistical sectors (and related) makes it possible to put in front in a more relevant manner the disparities within the communal territory, and consequently to direct the action as well as possible.

The accessibility of these data is however weak. Indeed, if the distributors, for both the socio-economic and geographical data, are largely identified and known, the cost of acquisition remains prohibitory. This difficulty seems to curb the effective use of the cartographic tool on an adapted scale.

Bibliography

BREUER C., DEVILLET G., 2008, *Towards a system of territorial intelligence : indicators and geographical data for European actors*, in Acts of the International Conference of Territorial Intelligence (Besançon, 2008) – À paraître

DAMY S., HERRMANN-PHILIPPE B., 2008, *Metadata for caENTI* in Acts of the International Conference of Territorial Intelligence (Besançon, 2008) – À paraître

DEVILLET G., BREUER C., 2008, *Contribution to applied territorial intelligence : reasoned catalog of territorial information available on internet and sources in Europe*, in Acts of the International Conference of Territorial Intelligence (Besançon, 2008) – À paraître

PEHANI P., LANDRE M., OSTIR K., 2008, *Interactive map for caENTI – Application of the web mapping technology*, in Acts of the International Conference of Territorial Intelligence (Besançon, 2008) – À paraître