

POLITIQUE SCIENTIFIQUE FEDERALE



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## Agora Programme

Synthesis of the final report

## RURAL AND URBAN POVERTY

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## 1. INTRODUCTION

This study, financed by the Belgian Science Policy, was carried out in the framework of the 'AGORA' programme at the request of the Combat Poverty, Insecurity and Social Exclusion Service.

Rural poverty has not been much studied in Belgium, where most of the available studies are focused on urban areas, in which poverty is more concentrated and visible. But it is nowadays obvious that the problem of poverty differs from cities to rural areas. In the latter, housing is cheaper but the housing stock and accessibility to services and jobs are limited (lack of public transports, remoteness of schools and supermarkets, necessity to have a vehicle...).

This AGORA project aims at studying and measuring the phenomenon of poverty in Belgium, and, more specifically, in the rural world for which few data are available. In opposition to many other studies, this project favours a quantitative analysis of this phenomenon.

In Belgium, only the *Atlas des quartiers défavorisés en Flandre et à Bruxelles* (Atlas of disadvantaged neighbourhoods in Flanders and Brussels) by Kesteloot *et al.* (2008) addresses the problem of poverty on a local scale for whole Flanders and Brussels and, as a consequence, also for the rural world. Also Vandermotten *et al.* (2006) have produced an Atlas of underprivileged neighbourhoods in Belgium's urban regions.

Those studies identify disadvantaged neighbourhoods (or rather disadvantaged statistical sectors<sup>1</sup>) on the basis of a combination of indicators calculated at the level of the territorial entity and reflecting social difficulties within a statistical sector. This approach allows better results in urban areas since poverty is generally more concentrated in some districts. When one statistical sector groups together strongly heterogeneous districts, the results need to be interpreted carefully. This issue is all the more sensitive in rural areas where poverty is known to be spatially more scattered due to weaker land costs. In addition, both studies are principally based on data from the latest socio-economic survey, which will not be renewed in future.

In Europe, other countries or regions have also tried to develop relevant indicators to measure poverty on a fine territorial scale taking into account the specific problems faced by rural areas. Among those, Ireland and the UK have started to reflect on the best tools allowing a measure of poverty on a local scale. The most successful experience in this field seems to be the one carried out in Scotland, where a multiple index of living poverty has been developed and regularly improved since its creation in 2003; it classifies in ordinal order the 6505 territorial entities of Scotland, from the most disadvantaged to the most advantaged. A relatively complex indicator has also been developed to assess accessibility in each entity, including the duration of the journey to different services (doctors, schools, supermarkets, post offices, service stations) both by car or public transport.

Since poverty is more scattered in rural areas, we have decided to use individual data to study poverty on a local scale for the whole of Belgium. Such approach makes it possible to quantify the number of individuals considered as poor within a spatial entity rather than to qualify the spatial entity itself. As far as we know, the present study is the first that uses individual data to measure rural poverty.

Furthermore, the project has several specificities: we have defined a new typology of space, which depends on a series of gaps in rural areas with regard to services and accessibility; we have collected and analysed different contextual variables that contribute to characterize the rural world; we have produced a new measure of poverty that takes into account its multidimensional character.

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<sup>1</sup> A statistical sector is the smallest administrative entity in Belgium and represents the smallest territorial level for which data are available.

Schematically, the research will include two major stages. First, we will examine in depth the comprehension of rural poverty and its specificities compared to urban poverty. This stage is largely based on the analysis of the EU-SILC survey, which offers very comprehensive data on incomes and living conditions of 6300 households in Belgium.

In a second stage, we will use this comprehension of rural poverty to ascribe each Belgian household a poverty index. The latter will be calculated using individual data of the datawarehouse of the "Crossroads Bank for Social Security" (CBSS) as well as contextual variables reflecting the specificities of the place of residence (in terms of services, employment, housing, public transport, ...).

## **2. DATA**

Three types of data are used in this project: the EU-SILC 2009 survey on income and living conditions, individual data on social security from the "Crossroads Bank for Social Security (CBSS)", and the contextual variables we have produced in the framework of the present study. Those variables are aimed at characterizing the households' living environment and helping quantifying the specific problems faced by rural populations.

### **2.1 EU-SILC**

The EU-SILC 2009 survey (European Union - Statistics on Income and Living Conditions) represents a very detailed source of information on income and living conditions of a sample of 6300 Belgian households, i.e. 15 109 persons. It is aimed to give an overview of poverty and social exclusion in Belgium and in Europe.

The Direction Générale Statistique et Information Économique (DGSIE) has agreed to provide us with the statistical sector of residence of the persons surveyed so that we could link the possible difficulties they face and the characteristics of their place of residence. However, for 12% of the households, only the postal code and not the statistical sector (more precise) is known.

Unfortunately, for all problems directly linked to the place of residence, we will have to work with only 88% of the initial sample.

### **2.2 THE CROSSROADS BANK FOR SOCIAL SECURITY (CBSS)**

The Crossroads Bank for Social Security (CBSS) gathers a large number of individual data from Belgian social security institutions. Those data are used to try to compensate for the loss of information due to the end of socio-economic (census) surveys in Belgium. The CBSS data do not inform on patrimony or property income (or undeclared work). Anyway, those who live in poverty generally have few or no patrimony.

Nevertheless, if all residents are listed in the Datawarehouse of the CBSS, the socio-economic position of 12% of the population remains unknown, that is a bit less than 1 300 000 people, notably outgoing frontier workers, international civil servants and diplomats, housewives/men, some unregistered children, annuitants, older people whose partner is entitled to household pension, sailors of the Belgian merchant navy, etc.

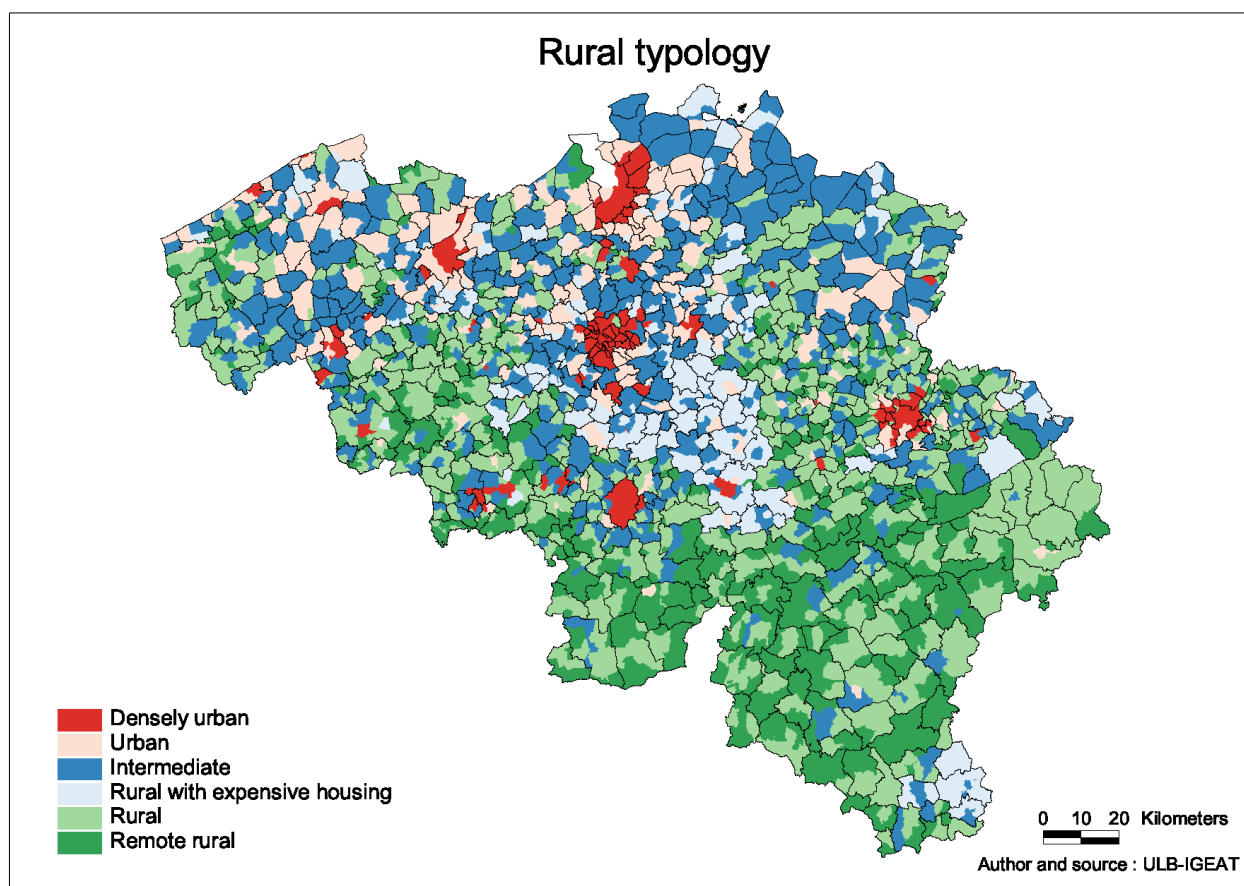
Among those people, 860 000 have an income of 0 € and 191 000 an annual taxable income inferior to 5 000 €. Those about whom the CBSS has very few information need to be considered carefully. For this reason, we had to exclude a great number of those households from the population analysed.

### 3. TYPOLOGY OF SPACE

Before being able to study rural or urban poverty, it is essential to define which territories have to be considered urban or rural. Consequently, we have built a typology of space for the whole of Belgium on the scale of the former communes<sup>2</sup>. This typology has been specifically established in connection with the problem studied: it was not defined according to certain activities or one type of space occupation but according to a number of lacks in services and accessibility.

From this perspective, four basic variables have been selected: two of them reflect the households' assessment concerning local services in the 2001 socio-economic survey, while the other two reflect the possibility of accessing external service poles.

The typology of space is shown in the map below.



In some analyses we will not be able to retain the categories "rural with expensive housing" and "remote rural", in which the persons surveyed in the EU-SILC sample are the least represented. Therefore, we will couple the "rural with expensive housing" with "intermediate" and "remote rural" with "rural" because those spaces are the most similar as regards poverty.

### 4. DEFINITION OF POVERTY IN THE EU-SILC SURVEY

The study of poverty is generally based on the EU-SILC survey because it represents a very exhaustive source of information on living conditions in EU countries. This is why this analysis of rural poverty (in opposition to urban poverty) and its specificities is produced on this basis. However, before dealing with this question, poverty needs to be defined.

The literature on poverty offers several possible measurements:

<sup>2</sup> The former communes are those pre-existing before the merging of communes in the 1970s. Their number was then reduced from 2 643 to 589 presently.

- Subjective poverty: a household is considered poor when it declares it finds it (very) difficult to make ends meet every month;
- Monetary poverty : a household is considered poor when living with less than 60% of the equivalent median<sup>3</sup> income;
- Material deprivation : a household is considered poor when unable to have access to goods and services and/or activities seen as ordinary;

From a practical point of view, a household is considered in material deprivation if it cannot afford at least 3 items among a list of 9<sup>4</sup>:

- The indicator of available income ;
- The examination of the different types of debts.

Nevertheless, even if those 5 dimensions of households' poverty present the advantage to be simple and easily understandable, they all seem to raise problems at different levels. For this reason, we have chosen not to use them.

In this study we have chosen to try to synthesize the large variety of information from the EU-SILC survey into one single variable we call "synthetic poverty index".

To produce such an index, we have taken into consideration all variables of the EU-SILC survey that can be considered as a possible expression (or not) of poverty. These variables concern around 90 items of the survey, corresponding to 138 variables (as some items lead to the production of several variables). The latter cover extremely varied fields such as: difficulty to have access to medical care, household equipment, status of the dwelling's occupation, quality of the dwelling, possible forms of patrimony at disposal, problems of debt or payments, difficulty to make ends meet every month, capacity to afford unexpected expenses, environment, participation in social life, etc.

Meanwhile, all the variables that may be considered as a possible (or not) expression of poverty cannot be put on an equal footing. As an example, the fact to declare living in a polluted environment is probably less clearly associated with poverty than the fact to be unable to access medical care for financial reasons. Having a savings book is also less a sign of absence of poverty than owning shares, etc.

For those reasons, it seems necessary to give each variable a different weight depending on whether it appears more or less strongly linked with poverty or absence of poverty. The more a problem is associated with low income, the higher its weighting in the overall index. Conversely, the more one characteristic is present among high income the more its weight is negative.

After having assigned a weight to each of the 138 variables, we attribute each household of the sample a value in the synthetic poverty index according to its answers to each of the items.

As a result, the synthetic poverty index we have opted for allows us to classify households but not to determine which households are (or are not) poor. It is thus necessary to set a poverty threshold in order to be able to determine those who can be considered poor. For this purpose, we have arbitrarily set the poverty rate to 15% (corresponding to the official Belgian poverty rate obtained on the basis of the criterion of monetary poverty). In other words, the 15% of households with the highest values in the synthetic poverty index are defined as poor.

<sup>3</sup> The median income is the income which divides the population in 2 groups : half of the population has a higher income and the other half has a lower income.

<sup>4</sup> Those 9 items are the following : ability to cope with unexpected expenses (800 €); eating every two days a meal with proteins; heating their dwelling adequately ; affording a one-week annual holiday ; ability to avoid debt, rent and payment arrears; and possessing (if they wish) a car; a TV set; a telephone; a washing machine.

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## 5. THE STUDY OF POVERTY ON THE BASIS OF THE SILC SURVEY

The results presented here have been obtained on the basis of the synthetic poverty index we have developed (except when explicitly mentioned), with an arbitrary threshold of 15%.

We only consider 4 different spaces due to a problem of participants (rural with expensive housing and remote rural are respectively tied intermediate and rural). Moreover, we have added a fifth category called "unknown", which corresponds to those who have moved since their integration into the sample of the SILC survey and whose statistical sector of residence is unknown.

### 5.1 POVERTY BY TYPE OF SPACE

First of all, we have studied poverty rates by type of space, while considering different measurements of poverty: monetary poverty, material deprivation, subjective poverty, synthetic poverty index, as well as those who face both monetary poverty and material deprivation.

All those measurements show the same tendency: dense urban areas concentrate the highest percentage of poor, followed by rural areas (together with remote rural areas), urban, urban and intermediate areas (associated to rural areas with expensive housing).

In the table below, poverty rates are analysed more in depth. The left part shows the assessed rates and the right part the number of participants in the EU-SILC sample. This number allows one to see how many people are concerned. Of course, the weaker this number, the more questionable the assessed rate of poverty for those considered.

## Poverty in Belgium by category of households and space

		densely urban	urban	Intermediate+rural with expensive housing	Rural+ remote rural	unknown	Belgium	densely urban	urban	Intermediate+rural with expensive housing	Rural+ remote rural	unknown
		synthetic poverty rate	synthetic poverty rate	synthetic poverty rate	synthetic poverty rate	synthetic poverty rate	synthetic poverty rate	persons	persons	persons	persons	persons
Total	All	21.2%	12.3%	8.3%	14.1%	23.7%	15.0%	3 872	2 299	4 570	2 556	1 811
sex	male	20.5%	11.9%	7.7%	13.9%	21.4%	14.3%	1 857	1 119	2 223	1 256	898
	female	21.8%	12.8%	8.9%	14.4%	26.1%	15.7%	2 015	1 180	2 347	1 300	913
household type	one person household	27.3%	21.2%	19.1%	31.0%	33.4%	25.9%	660	265	394	247	232
	2 adults, no dependant children, both < 65 years	11.2%	3.1%	4.8%	9.0%	11.8%	7.8%	558	352	680	334	372
	2 adults, no dependant children, at least one ≥ 65 years	7.1%	8.4%	5.5%	8.9%	19.1%	7.8%	380	310	496	286	108
	other households without dependent children	9.1%	9.3%	6.9%	14.4%	12.0%	9.6%	235	161	465	266	143
	single parent household, 1 or more children	40.8%	40.3%	26.5%	53.1%	58.3%	41.0%	405	136	248	97	160
	2 adults, one dependent children	17.1%	5.0%	3.8%	11.2%	13.8%	9.7%	399	225	546	294	243
	2 adults, two dependent children	13.4%	3.4%	4.4%	3.5%	19.4%	7.4%	532	456	956	424	232
	2 adults, three or more dependent children	24.4%	19.5%	4.4%	12.0%	28.2%	15.3%	392	258	477	339	184
other households with dependent children	33.9%	14.5%	17.4%	10.3%	29.1%	20.9%	272	136	284	231	128	
age	0-15	27.4%	16.9%	8.3%	12.6%	32.0%	18.0%	746	422	920	493	373
	16-24	27.6%	17.2%	11.6%	16.4%	25.9%	19.1%	424	252	454	304	250
	25-49	20.1%	9.4%	7.6%	14.5%	19.8%	14.1%	1 281	709	1 523	846	806
	50-64	19.9%	9.9%	8.2%	12.3%	21.3%	13.2%	798	506	985	521	220
	+65	14.7%	12.5%	7.9%	15.5%	26.2%	13.0%	623	410	688	392	162
activity status	employed	10.9%	5.9%	4.1%	8.4%	10.4%	7.6%	1 434	908	1 879	993	844
	unemployed	41.7%	20.5%	21.2%	34.2%	57.4%	33.7%	276	119	271	158	120
	retired/early retirement	16.2%	11.4%	9.3%	15.7%	25.4%	13.7%	646	435	747	429	180
	other inactive	31.9%	20.3%	12.7%	19.3%	41.6%	23.2%	737	401	706	442	273
tenure status	owner	8.6%	6.6%	4.2%	9.9%	11.1%	7.2%	2 486	1 832	3 905	2 174	1 030
	renter	42.5%	33.3%	31.0%	38.3%	38.2%	37.9%	1 386	467	665	382	781
work intensity	household without dependent children W=0	38.4%	22.8%	19.3%	30.6%	43.0%	29.4%	382	216	427	261	142
	household without dependent children 0<W<1	16.2%	6.0%	8.5%	14.1%	19.8%	12.4%	411	248	516	294	234
	household without dependent children W=1	6.0%	5.0%	2.6%	10.3%	7.2%	5.7%	543	276	579	277	367
	household with dependent children W=0	70.0%	54.2%	62.2%	70.4%	94.7%	71.9%	264	40	103	87	109
	household with dependent children 0<W<0.5	64.4%	62.5%	35.3%	43.2%	53.7%	55.9%	183	72	76	58	72
	household with dependent children 0.5<W<1	21.2%	9.6%	12.3%	12.4%	21.3%	15.2%	593	261	679	427	247
household with dependent children W=1	8.0%	9.5%	2.0%	3.3%	13.2%	5.9%	982	836	1 661	842	523	
education	low	35.4%	20.8%	17.7%	28.3%	45.6%	26.9%	388	235	475	306	122
	medium	21.1%	11.7%	7.8%	13.7%	27.2%	14.6%	1 495	1 006	2 029	1 199	728
	high	7.1%	4.0%	2.2%	3.0%	4.5%	4.4%	1 029	577	980	462	507

Source : own calculations based on EU-SILC data

Poverty rates in the different types of spaces in ascending order: 8.3% in intermediate + rural with expensive housing, 12.3% in urban areas, 14.1% in rural + remote rural areas, 21.2% in dense urban areas, and 23.7% for households with unknown statistical sector of residence.

These results confirm that poverty is highly represented in dense urban but also in the rural areas. In opposition, in intermediate areas, poverty is always under the Belgian average, regardless of the category they belong to.

On the Belgian scale, social categories facing the highest poverty rates (over 25%) are as follows : isolated individuals (26%), those with a low education level (27%), childless jobless households (29%), tenants (38%), single parents (41%), and, above all, households with children with low or non-existent labour intensity (respectively 56 and 72%).

Conversely, households in which the probability to be poor is the weakest are those with a highly educated member (4%), households (with or without dependent children) in which all members are active (6%), as well as the owners (7%).

As for the specificities observed for all types of environment, most of the time poverty rates are higher in dense urban areas. This is particularly true for households consisting of two adults with at least three dependent children (24%), the "other households with dependent children<sup>5</sup> » (34%), tenants (43%), and households with low education levels (35%).

Yet, some categories of households seem to face more difficulties in the rural world than in dense urban areas: isolated people (31% are poor in rural areas), single parents (53%, but their representation in the sample is particularly low), the 64+ (15%), "other households without dependent children<sup>6</sup> » (14%), childless households in which all members are occupied (10%) as well as the owners (10%).

On the contrary, poverty seems underrepresented in the rural world (compared with the Belgian average) among those under 25, households made of two adults with at least 3 dependent children (12%), and the "other households with dependent children" (34%), as well as highly educated households (3%).

When comparing the results obtained by types of household on the basis of the synthetic poverty index with those of monetary poverty, the two biggest differences concern the +65 age group (whose rate reaches here 13% vs. 21% with monetary poverty), as well as tenants (38% vs. 28.5%).

However, it seems that few households belonging to the 10% of the poorest households live in rural areas, where the most acute poverty is less important. Meanwhile, the households that are just a bit less poor (those comprised between the 10 and the 15% of the poorest) are under-represented there. Indeed, the transition from 10 to 15% implies a level of poverty in rural areas that increases from 7.6% (largely under the national average) to a rate that is very close to the national average (14.1%).

## 5.2 SPECIFICITIES OF POVERTY ACCORDING TO THE TYPES OF SPACE

In this section, we consider only the 15% of the households with the lowest synthetic poverty index. For each type of environment, we examine if the poor households belonging to one of the 4 types of environment shows specific *characteristics compared with the Belgian average of poor households*.

<sup>5</sup> Households made of more than two adults and at least one child considered as dependent.

<sup>6</sup> Households made of more than two adults without children considered as dependent.



In the framework of our analysis, we consider around 30 variables relevant to a considerable number of households. Those variables are not necessarily the most significant since some of them that have a very important impact on the measured poverty of households only concern a few individuals. It is therefore not possible to draw general conclusions.

### **5.2.1 Dense urban areas**

Poor households living in dense urban centres tend to waive consumption rather than going into debt. They are more often less equipped: they less frequently have a phone, a mobile, a PC, the internet or a car than the other poor households.

As regards housing, poor households in urban centres complain more often about damp problems but less often roof water leaks, too dark housing, and are more frequently equipped with central heating. On the other hand, the share of too small dwellings is much higher, which results in lower housing costs.

Consequently the financial difficulties of those households seem less frequent than in the other types of spaces, and they generally show greater optimism about their financial prospects.

### **5.2.2 Urban spaces**

In urban spaces outside the highest densities, poor households live more often in a dwelling presenting favourable characteristics (central heating, brightness, absence of humidity) but very often face difficulties in heating it adequately (62% more than the average of the poor). The share of households for which housing represents a high financial burden is significant.

They are often well equipped (PC, mobile, internet, car) but more frequently face difficulties to afford to eat meat every two days or to have people to dinner at least once a month.

The share of those declaring they find it difficult to make ends meet every month amounts to 30% more than the average of poor households and, on the whole, are the most pessimistic regarding the evolution of their financial situation. Moreover, they consider themselves more often in bad health than other poor households.

### **5.2.3 Intermediate spaces and rural spaces with expensive housing**

In intermediate spaces, poor households more often live in less favourable housing: 23% more than the average are not equipped with central heating, they have more often difficulties to heat sufficiently, 6% more complain about roof water leaks and 7% more a too dark dwelling. Those households complain it represents a heavy burden and are more often in debt. The share of them equipped with a car is higher but many do not have a PC. Their financial situation is consequently more often unfavourable and they are more pessimistic about its future evolution.

### **5.2.4 Rural and remote rural areas**

In rural areas, the share of poor households with large dwellings is logically higher. The share of those for whom housing does not represent a too heavy burden is close to the average of poor households.

Those households are particularly frequently under-equipped in central heating (55% more than the average of poor households), but they think themselves more often able to heat adequately.

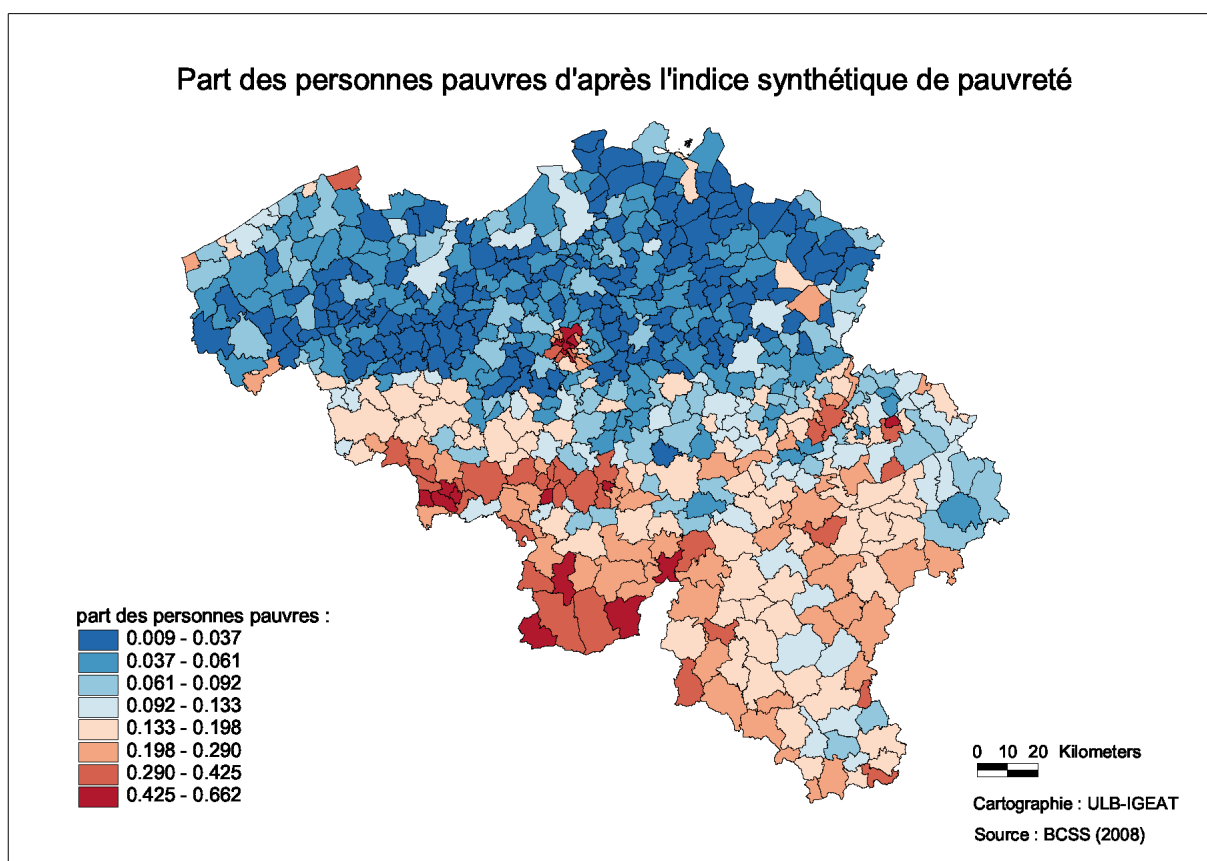
The share of well equipped households is clearly higher than the average (PC, internet, mobile, fixed phone and car) and they less often see their debts as a heavy burden. Their financial situation is generally not good and they are more often pessimistic as to its evolution.

They often consider themselves in bad health.

## 6. THE SYNTHETIC POVERTY INDEX OBTAINED FOR ALL BELGIAN HOUSEHOLDS ON THE BASIS OF THE DATAWAREHOUSE OF THE CBSS

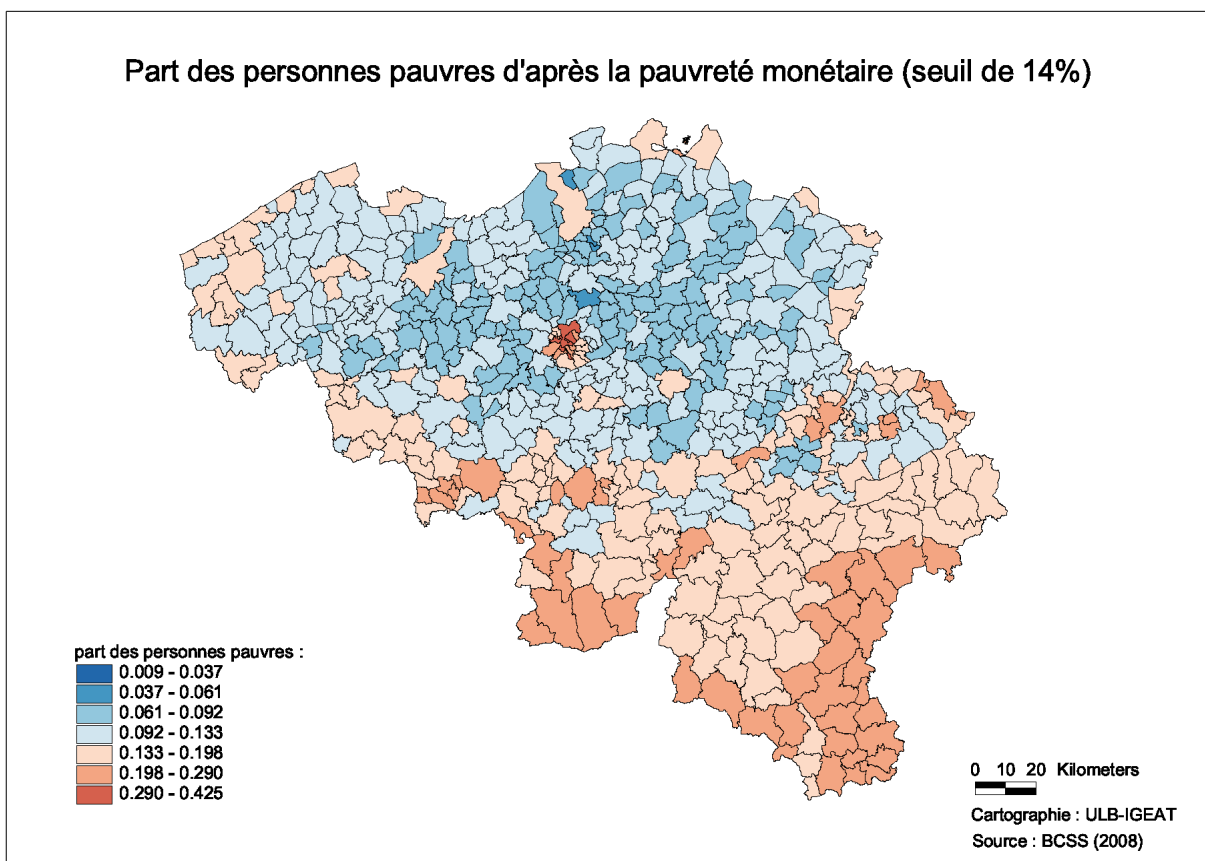
After examining, on the basis of the EU-SILC sample, relationships allowing to explain the households' synthetic poverty index using "social security variables"<sup>7</sup> and variables aimed at contextualizing the place of residence<sup>8</sup>, we use those relationships again to apply them to the whole population with the help of data from the Crossroads Bank for Social Security (CBSS). Doing so, we obtain a prediction of the synthetic poverty index for every Belgian household.

Moreover, the CBSS data enable us to measure incomes registered by the social security institutions (mainly social benefits and revenues of work). It is true that the data obtained from both sources are not perfectly identical, but the results in terms of monetary poverty are quite similar. As a result, monetary poverty can also be analysed on the basis of the data from the CBSS. This represents a considerable advantage since it enables us to cross variables, which would not be possible with the EU-SILC survey because of the limited sample.



<sup>7</sup> Social security variables are for example the worker status, the income, the type of household, etc. Social security variables have been selected because of their availability both in the SILC survey and in the Datawarehouse of the Crossroads Bank for Social Security.

<sup>8</sup> Contextual variables are a socio-economic index, servicing by public transport, accessibility to proximity shops, accessibility to schools, a synthetic index of accessibility to medical care, local unemployment rate, local housing cost and the local share of council houses.



Both maps show that the share of poor families in Belgium amounts to 14%<sup>9</sup>.

In the first map, we can observe a contrast between poverty in Flanders and in the other two regions of the country. The share of poor people in Brussels is very high but probably slightly overestimated by the synthetic poverty index obtained when using the CBSS data.

In the large Flemish cities such as Antwerp, Ghent, Bruges or Leuven, poverty is much less present than in the large cities of Wallonie.

Globally, the map of the synthetic poverty index by commune is coherent. Nevertheless, some communes present a surprising share of poor people (Knokke-Heist and the border areas close to the Grand Duchy of Luxembourg and Germany, where poverty is largely overestimated).

Monetary poverty (which only takes the income into consideration) reduces significantly the gaps, in terms of poverty, between "wealthy" and "deprived" communes. It is also worth noticing that, if only the income is considered, the same border communes close to Luxembourg and Germany record monetary poverty rates still higher and more unbelievable than with the synthetic poverty index. In such a case, taking factors into consideration other than the income in the synthetic poverty index allows a better assessment of poverty.

<sup>9</sup> According to the synthetic poverty index, their number is precisely 13.9%.

## Comparison between monetary poverty and synthetic poverty index (estimations based on CBSS data)

		densely urban		urban		intermediate		rural with expensive housing		rural		remote rural		Belgium	
		synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate	synthetic poverty rate	monetary poverty rate
total	all	22.8%	20.0%	11.4%	11.0%	8.8%	11.5%	4.6%	9.9%	12.7%	12.9%	15.9%	13.9%	13.9%	14.0%
sex	male	21.7%	19.0%	10.6%	9.9%	8.0%	10.4%	5.2%	9.2%	11.4%	11.7%	13.8%	12.8%	12.9%	12.9%
	female	23.9%	20.9%	12.2%	12.1%	9.5%	12.6%	4.0%	10.6%	14.0%	14.0%	18.0%	14.9%	14.8%	15.0%
household type	one person household	34.9%	27.0%	20.7%	20.0%	20.8%	20.7%	41.6%	21.1%	27.9%	22.2%	34.6%	25.7%	28.5%	23.5%
	2 adults, no dependant children, both < 65 years	10.5%	10.7%	5.2%	7.5%	4.2%	8.6%	0.2%	8.0%	8.8%	9.6%	9.9%	10.3%	6.7%	9.1%
	2 adults, no dependant children, at least one ≥ 65 years	5.9%	14.3%	1.1%	17.5%	3.2%	19.4%	0.4%	20.6%	3.1%	20.6%	27.6%	24.0%	4.0%	17.9%
	other households without dependent children	7.2%	5.9%	4.3%	2.9%	3.5%	3.1%	0.2%	3.3%	3.8%	3.7%	5.7%	4.7%	4.4%	3.8%
	single parent household, 1 or more children	55.3%	46.8%	66.1%	29.8%	40.1%	34.7%	9.0%	25.8%	59.6%	38.4%	85.7%	37.2%	53.3%	38.6%
	2 adults, one dependent children	12.8%	11.1%	5.0%	4.8%	3.8%	5.3%	0.1%	4.5%	5.6%	6.0%	2.5%	6.9%	6.4%	6.7%
	2 adults, two dependent children	12.0%	11.1%	3.9%	4.7%	3.4%	5.2%	0.1%	4.5%	4.7%	6.3%	1.3%	6.9%	5.3%	6.5%
	2 adults, three or more dependent children	24.7%	22.3%	8.5%	9.4%	7.3%	10.0%	0.2%	7.6%	10.7%	12.3%	1.5%	11.4%	12.1%	13.5%
	other households with dependent children	26.2%	17.8%	11.9%	6.8%	7.3%	6.8%	0.9%	5.6%	8.3%	7.7%	2.9%	8.2%	13.1%	10.0%
	collective household	15.7%	20.7%	5.5%	20.1%	5.8%	17.7%	4.8%	22.5%	9.9%	17.2%	14.5%	20.9%	9.3%	19.4%
age	0-17	30.9%	26.8%	17.3%	11.4%	11.7%	12.6%	1.5%	9.0%	17.3%	14.7%	15.5%	14.3%	18.6%	16.5%
	18-24	30.1%	24.6%	18.7%	9.6%	11.0%	10.1%	4.0%	8.3%	15.1%	11.6%	13.5%	12.1%	18.5%	14.3%
	25-34	21.9%	18.1%	11.9%	6.9%	8.2%	7.2%	6.5%	5.4%	10.5%	8.3%	6.9%	8.9%	13.7%	10.9%
	35-44	21.2%	18.5%	11.7%	7.8%	8.0%	8.3%	5.5%	6.7%	11.0%	9.7%	9.6%	10.2%	12.8%	11.2%
	45-54	17.3%	16.0%	10.3%	7.4%	7.7%	7.9%	6.4%	6.9%	10.6%	9.2%	10.8%	10.3%	11.2%	10.1%
	55-64	17.5%	17.7%	9.3%	12.6%	8.3%	13.3%	6.3%	11.7%	13.6%	14.1%	18.8%	15.0%	12.0%	14.4%
	65-74	18.3%	17.4%	3.7%	16.8%	5.6%	17.5%	3.0%	18.2%	8.0%	18.4%	30.2%	21.7%	9.6%	17.6%
	75 and +	21.3%	17.3%	4.4%	19.5%	7.5%	20.4%	4.8%	23.1%	11.9%	21.3%	35.7%	26.2%	12.4%	19.6%
one person household	one person household aged 18-24	56.7%	55.6%	53.9%	36.3%	44.3%	37.6%	94.8%	37.5%	44.2%	40.6%	8.0%	45.0%	53.1%	47.8%
	one person household aged 25-34	28.8%	26.7%	25.3%	14.1%	22.3%	15.9%	71.5%	14.9%	22.2%	17.9%	10.6%	20.6%	27.2%	21.6%
	one person household aged 35-44	29.2%	25.9%	23.7%	13.8%	21.0%	14.9%	64.0%	14.1%	22.4%	17.1%	14.2%	18.6%	26.5%	20.0%
	one person household aged 45-54	27.2%	27.3%	26.2%	17.8%	25.1%	20.2%	67.0%	17.7%	27.2%	21.7%	22.4%	23.3%	27.7%	22.9%
	one person household aged 55-64	35.3%	29.6%	30.4%	23.6%	26.9%	24.2%	47.9%	20.8%	36.3%	25.1%	35.0%	26.0%	33.1%	26.3%
	one person household aged 65-74	44.0%	25.4%	11.1%	23.3%	15.3%	22.1%	13.9%	24.9%	27.2%	23.0%	51.1%	27.2%	27.1%	23.9%
	one person household aged 75 and +	39.2%	19.7%	9.4%	21.0%	14.7%	21.1%	12.7%	25.4%	26.6%	22.3%	52.5%	29.5%	24.8%	21.1%
worker status	irregular income (temporary work, occasional income, ...)	40.8%	21.6%	44.8%	11.3%	9.1%	10.5%	10.7%	8.7%	17.9%	11.5%	13.6%	12.0%	28.9%	14.4%
	manual worker	24.9%	13.2%	15.7%	5.3%	8.1%	5.0%	11.3%	4.4%	10.4%	5.6%	7.9%	6.1%	14.5%	7.3%

## Comparison between monetary poverty and synthetic poverty index (estimations based on CBSS data) (continuation)

	urbain dense		urbain		intermédiaire		rural avec foncier élevé		rural		rural profond		Belgique	
	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire	indice synthétique de pauvreté	pauvreté monétaire
<b>1. Occupé</b>														
1.1. Travail salarié	9.9%	6.2%	7.5%	2.6%	3.9%	2.5%	5.0%	2.1%	5.1%	2.9%	5.2%	3.0%	6.6%	3.5%
1.2. Occupé en tant qu'indépendant	14.6%	26.7%	7.7%	17.7%	10.0%	17.6%	7.6%	16.4%	7.7%	19.1%	8.6%	21.4%	10.1%	20.2%
1.3. Occupé en tant qu'aidant auprès d'un indépendant	18.8%	37.4%	12.5%	27.9%	13.3%	27.5%	4.3%	25.4%	11.3%	28.1%	4.3%	27.6%	12.5%	29.0%
1.4. Occupé en tant que salarié et comme travailleur indépendant/aidant	4.7%	5.5%	4.9%	3.0%	3.3%	3.1%	5.2%	2.8%	3.0%	3.2%	4.0%	3.6%	4.1%	3.6%
<b>2. Demandeur d'emploi (DE)</b>														
2.1. DE après travail à temps plein, avec allocation de chômage	61.0%	43.5%	52.3%	29.9%	38.9%	30.8%	21.7%	26.6%	56.7%	32.8%	56.0%	34.9%	52.6%	36.3%
2.2. DE après un emploi à temps partiel volontaire, avec allocation de chômage	47.7%	47.5%	25.2%	28.4%	19.2%	26.5%	9.9%	24.6%	24.1%	27.7%	13.5%	30.9%	31.2%	35.1%
2.3. DE après études, avec allocation d'attente ou allocation de transition	62.8%	59.9%	59.2%	42.7%	49.1%	45.5%	14.0%	32.4%	52.6%	45.3%	27.1%	43.2%	55.4%	51.4%
<b>3. Inactif</b>														
3.1. Interruption de carrière complète / crédit-temps complet	13.1%	16.6%	9.0%	12.3%	5.0%	11.3%	3.4%	10.6%	7.9%	12.6%	3.9%	16.4%	8.2%	13.2%
3.2. Dispense d'inscription comme demandeur d'emploi	49.6%	41.1%	40.5%	27.8%	27.1%	27.4%	17.9%	24.1%	52.7%	28.9%	61.7%	30.8%	41.5%	32.2%
3.3. Revenu d'intégration / aide financière	98.3%	87.3%	97.0%	78.6%	94.2%	78.0%	46.2%	70.5%	98.7%	76.9%	37.0%	70.6%	96.3%	84.1%
3.4. Bénéficiaire d'une pension sans emploi	20.4%	15.5%	4.4%	15.3%	6.7%	15.5%	4.2%	16.6%	10.7%	16.1%	31.1%	19.2%	11.4%	15.7%
3.5. Pré pensionné à temps plein	12.6%	11.6%	2.1%	11.3%	4.1%	11.9%	1.4%	11.0%	5.5%	12.5%	14.6%	13.0%	5.8%	11.8%
3.6. Enfants bénéficiaires d'allocations familiales	29.5%	25.7%	16.9%	11.0%	11.2%	12.1%	1.5%	8.9%	16.7%	14.2%	15.6%	13.9%	17.8%	15.8%
3.7. Incapacité de travail	29.2%	32.0%	30.8%	21.5%	18.1%	21.3%	17.6%	17.5%	27.5%	22.8%	14.0%	23.2%	25.5%	25.0%
<b>4. Autres</b>	21.4%	25.4%	11.5%	19.3%	7.8%	20.6%	1.6%	19.0%	11.9%	22.1%	20.6%	23.6%	13.3%	22.0%

Poverty is more intense in urban centres, followed by remote rural, rural, urban, intermediate, and rural with expensive housing areas<sup>10</sup>.

It appears from both tables below that the categories most affected by poverty in Belgium benefit from the social integration income (96.3%), school leaving job seekers (55.4%), single parents (53.5%), job seekers after full time occupation (52.6%), job seekers exempt from registration (41.5%), job seekers after part time occupation (31.2%), workers with occasional work (28.9%), isolated individuals whatever their age (28.5%), and more particularly those between 18 and 24 (53.1%), as well as people unable to work (25.5%).

In opposition, the least affected are the households (except isolated individuals) with no dependent children (the poverty rate varies from 4 to 6.7%), households of two adults with one or two dependent children (6.4 and 5.3%), workers combining salaried and independent jobs (4.1%), full-time early pensioners (5.8%) and salaried workers (6.6%).

Overall, the trends resulting from the monetary measurement of poverty and from the synthetic index are similar. Nevertheless, in some cases, the poverty rates measured by both types of indicators can vary considerably. For the independent workers and their helpers, for households made of two adults (with no dependent children) in which one at least is over 64, and for collective households<sup>11</sup>, poverty measured by income is clearly higher than that measured by the synthetic poverty index.

Conversely, poverty measured by the synthetic poverty index is more intense for job seekers after a full time job, for those exempt of registration, for the beneficiaries of the integration income, single parent households, and people with occasional revenues. All those persons suffer thus more from poverty than would appear if only their income was taken into consideration.

In those different cases, one may suppose that the synthetic poverty index takes the specific difficulties of households better into consideration, as they go beyond the purely monetary aspect (for example for the people depending on the Centre Public d'Action Sociale or for single parent households). As regards independent workers and their helpers, one can reasonably believe their income as registered by the CBSS is below their real income; the synthetic poverty index corrects this bias.

The inhabitants of urban centres are in all cases poorer than the average, whether poverty is measured in terms of monetary poverty or synthetic poverty index. Conversely, households living in intermediate spaces or in rural with expensive housing spaces (except isolated individuals) are less poor than the Belgian average. This trend remains generally true in urban areas (outside urban centres) and in rural spaces (except remote rural), if one excludes some categories of individuals, notably those unable to work and single parent households.

On the other hand, in remote rural areas, the situation is more contrasted. Old people (and associated statuses such as early pensioners, pensioners and those exempt of registration as job seekers), the +64 isolated, as well as single parent households face more difficulties in remote rural than the Belgian average. On the contrary, job seekers after voluntary part-time occupation or after school, the under 55 isolated people, workers, people with occasional income, the beneficiaries of social integration income, those unable to work as well as large households<sup>12</sup> are less poor in remote rural areas than the (Belgian) average.

<sup>10</sup> It should be noticed that, when monetary poverty is considered, poverty is a little more present in intermediate (11.5%) than urban areas (11%). As to the rest, the classification between the different areas is the same as in the synthetic poverty index.

<sup>11</sup> Note that the EU-SILC sample does not include collective households.

<sup>12</sup> Households of "two adults with at least three dependent children" and "other households with dependent children".

## 7. CONCLUSIONS

In the framework of this study, the research team has first of all carried out a considerable work of collection and analysis of data. The latter have made it possible to elaborate a large series of contextual variables aimed at reflecting the specific difficulties faced by households living in rural areas. Whenever possible, we have always tried to work on the finest territorial scale, i.e. the statistical sector.

Secondly, a typology of space has been developed. Before being able to study rural or urban poverty, it was necessary to define to which type of space each statistical sector belonged. We have opted for a specific typology in connection with the problem to deal with. This typology has thus not been defined according to some activities or a type of land use but rather according to a series of lacks in terms of services and accessibility.

Thirdly, we have tried to define poverty at best. Several paths have been explored: classic measurements such as subjective poverty, monetary poverty, material deprivation, but also an indicator of available budget or households' debt. However, each of those measurements has weaknesses. We have therefore chosen to develop our own poverty index, called "synthetic poverty index", which makes the most of the large variety of data from the EU-SILC survey since it takes into account a considerable range of expressions of poverty (or absence of poverty), while attaching more importance to those concentrated in low income.

Starting from the synthetic poverty index and our spatial typology, we notice a range of new findings resulting from the data of the EU-SILC survey. Surely, the share of poor households is the highest in a dense urban environment, but the households living in rural areas occupy the second place, followed by those living in the areas we have classified as "urban" (outside the highest densities), and, finally those in intermediate spaces.

It seems however that the most intense poverty is found in rural areas. Indeed, when considering the 10% of the most deprived households in Belgium, these are under-represented in rural areas. Conversely, if one considers the 15% of the poorest households, the situation of the rural world is clearly less favourable: the households that are just a bit less poor (i.e. those comprised between the poorest 10 and the 15%) are over-represented in the rural world.

Still on the basis of EU-SILC data, we have studied the specificities of poverty in the different types of environment.

Moreover, we have tried to explain the synthetic poverty index by means of the data available in the Crossroads Bank for Social Security (CBSS) and the contextual variables we have elaborated. Thanks to the individual data of the CBSS, we have thus been able to make predictions, for all Belgian households, of their synthetic poverty index. The results seem consistent with those of the EU-SILC which we took as a model.

Since we now have an estimation of the synthetic poverty index at disposal for all households, we produce a map of poverty in Belgium by statistical sector and by commune, and a series of summarizing tables. If one refers to the typology of space, the share of poor households is the highest in dense urban spaces, followed by remote rural (15.9%), rural (12.7%), urban (11.4%), intermediate (8.8%), and rural with expensive housing (4.6%) spaces.

In Belgium, the categories most affected by poverty benefit from the social integration income (96.3%), school leaving job seekers (55.4%), single parents (53.5%), job seekers after full time occupation (52.6%), job seekers exempt from registration (41.5%), job seekers after part time occupation (31.2%), workers with occasional jobs (28.9%), isolated individuals whatever their age (28.5%), and more particularly those between 18 and 24 (53.1%), as well as people unable to work (25.5%).

When looking at the specificities of the different types of environment, it appears that people living in dense urban areas are always poorer than the Belgian average, whatever the category to which they belong. The households living in intermediate spaces or in rural with expensive housing areas (except isolated individuals) are less poor than the average in Belgium. This trend remains generally true in urban spaces (outside the centres) and in the rural areas (except remote rural), if one excepts some categories such as people unable to work and single parent households.

However, in the remote rural world, the situation presents more contrasts. Old people (and associated statuses such as early pensioners, pensioners and job seekers exempt of registration), the +64 isolated individuals and single parent households are faced with more difficulties than the Belgian average. Conversely, job seekers after voluntary part-time occupation or after school, the under 55 isolated people, workers, people with occasional income, the beneficiaries of the social integration income, those unable to work, and large households are less deprived in remote rural areas than the average.

Furthermore, the data of the CBSS make it possible to measure the income registered by social security institutions (mostly social benefits and work revenues). Of course, incomes obtained from the CBSS are not perfectly identical to those resulting from the data of the EU-SILC, but the results in terms of poverty are quite close. This study allows thus also to refine the official results obtained in terms of (monetary) poverty on the basis of the EU-SILC survey since they offer the possibility to cross information, which is not possible with a sample of 6300 households.

As a conclusion, we believe that the results of this study are globally valid. Obviously, the more they are disaggregated, the higher the risk of error. Such a risk is presumably lower in terms of monetary poverty than in terms of synthetic poverty index. The results produced here (so much for monetary poverty as for synthetic poverty index) provide an overview of the possibilities offered by the database we have elaborated in the framework of the study. A lot of crossings of variables are possible and they can be defined according to a specific problem or questioning.

Even though we think the quality of the results produced here is generally satisfying, it could have been better if some complementary data had been available at individual level (more particularly for pensioners' households), notably concerning debt, ownership of a car, health condition, state and cost of housing. In this respect, the decennial census represented an irreplaceable source of information, unfortunately lost nowadays.