

---

# SPATIAL DIMENSIONS OF POVERTY AND FINANCIAL PRECARIOUSNESS<sup>1</sup>

PhD Candidate Andrei CHIRILĂ

*“Alexandru Ioan Cuza” University of Iași*

## Abstract

In the article it is presented an territorial analysis<sup>2</sup> taking into consideration the workforce occupational status and the incomes features of each of its socio-occupational categories. Two were calculated (based on the last Population Census with available data): **the workforce precariousness index** (which considers the labour resources that do not realize any income by their own forces) and **the relative average occupational poverty index** (that takes into consideration the national average incomes level and the percentage of the occupational categories whose incomes are situated below the national average). A special attention was paid to the analysis of the institutional means conceived to diminish these phenomena and the vulnerabilities they imply, given the concept of financial territorial resources (European structural funds).

**Keywords:** incomes level, specific index, financial resources

\*\*\*

This study brings into discussion the questions of **precariousness and labour resources financial poverty**, actual affairs in any space, inclusively in those belonging to economically developed countries. Romania, in general, North-East Development Region and Iași County are spaces that confront to peripheral positions in the EU, but also to a series of specific matters from the past: economical reorganization, existence of an extremely high level of occupied population in subsistence agriculture or as pronounced discontinuities, even fracture between urban and rural areas.

## The workforce precariousness index

**The term of precariousness** has multiple sociological and economical interpretations. In the study, precariousness will be understood by the official definition existing in the French state: the lack of one or more securities that permit to citizens the assumption of elementary responsibilities, either by the total lack of incomes, either by the lack of financial development means (for instance, in the case of unemployed population). In this concern, it has been

### 1. Territorial analysis realized at Iași County level

2. Data and information in the study sustained by the European Social Fund in Romania (ESF), under the responsibility of the AMPOSDRU [grant POSDRU/CPP 107/DMI 1.5/S/78342]

---

tried to create a Precariousness Index, having the results of the last population census with available data and the official definitions regarding the socio-occupational status as departing points.

The calculation method for **the workforce precariousness index** takes into consideration the occupational situation of active population, status represented by the relation in which an individual is found towards economic and social activities, but also by the means of obtaining his source of existence. As a matter of fact, the index has been calculated as the percentage of the ratio between the sum composed by the unemployed population, the unpaid family workers and the domestic workers (*casnice* in Romanian; considered part of the inactive population) and, respectively, the sum represented by the active population and the domestic workers.

$$I_{prec} = \frac{S+AF+C}{PA+C} * 100$$

*I<sub>prec</sub>*=workforce precariousness index; *S*=unemployed population; *LF*=unpaid family workers; *C*=domestic workers; *PA*=active population

The above mentioned types of occupational situations were particularly chosen because, according to the definitions presented in the Census Staff Manual, they do not receive any remuneration as salary or payment in kind<sup>1</sup> and do not realize any income by their own forces<sup>2</sup>.

The unemployed population, according to the International Labour Organization official definitions, has to meet three criteria: to not have a job, to be available to start working in the following 15 days and to actively search labour. The other two categories taken into consideration were the unpaid family workers (whose number is much more significant in rural space) – persons that activate in familial economic units that belong to other household member they help; for their activities, they do not receive any remuneration – but also the domestic workers, aged 15 or more, that carry on domestic activities in their own household and that do not have their own source of income. Although they are considered as part of inactive population, we can observe that the definitions of unpaid family workers and of domestic workers are extremely similar, this being the reason for which it has been decided to include the latter into potential labour resources category, too. They are, in their vast majority, persons of working age, pensioners being excluded, even if they

---

1. Generally speaking, they are represented by agricultural products exchanges.

2. We did not take into consideration the social protection forms like unemployment benefits because they are only temporary incomes and they do not represent means of financial development.

---

carry on domestic activities. The three occupational categories can represent a synonym (incomplete and imperfect) for disguised unemployment – that indicate an insufficient, even unproductive occupation -, being an excellent clue of the financial problems gravity that Romanian population finds in<sup>1</sup> and of the labour resources waste, translated by production and income loss.

### **The relative average occupational poverty index**

**Poverty** is characterized by ambiguity and relativity, as it can enormously differ on temporal, spatial and socio-professional scales. One of its common accepted definitions can be nevertheless considered as representing the low level of resources of an individual or of a group, when compared to the situation of other members of society. Its causes can be multiple, both collective<sup>2</sup> and individual (Ionescu, 2007), in the sense of not assuming the responsibility for personal wealth, assumption taken previously by the state system. Even if poverty may be translated, in a broad sense, by the individuals incapacity to access different fundamental rights (Concialdi, 2005), in order to avoid the risk of its quantification impossibility, it has been decided to treat exclusively the matter of financial poverty, generated by the lack of sufficient incomes, as these resources represent the main source for satisfying the population consumption needs.

Practically, two poverty evaluation methods are used in Romania, as in most countries (Panduru et al, 2009; MMFPS): the **relative** method<sup>3</sup>, respectively the **absolute** one<sup>4</sup>. The thresholds used in this sense, purely statistical, are only conventional and cannot pretend normative value, but they are absolutely necessary in order to estimate the number of persons affected by poverty. It has to be mentioned the fact that the data related to total monthly average incomes, published by NIS, are available only on national and regional scale, whilst the data related to average incomes by the main social categories of population are available only on national and macro-regional scales (data from statistical research – sample survey on family budgets). In order to assure continuity to the scientific approach, it has been decided to keep the reference to socio-occupational status, by creating an index (or, we admit, a false-index or a theoretical index) that take into consideration the total average incomes deviations of each socio-occupational category in

---

1. In rural areas, subsistence agriculture is still the main source of revenues.

2. Economy reorganization, subsistence agriculture, even corruption

3. Calculated by the National Institute of Statistics as part of the European set of social inclusion indicators

4. Calculated by the Labour, Family and Social Protection Ministry as part of the national set of the same indicators

---

relation to the total average incomes of the population on national level. It has been titled as **relative average occupational poverty index**, considering the deviations in relation to total monthly average incomes and not to a poverty threshold (relative or absolute) because we analyze only the active population, which should represent the engine of any territory economic development. Analyzing the available data (2001-2010, national level), the population occupational categories that have incomes below the national average are the unpaid family workers and the domestic workers (with no revenues at all), but also the unemployed population, with an income level of about 55-60% of the total average for the entire decade and in a somehow surprising way, the workers on their own (both in agriculture and non-agricultural activities), with incomes between 60-70% compared to the national average.

$$Isrmo = \frac{S+AF+C+LCP}{PA+C} * 100$$

*Isrmo*= relative average occupational poverty index; *S*=unemployed population; *AF*=unpaid family workers; *C*=domestic workers; *LCP*=workers on their own (in agriculture and non-agricultural activities); *PA*=active population

**The relative average occupational poverty index** represents in fact the percentage of the population from social categories with incomes below the average in the total of the active (and domestic workers) population. It can be mapped at territorial level (LAU 2), in order to remark the spatial dimensions of this phenomenon. It is a rough and mostly theoretical index, which offers nevertheless a (imperfect) perspective on the active population poverty level at a higher territorial scale.

#### **The workforce precariousness index: a pauper rural population**

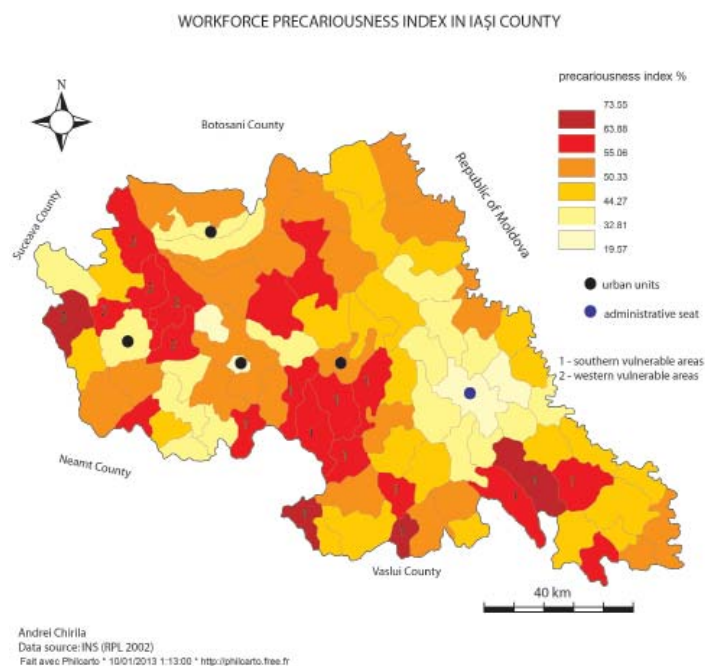
-Results-

After having mapped our results, by a univariate choropleth cartographic representation (figure 1) that synthesize the precariousness intensity, three type of spaces can be distinguished from this point of view. There are white spaces, where the precariousness is low, particularly in the case of urban and peri-urban areas, intermediary spaces and black spaces, where it is severe (in fact, profound rural areas, without remarkable territorial resources). In contradistinction to the French and West European cases, where precariousness areas are many times a feature of urban space, existing a veritable discontinuity in the repartition of pauper population (Selimanovski, 2008), the situation is presented exactly in opposite way in the case of Romania/

---

Iași County, due mainly to the subsistence agriculture, based on small and very small exploitations.

At territorial level, the workforce precariousness index varies between 19,56% in Iași Municipality and 73,55% in the commune of Schitu Duca, the county average 49,45%, situation that signifies that almost half of the active population in the county does not realize any income by their own forces. This matter of facts is of great severity, especially for rural space, where a high percentage of the population, working in agriculture, cannot assure a minimum of revenues for everyday needs. The most vulnerable zones from this point of view are those situated in the south and the center of the county (marked on the map with number 1 – Dobrovăț, Costuleni, Dagâța, Ipatele, Mădârjac), but also the western ones (marked on the map with number 2 – Moțca, Vânători, Todirești), with a percentage of unpaid family workers that reaches many times 60-65%. From a typological point of view, the respective areas are rural spaces densely populated, characterized by agricultural activities in individual micro-exploitations. (Atlasul Teritorial al României, 2006). The lower relative values of the index in the communes of the north-eastern part of the county may seem surprising, but they can be explained either by a soils superior quality (especially chernozems), fact that permits a more intensive agriculture, on bigger surfaces, either by a methodological error, having in mind that the small number of unpaid family workers is compensated by a significant number of workers on their own in agricultural activities, as their definitions could appear erroneously similar. Moreover, taking into consideration that typologically these communes are less populated and rather ageing, with an auto-sufficiency agriculture (despite some big exploitations), we can reach to the conclusion that their smaller households dimensions have lead to a higher percentage of workers on their own (household chiefs) and to a lesser percentage of unpaid family workers (the other household members).



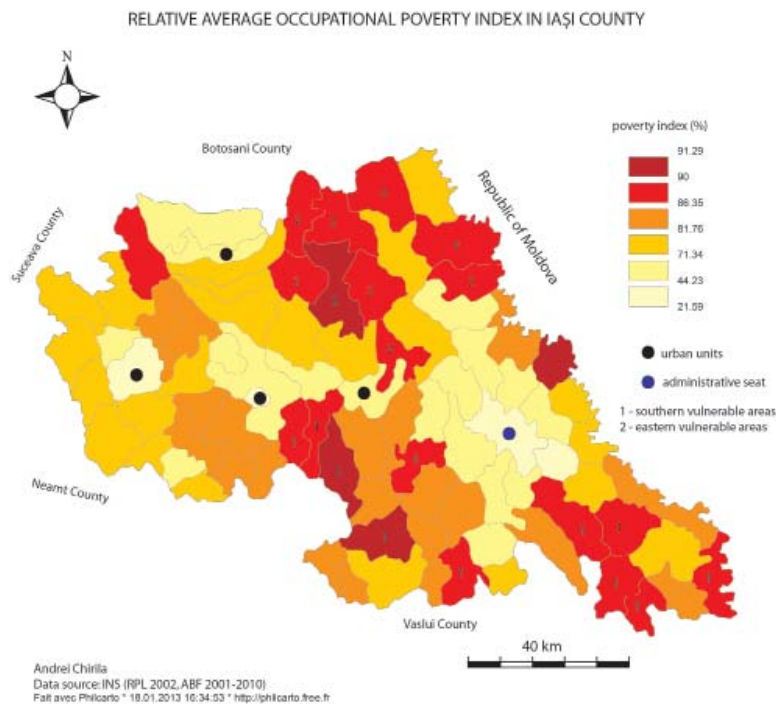
The majority of the administrative units where high unemployment rates have been registered (15-20%), as well as those situated in the next vicinity of urban centers are not characterized by high values of workforce precariousness index. They have insignificant proportions of domestic workers and unpaid family workers. It is a logical situation of the communes in the proximity of the two county municipalities - Iași and Pașcani -, the only ones that can assure a relative attractiveness for the labour resources in their immediate vicinity. Other communes in the extreme south-western part of the county follow the same features, being economically polarized by Roman (Neamț). In the case of farer communes (distance towards the centers generating jobs) the inexistence or the high prices of transportation are often perceived as a repulsive factor or as an obstacle to job-related mobilities. Moreover, in order to confirm the attractiveness of the county seat, we must mention that, among all vacant jobs in the county, more than 90% are concentrated in Iași (AJOFM Iași website, consulted between April 2012 and February 2013). Jobs inexistence in profound rural areas and reduced transport accessibility that available jobs be addressable, generally speaking, only to urban/peri-urban population or to those residing along transport axes.

---

## The relative average occupational poverty index – an approach with qualitative aspects

### -Results-

Its relative values vary between 21,59% in Iași Municipality and 91,29% in the case of Focuri commune, situated in the central-northern part of the county (figure 2). Comparing the spatial distribution to the previous one, it is necessary that some remarks be mentioned. Firstly, the urban units continue to have the lowest percentages, with growths of about 5% in the case of poverty index. Secondly, the southern half of the county (marked on the map by the number 1) remains vulnerable from this point of view, with a proportion of 25-30% of the own-account workers in the agricultural field and with negative deviations of their average incomes, matter of fact that can be translated by an auto-sufficiency agriculture, by low accessibility, by low quality of terrains (many of them inclusively eroded or erodible) and by the lack of important natural resources, apart from the agricultural ones.



---

The fact that the vulnerable areas in the west of the county (in the case of the precariousness index) lose this attribute can also be remarked, their place being taken by some central-northern areas. The western communes have similar values of both indexes (60-70%), situation that implies the lack of a significant number of workers on their own and a relatively high percentage of employees, of about 30-40%, at least in respect to Romanian rural space. The localities are polarized by the nearest urban center (Pașcani) and have a favorable territorial location, with dense railway and road networks, but also with better frequencies of local trains and buses. A median east-west axis with the lowest poverty index values in the entire county overlaps a railroad artery and the European Road E583, which assure the connection of four of the five urban centers of Iași County. The relatively high percentage of the employed population can be explained by an adequate transportation infrastructure, an argument in this regard being the mention that on this route eleven Regio trains (ten of CFR Călători and one of Regiotrans) circulate each day (between 04 AM and 09 PM), in addition to other Interregio trains.

The north-eastern areas of Iași County are characterized by high relative values of the index, up to 85-90%, with 35-40% than in the case of the index that remarked the total lack of incomes by own forces. This matter of facts can be explained by an extremely elevated number of own account workers in the agricultural field and by an extremely low number of employees, practically nearly inexistent (in some cases, even 40-50 employees, half of them working in administration, educational and health systems). Being poorer accessible zones, with an important agricultural potential, it is considered that the occupancy (and especially employment) and the entrepreneurial initiatives encouragement should beneficiate by a partial spatial redirection of the funds allocated to active measures regarding labour market. The creation of new jobs needs to be stimulated locally, either by productive capacity growth of the existing ones, either by big agricultural exploitations construction (corn and dairy products, underlining the area structural features), inclusively **by means of rural development structural funds**. As the situation of vacant jobs in Iași County in 2012 (the lists published weekly by AJOFM – The Labour Resources Occupancy County Office) has been followed, these north-eastern areas were characterized by the total lack of available jobs (in general, 90% of them are concentrated in Iași Municipality).

The theoretical index catches only imperfectly the active population financial poverty degree in Iași County, relevant in this aspect being labour market informal sector, practically unregulated by legal or contractual norms (Barthou, 2008) and that surely raises population income levels. Even if we mention the individuals working without any contract or we take into

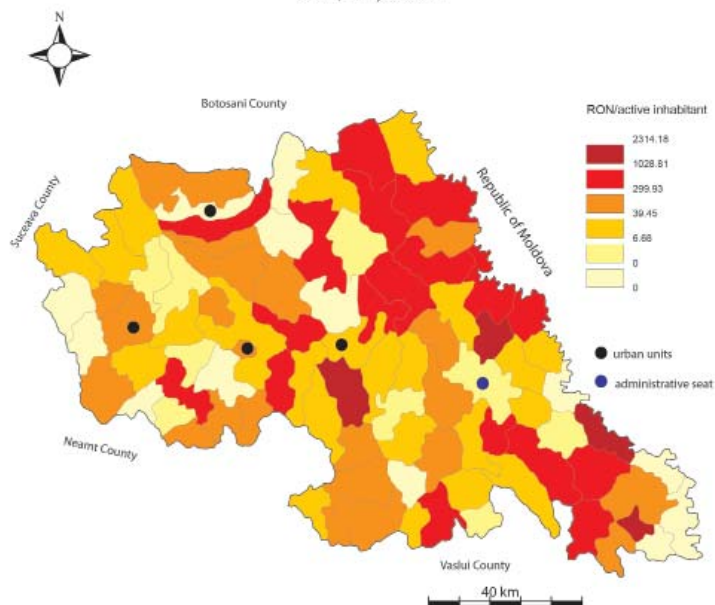


---

consideration the employers which propose wages close to the minimum one or even the own account workers in non agricultural domains that declare lower revenues than the real ones, all these socio-occupational categories constitute a feature of mainly urban and peri-urban spaces. Thus, the spatial fractures between the incomes level of rural-urban areas tends to increase. From this point of view, we consider that informal labour does not structurally affect the territorial repartition of the index relative values.

In order to approach the matter of active population financial situation improvement it is necessary to turn to territorial resources concept. Resources are defined as the means a territory disposes in order to generate wealth and added value and are built on material or ideal components (Gumuchian and Pecqueur, 2007). It has been decided to deal only with the financial resources that potential beneficiaries (individuals or enterprises) dispose for rural development, by the Rural Development National Program investments plan, objectified by projects fundable from structural funds (FEADR – Rural Development European Agricultural Fund). We opted particularly for this type of resources, as the presented results confirmed the fact that financial poverty degree is more elevated in rural zones than in urban ones. This matter of facts characterizes the entire Romanian rural space. Other European-financed operational programs may encourage local communities' development, but they do not have an immediate and direct impact on population income level. They may lead to indirect development on average and long term – sectoral programs designed for access infrastructure, environment, economic competitiveness increase, but also programs addressed to education improvement, professional reconversion or social infrastructure, whose beneficiaries can be public institutions or NGOs from the entire county, as an interface towards vulnerable and disadvantaged population categories. The database for this part of our study was the centralized situation of all European-fundable projects in the county, published by ADRNE (North-East Regional Development Agency) and the amount of committed financial assistance accorded to beneficiaries by PNDR. In this concern, an indicator capable to express their territorial distribution on LAU 2 administrative unit level has been created, indicator defined as **the ratio between the total committed sums from each commune and the active population from the same spatial.**

TERRITORIAL DISTRIBUTION OF THE EUROPEAN FUNDS/ ACTIVE INHABITANT (RURAL DEVELOPMENT NATIONAL PROGRAM) IN IAȘI COUNTY



Andrei Chirila  
 Data source: www.admordest.ro  
 Faik avec Phlicarta \* 16.01.2013 00:13:02 \* http://phlicarta.roe.fr

The county average is 105 lei/active inhabitant, whilst the rural administrative units' average is 181 lei/active inhabitant. The fact that these funds are addressable also to the population residing in urban administrative units should not surprise, as there are urban units that integrate villages in their composition (the cases of Pașcani or Podu Iloaiei) and as beneficiaries are regarded by the type of agricultural activity they are in, and not by their residence place (there are beneficiaries of the program inclusively in Iași Municipality or in Târgu Frumos town). The cartographic representation demonstrate a correlation between the areas with the highest percentages of pauper population and the areas that beneficiate from the most important financial committed values per inhabitant.

The committed sums in the case of northern communes are assigned especially to projects related to cereal agriculture, whereas those committed in southern administrative units refer mainly to horticulture (fruit growing and wine making), underlining their agricultural specific features. There are thirteen localities that did not accessed funds by this operational program and the maximal relative value is registered in Prisăcani commune - 2314 lei/active inhabitant. Exemplifying the case of the latter, the main beneficiaries have mushrooms cultivation as primal economic activity, situation that can be explained by the

---

physical and geographical features of this commune from Prut Valley. In this regard, SC Hertman SRL accessed over one million lei funds in order to establish an exploitation for mushrooms cultivation and SC BioCompost SRL accessed a similar sum in order to found an establishment for processing corn straws and for obtaining mushroom compost. Other beneficiaries that accessed remarkable funds are: SC RoCereal SA, with 1,12 million lei for the expansion and the modernization of a mill or SC Agroimpex SA, with 1,98 million lei, for establishing a traditional dairy production structure, utilizing energy for alternative sources. Given this facts, it is legitimate to interrogate upon what is being encouraged by the access to the funds, either a productive quality or big exploitations, either life population quality, by augmenting their incomes level (inclusively for investments). We consider that both types of quality may see meliorations from this point of view, by the simple creation of local rural jobs in more isolated areas, but with a relatively elevated active population percentage. By the means of constructing, extending or modernizing agro-industrial establishments, the number of permanent and seasonal jobs should, at least theoretically, see positive dynamics. Moreover, the sums brought to local budgets, as property taxes (and not only this type of taxes, in the context of future regionalization and decentralization) are not to neglect, creating indirect local development.

Furthermore, by means of the structural funds, it is tried inclusively to encourage the entrepreneurship in the case of SMEs or individuals. Despite that the sums committed by individuals are much inferior to those committed by companies, they consist a departing point from subsistence agriculture to one that generates higher monetary revenues. The available sums in order to create and develop agriculture individual exploitations vary between 10 and 25 thousand lei per project, whereas the granted sum for the increase of commercialized production volume is 7,5 thousand lei. Generally speaking, the small farming units are based on fruit-growing and apiarian activities and by means of the funds, the impact of lack of access to bank agriculture credits or even micro-credits (addressed, in their vast majority, to big exploitations) is being attenuated (MADR, 2007), the organisms that activate in micro financing field being situated particularly in the western part of the country.

### **Conclusion**

The results demonstrate that a big part of the active population in Iași County (that theoretically should sustain the economy on the whole) live without any source of revenues or with low incomes, below the total population average income and below other socio-occupational categories average incomes. By means of precariousness and poverty indexes cartographic representations, the most vulnerable areas as far as chronic poverty is concerned are presented. In the

---

same manner, by mapping the territorial distribution of the structural committed sums in agricultural field, a correlation between the high values of these sums and the elevated values of the two previous indicators has been observed, a premise for future economic development and for increase of income levels being created. A sectoral (geographical) approach of the above mentioned questions has been realized, with coarse calculation formulas and with a reduced number of variables and statistical correlations that catch an overview of poor active population distribution or the causes that generate it. The fact that there are only a few studies at this territorial level analysis makes the present study to have its own contribution in understanding these phenomena and in alerting on the financial vulnerabilities of a large part of active population, as well as on the opportunities of Rural Development European structural funds that represent a channel to reduce rural active population poverty.

#### Bibliography

- Barthou E., 2008. *L'économie de survie ou comment s'adapter à l'essor du capitalisme en Roumanie*, in *Autrepart* (Presses de Sciences Po), no. 48, 4/2008
- Concialdi P., 2005. *Pauvreté, bas salaires et minima sociaux – pour des réformes structurelles*, in *L'Economie Politique*, no. 26, 2/2005
- Gumuchian H., Pecqueur B., 2007. *La ressource territoriale*, Edition Economica, Collection Géographie, Paris
- Ionescu I., 2007. *La question de la pauvreté en Roumanie*, in *Pensée Plurielle*, no. 16, 3/2007
- Preda M. (coord.), 2009. *Riscuri și inechități sociale în România*, Editura Polirom, Iași (Panduru et al., page 26)
- Sélیمانovski C., 2008. *La frontière de la pauvreté*, Presses Universitaires de Rennes, Collection Géographie Sociale
- Comisia Națională de Prognoză, 2012. *Proiecția principalilor indicatori economico-sociali în profil teritorial până în 2015*, București
- *Pauvreté, Précarité, Solidarité en milieu rural - RAPPORT IGAS N°RM2009-102P/CGAAER N°1883*, IGAS, CGAAER, 2009
- *Planul Național Strategic pentru Dezvoltare Rurală 2007-2013*, București, Ministerul Agriculturii și Dezvoltării Rurale, 2007
- *Recensământul populației și locuințelor – Manualul personalului de recensământ*, București, INS, 2010
- *Situația sărăciei în România*, București, Ministerul Muncii, Familiei și Protecției Sociale, 2009
- *Statistica politicilor privind piața muncii – anul 2007*, București, INS, 2008
- <http://www.apdrp.ro/> (last consulting – 17.05.2012)
- [http://ajofmiasi.ro/locuri\\_de\\_munca/](http://ajofmiasi.ro/locuri_de_munca/) (last consulting – 01.02.2013)
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tgs00005&plugin=1> (last consulting - 29.06.2012)
- [http://www.mdrl.ro/\\_documente/atlas/a\\_asezari.htm](http://www.mdrl.ro/_documente/atlas/a_asezari.htm) (last consulting - 01.07.2012)
- [http://www.recensamantromania.ro/wp-content/uploads/2011/07/manual-rpl\\_pag60-93.pdf](http://www.recensamantromania.ro/wp-content/uploads/2011/07/manual-rpl_pag60-93.pdf) (last consulting - 05.01.2013)