ECONOMIC ACTIVITIES IN ARAD COUNTY: TERRITORIAL DISPARITIES

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Abstract. Development is a process illustrating a system’s positive dynamics, as well as its quantitative and qualitative transformations. The economic territorial disparities are shaped by the action of such factors as local resources, geographical position, regional development background, the infrastructure of transport and telecommunications, labour potential, investments, local, regional and international partnership, the capacity of the local/regional administration to obtain European funding, etc. In the economy of Arad County, agriculture and forestry, which have a significant potential for development, are dependent on the biological, soil and climatic conditions of the relief steps; agriculture and related services (210 firms) are better developed in the lowlands, especially at Cermei, Horia, Irașoți, Olari, Sâncleani, and Şiria, while forestry is specific to the mountainous area (Dezna, Moneasa, Buteni, Avram Iancu, and Sâvârșin); industrial activities are wide-ranging mostly in Arad City and in the western part of the county; industrial zones and parks register dynamic evolutions, basically in Arad, Curtici, Nădlac, and Pecica; rural areas, largely those adjoining urban centres, are also involved in industrial activities (the case of Vladimirescu, Livada, and Fântânele close to Arad City, although neither Lipova, Curtici and Chișineu-Criș lag far behind); the services sector is present in towns, but in some villages from the western part of the county as well, especially in those located in the proximity of the Hungarian border.

Rezumat. Activitățile economice din județul Arad: disparități teritoriale. Dezvoltarea este un proces ce ilustrează dinamica pozitivă a sistemului, ca și transformările calitative și cantitative. Disparitățile teritoriale economice sunt rezultatul acțiunii unor factori cum sunt resursele locale, poziția geografică, fondul dezvoltării regionale, infrastructura de telecomunicații și transport, potențialul forței de muncă, investițiile, parteneriatele locale, regionale și internaționale, capacitatea administrației locale/regionale de a obține fonduri europene etc. În dezvoltarea economiei județului Arad, agricultura și silvicultura, care au un potențial de dezvoltare semnificativ, sunt dependente de condițiile biologice, pedologice și climatice ale treptelor de relief; agricultura și serviciile conexe (210 firme) sunt mai bine dezvoltate în zonele joase, în special la Cermei, Horia, Irașoți, Olari, Sâncleani și Şiria, în vreme ce silvicultura este specifică ariei montane (Dezna, Moneasa, Buteni, Avram Iancu și Sâvârșin); activitățile industriale sunt concentrate cu precădere în orașul Arad și în partea vestică a județului; zonele industriale și parcurile înregistrează evoluții dinamice, mai ales în Arad, Curtici, Nădlac și Pecica, ariile rurale, mai ales cele din proximitatea centrurilor urbane sunt de asemenea implicate în activități industriale (cazul comunelor Vladimirescu, Livada, Fântânele, din apropierea orașului Arad, deși nici Lipova, Curtici sau Chișineu-Criș nu se află la distanță foarte mare); sectorul serviciilor este present în orașe, dar și în unele sate din partea vestică a județului, mai ales în cele localizate în proximitatea graniței cu Ungaria.

Key-words: economic activities, territorial disparities, Arad County

Cuvinte cheie: activități economice, disparități teritoriale, județul Arad
1. ECONOMIC ACTIVITIES AND DEVELOPMENT POTENTIALS

Assessing the capacity for a space to develop implies identifying and analysing the factors capable to sustain and accelerate, or on the contrary restrict its development. As important are relationships of dependence/interdependence liable to determining facts, phenomena and processes within a territorial system.

1.1. Geographical position is a factor that determines relations with other spatial system, facilitates territorial access, or on the contrary, makes it rather difficult. Assessing the importance of this factor means viewing it in relation with other territorial systems and sub-systems, with phenomena and processes manifest in other places. The geographical position of Arad County facilitates the development of all types of economic activities. Take agriculture, for example, which can be practiced in the large plain from the western half of the county, in the corridors, floodplains and terraces of the Mureş and Crişul Alb rivers, areas rich in fertile chernoziem soils and with good climatic conditions (optimum temperatures and much precipitation); in the hilly and mountains from the eastern side of the county there is plenty of pasture-lands and natural hay-fields essential to rearing animals; the morphology, soils and climate of the central part are indicated for the growth of vine, so wine-related activities make an important economic contribution. The geographical position is of great local and regional consequence, it polarising economic activities, infrastructure, manpower, etc. in the localities situated close to the border.

1.2. Regional economic background

The Arad and Timiş counties fall into the West Development Region, being a sub-region of old-standing and diversified industrial activity (light industry, machine-building, electrotechnics, etc.), and one of the areas currently sought by foreign and native investors. Regional economic development is clearly influenced by the range of companies, the upsurge of the private sector, the presence of important multinational companies and of hi-tech industries and related services existing within Timişoara-Arad industrial core.

1.3. Transport and telecommunications infrastructure

These two sectors and the services related to them have steadily been developed in the county. As the active population started looking for work abroad, the transport of goods and passengers boomed. In the past few years numerous firms have engaged in international passenger traffic, and in domestic bus and microbus transport. This type of activity has good development prospects once the road, rail and air flights infrastructure is put in place.

1.4. Labour force

At present, labour plays a major role in delimiting development potential areas and their economic and social profile. Labour has come to be more important that material inputs even. The structure of labour employment in Arad County (2006) is also suggestive of the main industrial activities, e.g. processing (82%), constructions (11%), electricity production and transmission (4%) and mining (3%). The existence of a skilled labour force is a good asset for the development of some (sub) branches competitive in the national and continental markets. Qualification is sustained by traditional higher education establishments and lengthy research experience of people employed in electrotechnics, cybernetics, etc. However, industrial development has also its constraints, e.g. few investments in the manpower of small and medium enterprises (SME), the migration of skilled and highly skilled labour to EU countries, diminished possibilities for renewing
labour resources, lack of flexibility in the educational system (no continuous education framework).

1.5. Entrepreneurial culture and the market

The factors limiting entrepreneurial development are, among others, the relatively low number of local entrepreneurs and an as low entrepreneurial culture, still below the EU level. Besides, since entrepreneurs cannot offer credible guarantees to obtain the necessary funds, many SME are under-capitalized and cash flows are discontinuous. Also a constraint is limited access to the requisite business infrastructure which actually is concentrated in Arad City (over 80% of the county’s trading companies and nearly 100% of business assistance and consultancy firms). Since half the rural population’s living standard is of subsistence, market demand, in general, and for personal goods and services, in particular, are depressed.

1.6. Investments

Attracting fresh investors to smaller towns and communes means having a good infrastructure. Little investments in agriculture account for the high proportion of small individual farms (87% are under 5 ha), the poor development of specific services, etc., which makes farming uncompetitive. A foreign investment in the industrial sector has both advantages and disadvantages. Let’s recall only two disadvantages: the opening of garments and footwear manufactures (which have little added value) in small localities leaves the local labour force with no employment alternative in other branches; foreign firms close down choosing to migrate to other countries where cheaper labour is available, thus the locals lose their jobs. The bigger the firms that do it, the greater the loss for the local economy.

1.7. Local/regional/international partnerships and cross-border cooperation

The Arad county Council has concluded cooperation agreements and protocols with Hungary, Poland, Belgium, Italy, France and China. The cross-border cooperation of Arad County settlements is regulated by the provisions of the Hungarian-Romanian Cross-border European Territorial Co-operation Programme, 2007 – 2013. The main objective of this Programme is to stimulate border region co-operation through partnerships in such domains as transport and communications infrastructure, environmental protection, economic and social development. These provisions have materialised in the Romanian-Hungarian partnership of free zones and of industrial zones from some urban centres.

1.8. Interest for and capacity to obtain European funds, elaborating development programmes

Having the capacity to obtain European structural funds in order to finance various economic and social development projects is of primary interest for the local authorities. On these lines, a training programme (in Belgium and Hungary) as to how European projects should be elaborated in order to stimulate entrepreneurship is underway.
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2. STRUCTURE AND GEOGRAPHICAL DISTRIBUTION OF ECONOMIC ACTIVITY TYPES

2.1. Agriculture
In 2006, Arad County numbered 29 firms engaged in the processing of farming, forestry and fishing products. Most of the agricultural and related services firms (210) are located in the countryside (Horia, Iraţoşu, Cermei, Fântânele, Macea, Olari, Şagu, Sâlciu, Semlac, Şimand, Socodor, and Vinga). These sectors also employ the largest workforce in the settlements of Cermei, Horia, Iraţoşu, Olari, Sâlciu, Semlac, and Șiria. Only a few firms (76) are involved in forest exploitation and related services, their distribution depending on the physical-geographical conditions of the area (Dezna, Moneasa, Bălteni, Avram Iancu, and Săvârșin). Seven firms (mainly at Cermei, Zădăreni and Bocsig) are active in fishing, fish culture and related services (Fig. 1).

Fig. 1 The structure of farming, forestry and fishing firms (2006)
Structura agenţilor economici din agricultură, silvicultură şi pescuit (2006)

2.2. Industry and constructions
Most industrial companies (80.2%) are located in the urban area and only 19.7% in the countryside, where local authorities do little to attract them. The CANE\(^1\) structure of is quite complex: Arad City numbers about 590 firms (25 CANE types); Lipova and Curtici 13 firms and 11 CANE types; only 9 – 10 CANE types in Chişineu-Criş, Ineu, Nădlac, and Sebiş or 6 – 7 CANE types in Sântana and Pâncota. Noteworthy, essential for the urban economies are the firms manufacturing garments (Sebiş, Ineu, Pâncota, Nădlac, Curtici, Pecica and Arad City even), textiles (Ineu, Curtici and Chişineu-Criş), the tanning of hides and skins and leather dressing (Sebiş, Pâncota, and Pecica), foods and drinks, rubber and plastics (Arad, Lipova, Curtici, and Chişineu-Criş). As important are metal constructions, machines and equipments and furniture firms (Fig. 2).

\(^1\) CANE = Classification of Activities in the National Economy.
The geographical distribution of firms in the countryside depends on proximity to town, preferentially the majority of firms, which also employ the largest workforce and have the biggest turnover, prefer such localities.

The concentration and number of firms is associated with wide-ranging industrial activities. Thus, the settlements of Turnu, Felnac, Vinga, Făntânele, Şagu, Frumuşeni, Cicir, Covşaşniţ, Miniş, Ghioroc, Zimandu Nou, Radna, Vladimirescu etc. have foods and drinks, textiles, wood-processing, electrical devices and apparata and other industries. The economic power of Arad City has spread over into its rural neighbourhood, also because one finds in the city specific services needed to begin and run a business. This explains the numerous firms present in the rural area between the towns of Arad, Curtici, Pecica and Lipova and, moreover, in the localities under their administration. In the central-northern part of the county, CANE activity types are not so diverse (Fig. 3).

In 2006, the number of localities dealing in construction trebled compared to the early 2000. The number of construction firms increased from 170 (2000) to 675 (end of 2006), most of them being located in towns: Arad, 455 firms, Lipova, 17, Pecica, 14, Nădlac, 9 and Sebiş, 10 firms), but some also in the countryside: Vladimirescu (16 firms), Făntânele, Frumuşeni, Sâneleani, and Semlac (6 – 7 firms each), and Vinga, Cicir, and Şirir (4 – 5 firms each).
2.3. Services

The complexity and diversity of tertiary types of activity, alongside some characteristics of the urban and rural settings made us analyse the territorial distribution of these activities by setting.

Services firms are unevenly spread in the territory, a preferential location being Arad City (87.1% out of a total of 4,859), the county’s major economic centre. Lower proportions are registered in Lipova, Ineu, Sebiș and Curtici. In terms of types of tertiary activities, there are two urban categories: one in which commercial activities are dominant (Pâncota, Sebiș, Pecica, Curtici and Nădlac), the other in which they are below 50 – 60% (Arad, Sântana, Chișineu-Criș and Lipova). Other services types exist in all the towns, percentages differing in terms of location, whether close to the border or farther from it, as well as of other natural environmental elements; fairly significant percentages (ca 10 – 15%) of real estate transactions in Chișineu-Criș, Ineu, Sebiș, Lipova and Sântana; passenger and fright transport prevails close to the Hungarian border (Nădlac, Pecica and Curtici) and in the large valley corridors, transit areas (Lipova), or along the big European or national transport axes (Arad, Sântana and Chișineu-Criș); services destined to enterprises are well represented in most towns, with high percentages in Arad, Nădlac, Chișineu-Criș, Sântana and Sebiș (Fig. 4).

Urban centres play a major role in modelling the geographical spread of rural firms. The greatest number of firms and types of services have the settlements in the neighbourhood of Arad City, although they are not missing altogether in other towns either. Retail trade is the domain of very small firms with limited economic power and a few employees. Transport is the appanage of bigger firms (boasting a profitable turnover and a large workforce) which operate mostly in settlements located in the vicinity of towns; their
number diminishes and economic power wanes with the distance from the urban, so much so that in some isolated places they are missing altogether. Some rural settlements are engaged in tourism and related services (Fig. 5).

Fig. 4 The structure of urban services firms (2006)
Structura după activități a agenților economici din sectorul terțiar din mediul urban (2006)

Fig. 5 The structure of rural services firms (2006)
Structura după activități a agenților economici din sectorul terțiar din mediul rural (2006)

3. LABOUR FORCE – STRUCTURE AND DYNAMICS

3.1. Agriculture
The rural settlements in which numerous firms are active and employ many wage-labourers are Olari, Semlac, Sânleani, Iratoșu, Horia, Vladimirescu, Avram Iancu, Săvârșin, Vinga, and Moneasa.

Agriculture and related services employ the largest farming labour force at administrative-territorial units (ATU) level, e.g. at Cermei, Horia, Iratoșu, Olari, Sânleani, Semlac and Șiria. Forest workers number between 30 and 100 people, and even fewer in fishing, fish culture and related services (3 – 7 people) (Fig. 6).

Fig. 6 The structure of farming, forestry and fishing employees (2006)
Structura salariaților din agricultură, silvicultură și pescuit (2006)
3.2. Industry and constructions

In 2005, the industrial labour force employed was obviously concentrated in urban centres, especially in Arad City, the firms employing them manufacturing mainly textile items, garments (Arad, Ineu, Curtici and Lipova), non-metal mineral products, iron/steel metallurgy, iron/steel constructions, machines and equipments (Arad, Chişineu-Criş, Sebiş, Lipova, and Pecica, with approx. 100 employees each). Only 15.4% of the overall industrial workforce was found in the rural area, and nearly half of it employed by firms located in the proximity of towns, or in rural localities under the administration of towns (Nadab, component settlements of Chişineu-Criş Town with over 3,400 people working at electrical devices and apparata firm (Fig. 7).

The number of construction workers steadily increased, totalling 7,133 employees (2006), of which 91% in towns, the others on rural construction sites.

3.3. Services

The territorial spread of employees in the tertiary sector follows the quantitative and structural distribution of profile firms. The employees’ types of activity (CANE) depends on the structure of profile firms with the exception of some types, e.g. firms servicing enterprises have few employees; transport firms operating in towns situated close to the country’s western border employ more people than firms farther from it (Figs. 8, 9).
4. CONCENTRATION AND DIVERSIFICATION OF ECONOMIC ACTIVITIES

Farming works are practiced in all the administrative-territorial units of Arad County, however, some correlations between this type of activity and land use types are quite obvious:
- in the plain, where high quality arable soil cultivated with wheat, maize and sun-flower prevail, firms are profiled on plant crops and animal breeding; this is the area where over one-third of the local farming consultancy centres and two cereal storage companies (Cerealcom SRL and Comcereal SA, storage capacity 150,000 tons and 100,000 tons, respectively) operate;
- in the north of the county, there is a distinct agricultural area cultivated mainly with wheat, maize and vegetables. Profile firms exist only in two communes (Mișca and Șicula) and they employ few labourers. A local farming consultancy centre operates in Șicula;
- in the mountainous area, one finds mostly pasture lands, natural hay-fields, maize and potatoe crops. Forestry firms are concentrated especially in the north, in the Zarand and Moneasa depressions, and in the south, along the Mureș Corridor. A number of five local farming consultancy centres operate in the area;
- in the Gurahonț and Hălmagiu depressions, forestry firms employ few workers. A local farming consultancy centre operates there (Fig.10).

The current trend of Arad County firms is to concentrate in areas with good communications and transport facilities, which are available in:
- industrial parks: UTA 1 Industrial Park overlaps the structures of the former Arad Textile Mills (UTA – Uzine Textile Arad); the next comprehensive industrial project initiated by Group Codlea Arad is the establishment of UTA 2 Logistic Park;
Fig. 10 Farming and industrial activities in the territory
*Diferențieri teritoriale ale activităților agricole și industriale*

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Fig. 11 Services activities in the territory
*Diferențieri teritoriale ale serviciilor*
-industrial zones prove to be kind of economic launching bases for Arad County. A study carried out in 2004 shows that this county best illustrates of how foreign direct investments can be drawn in by creating industrial zones with firms of various profiles, especially the manufacturing of car components: “Leoni” (Germany), “Takata Petri” and “Yazaki” (Japan). Major industrial zones: Arad – West Industrial Zone (25 investors), Arad – East Industrial Zone, Arad – North Industrial Zone and South – Zădăreni Industrial Zone;
- Curtici – Arad Free Zone covers 90 hectares and has two platforms: one at Curtici (75 ha) and the other in the area of Arad International Airport (15 ha). Curtici Free Zone proves to be very attractive for German investors who wish to take 3 hectares on lease for a three million investment in a metal processing unit (Fig. 10).

As regards services firms (exclusively in tourism) there is an obvious disparity in the number and quality between those located in the eastern and in the western parts of the county. A detailed analysis of these firms by location, types of services and specific infrastructure has shown the following:
- in the west part of the county services firms are more numerous and employ more people proving beneficial both to the labour structure and the local economy. In many localities (especially towns) public services (e.g. health and education) have an adequate infrastructure;
- the east of the county falls short of an adequate utilities infrastructure, which makes public services deficitary. There are few services firms and also few employees, most of them active in education and health units. An exception makes Ineu Town, where services firms match their west Arad County counterparts (Fig. 11).

Tourism firms are obviously operating in tourist zones, basically in Arad City, in Lipova Hills settlements, at the foot of the Zarand Mountains, alongside the Mureș Corridor, in the Gurahonț, Hălmagiu and Moneasa depressions and in Nădlac Town.

5. CONCLUSIONS

Looking at the territorial distribution of economic activities in Arad County one finds the following:
- farming works (well represented both in the plain and hilly regions) and forestry works (specific to the county’s Carpathian zone) fall into three CANE types, in terms of the biodiversity, soils and climatic conditions of the three relief steps: the cultivation of land and related services in the plain and hills, forestry and forest exploitation in the mountains. In the hilly zones, which show transitional physical-geographical features, activities are more wide-ranging. Each CANE farming type also shows some dysfunctions: there is a tendency to englobe small plots of land into larger agricultural exploitations, but the practice is less frequently met than it should, though elements liable to stimulating it do exist; despite forest exploitation being regulated and monitored, there are cases when this activity proves unsustainable for the forest environment, in particular, and the natural one, in general;
- there is a wide range of industrial and building activities both in town and the countryside, the local economic milieu being revitalised largely in Arad City and in towns from the west of county. By its geographical position close to Romania’s western border, all types of economic activity, primarily, secondary and tertiary ones have significantly developed. Characteristic of the urban economies are the industrial activities practiced in industrial
zones (undergoing a vast process of reorganization and functional restructuring of production and labour), free zones (Curtici-Arad) and industrial parks. Unlike the diversity of industrial activities seen in towns, also seen in the rural settlements adjoining them (Arad, in particular), the others manufacture mainly garments ("lohn"\(^2\)), wooden items, furniture, etc:

\(^2\) Lohn based business ("Lohn" (wage, salary in German) using cheap unskilled or little skilled local labour, importing raw materials processing and exporting them. The two contracting parties are the exporter and the importer (usually a prestigious firm known in the international market). This type of activity is common practice in the light industry in particular.
- services represent a dominant sector both in town and the countryside, which basically means tertialization of the whole Arad County economy. This is a normal and desirable development for an economy that had been industrialised under socialism, and is now profiting primarily from its geographical position at Romania’s western border, as well as from other viable opportunities. The workforce employed in the tertiary sector is less numerous than in industry and constructions. While economic agents perceive tertialization as a positive development, from a social viewpoint it proves to be rather fragile, given that most of the occupied population works in the industrial sector (it is the case of urban centres in principal, and where and there of some rural localities). This situation raises problems for
certain industrial (sub)branches producing in the “lohn” system, fact that weakens the local economy and makes it vulnerable when several untoward elements/factors pile up. The situation becomes even more stressing whenever a numerical, structural discrepancy between labour offer and demand comes up. The presence of exogenous social components (foreign labour force) within a territorial system induces fundamental changes in its structure given that future evolutions have to cope with elements whose impact can hardly be predicted, either because “the new” is unknown or insuffciently known (Figs. 12, 13, 14, 15).

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