



Impact of the Industrial Activity on Demography in the Neighbouring Rural Area of Dej Municipium, between 1930 and 2004

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Theme relevance

Our paper focuses upon population dynamic in Dej area, on the changes determined by the industrial activity of the urban centre, along with other social and economic changes, especially after 1989. Dej municipium and the rural neighbouring space has the features of a critical area (P.A.T.R., p. 254, Cocean, 2005, p. 156) because of its variation in development despite the opportunities ensured by its central geographical position in the North-West Development Region and the favourable position in the Corridor of the Someş. The particular development of relations between the urban and the rural of the area (as studied by Benedek, 1998) (e.g. the population in the periurban area of Dej has ensured since 1965 the industrial labour force of the town) determined us to realise this study that includes both spaces (urban and rural) in order to realise a coherent analysis. An earlier study¹ was done in 1997 on the theme that we approached and its goal was to “analyse the territorial relations in order to point out and to regulate the economic co-operation possibilities related to the use of the common natural resources and to correlate the investment programmes” (P.A.T.I.C., vol. 1, p. 9) of the settlements.

Geographical coordinates of the studied area

Benedek J. and Bagoly P., (2005) considered that one characteristic of Romania after 1989 was the population’s suburbanisation process (p.117) as a consequence of both economic constraints for some and of welfare for others (p. 118). Dej, as a medium size town, was given as an example (along with Turda, Mediaş, Bistriţa, and Alba Iulia – p. 119) by the two mentioned authors, for the tendency of the medium size towns of Transylvania to enlarge their suburban zone. Dej town is included in the Western urban axes of the Transylvanian Depression: Dej – Gherla – Cluj-Napoca – Turda – Câmpia Turzii – Aiud – Teiuş – Alba Iulia – Sebeş (Benedek, Bagoly, p.126), together with its neighbouring communes, belonging to its suburban or periurban area. The studied area, with 36.182 ha (its area is 5,42% of the area of Cluj County - P.A.T.I.C., vol. 1, p.33) and a total population in 2002 of 53.955 inhabitants includes Dej municipium and five neighbouring communes under its direct influence: Căşeiu, Căţcău, Cuzdrioara, Jichişu de Jos, and Mica. Dej municipium, together with the five communes administer 33 settlements. From the physico-geographical perspective, the area belongs to the Hills of Cluj and of Dej and to the Hills of Ciceu, subunits of the Someş Plateau, especially to its meadow and corridor units determining the “shelter climate” characteristic of the majority of the settlements. Subsequently, these six administrative-territorial units are situated in a hilly area, in the Corridor of the Someş and in its adjoining space (Pop, p.152). Căţcău is situated on the second and third terrace of the Someş, and Căşeiu on a terraced cone of the valley that flows in the Someş, on its right side.

¹ *** (1997), *Planul de Amenajare a Teritoriului Intercomunal Căşeiu, Căţcău, Cuzdrioara, Jichişu de Jos, Mica* (P.A.T.I.C.), vol. I, II, III.

Mica is situated at the confluence of the Someșul Mare and the Someșul Mic rivers. Cuzdrioara is situated in the Hills of Cluj and of Dej. The latter, together with Cășeiu and Câțcău, is a part of the orchard belt of Dej (Pop, p. 130). Cuzdrioara, Jichișu de Jos, and Mica are considered in other studies¹ suburban communes of Dej municipality, as well.

The role of infrastructure was significant for the space organisation (Surd, Bold, Zotic, Chira, 2005) and the relations between the five communes. The bad communication network between the five communes (the absence of the circulation rings able to realise the direct link among them, P.A.T.I.C., vol. 1, p. 2) and the better one with Dej favoured the polarising determined by the municipality. The radial development of the valleys with the convergence point in Dej fortified the role of the centre in relation with the periphery. Dej municipality is a hydrographical knot (a confluence area), a railway and road knot, and a transit passage. All these functions explain its overcrowding (P.A.T.I.C., vol.1, pp. 4-5). Its most important functions used by neighbouring rural population are economic, finance and banking, educational and medical.

The studied area is characterised by disparities in the location of the industrial units. The industrial function belongs mainly to Dej and has had a direct impact both on attracting the labour force from the neighbouring rural space and on the rural-urban migration. Nevertheless, in spite of the opportunities the municipality offers to its own labour force and to that in the rural space, a recent study (P.A.T.I.C., vol. 1, p. 4) drew attention upon the future impossibility of the economic units in the town to offer enough jobs.

History of the industrial development of Dej municipality

Even though no concrete data exist in order to establish the beginning of Dej, its appearance and development along the centuries were tightly correlated, especially to three factors. *The first* was the existence of the salt resources in Ocna Dej. This salt resource was near the surface and of superior quality, having few impurities and no hydrocarbons intrusions (Bogdan, Hășnaș, p. 20). It was easily exploited centuries ago and it was an excellent ingredient for food, and later on, a very good industrial raw material. *The second factor* was the position of Dej at the contact of two different landform units, having a diversified and even complementary economic potential: terraced hills belonging to the Someș Plateau, with rocks for construction, forested areas, orchards, etc., and the fertile meadows of the two Someș Rivers. *The third factor* was the location of Dej at the intersection of the corridors belonging to the three rivers: the Someșul Mare, the Someșul Mic, and the Someș. This location was favourable for the appearance of an important communication crossroads: one route on the North-South direction, along the united Someș and then on the Someșul Mic, linking Transylvania with the North-Western part of Romania and another route on the East-West direction from Moldavia along the Corridor of the Someșul Mare up to Dej, and continuing along the Olpret and the Brăglez valleys, mentioned as "the route of salt" (this route started in Ocna Dej and headed to Zalău and Marghita, and to the Pannonian Plain – Pop, p.153).

Although essential for a long time, the function of salt exploitation and transport both on land and water had lost its importance by the beginning of the 18th century. But, the location of Dej at the contact area of two different landform units and at an important crossroads ensured its development as a market town (Rüsz Fogarasi, Enikö, 2003), and thus becoming a commercial and handicraft centre favouring the exchange of products within and among the neighbouring settlements.

An important moment for the economic development of the town was in 1881 when the railway infrastructure was set up: in September 15th, 1881, Apahida-Dej railway was open to traffic, following in August 9th, 1882, Ocna Dej-Dej, in May 3rd, 1885, Dej-Bistrița, and in October 1st, 1885, Dej-Jibou-Zalău railway. Thus, Dej became an important railway knot connected to the Northeast, Northwest, and to the South of Transylvania. Although the setting up of the railway system opened new perspectives for urban economic development, the start of industry in Dej was situated in the third and fourth decade of the 20th century when the county of Someș was born and had its administrative centre in Dej. During this period, a cement plant was

¹ *** (1997), *Planul de Amenajare a Teritoriului Intercomunal Cășeiu, Câțcău, Cuzdrioara, Jichișu de Jos, Mica* (P.A.T.I.C.), vol. I, II, III.

functioning using the rio-dacitic tuff in the proximity of the town, the salt mine, several workshops, and several small units of the food industry (Geografia României, vol. III, p. 533) were located nearby the railway station. All these were functioning for the needs of the town and of the neighbouring settlements.

In that context, at the end of the Second World War and especially after 1950 new food units appeared (fruit preservation, milk processing, and meat preservation), as well as wood processing plants (Pop, p.152). The most important impact was the setting up of the industrial platform, in 1965, in the Eastern part of the town, towards Cuzdriroara. Even though environmental pollution followed the appearance of the industrial activities, for their development and location the extant raw materials were taken into account (e.g. wood, salt), together with the existence of the gas pipe, the electric energy network, the water resource of the Someș, the facilities offered by the function of the town as a railway and road knot, and the extant labour force. Later on this one was quantitatively important due to its professional qualification.

At that time, the industrial platform included the Group of plants for cellulose and paper production (in 1963, was set up the nowadays Someș-Dej plant), the Furniture Plant and the Synthetic Fibres Plant (Geografia României, vol. III, p. 533) having tight connections among them. Simultaneously, in the proximity of the railway station new plants appeared and thus a second industrial and depositing area. The majority of these plants were in the field of food industry (the Butter Plant, the Fruit Preserve, Juice and Apple Vinegar Plant) (Geografia României, vol. III, p. 533), also involving the women in the industrial activity. At the same time, the former cement plant turned to the production of magnesium refractory brick (Pop, p.152) for metallurgy and glass industry etc. Other smaller units got specialised in miller's trade, bread manufacture, and meat processing and were dispersed in the entire town. All these economic units ensured a high number of jobs that determined a significant migrational movement of the population from the neighbouring rural area to Dej, an issue to be discussed in the second part of our paper.

Between 1990 and 2005, the new political, social and economic context determined the Romanian society to cope with several new elements: the disappearance of economic directing and the setting up of the legislative framework ensuring local autonomy while taking into account (during the decision process) the local opportunities, resource and competence, as well as the local people's interests, either individual or collective. This situation instantly involved the neighbouring rural communities' right to decide. Nevertheless, Dej influence was still very strong. At the same time, private initiative was supported and private property was recovered.

After 1990, the old industrial units were privatised, but still using the old equipment and polluting the environment. Besides these, new problems appeared: ensuring the raw material and the market for selling the products. At present, the industrial activity is still located in the two main industrial areas of Dej, but having low productivity.

In the industry of Dej town the production focuses on: cellulose and paper, furniture, refractory materials, vegetables, fruit and meat preserves, concentrated juice, etc. (P.A.T.I.C., vol. 1, p.41). The main industrial activity of the town is still the production of cellulose and paper (S.C. *Someș S.A.*, *Tiger Someș*), numerous industrial plants of the town depending on this sector. The second as importance is the food industry represented by the following societies S.C. *Napolact S.A.* (dairy products), S.C. *Romcons S.A.* (vegetables, fruit, and meat preserves), *Pektirom S.R.L.* (fruit concentrated juice, pectin). The metallurgic industry is represented by societies such as *Metalicplas S.R.L.* (lattice, zinc fibre, nails), *Somplas Prodexin S.R.L.*, chemical industry by S.C. *Cesom* (cellulose fibres), wood processing industry by S.C. *Samus S.A.* (furniture), construction material industry by S.C. *Refrabaz S.A.* (refractory bricks for the metallurgic industry, of glass, and cement), textile industry by *Socom Progresul Dej* (using the Lohn system), and parapharmaceutic industry by S.C. *Gughis S.R.L.* (baby diapers).

According to the *Strategy for the development of Cluj County, 2007-2013* (pp. 59-61) and to the P.A.T.R. (2004), the setting up of Dej-Gherla industrial park was proposed. The purpose was the economic rebirth of Dej municipality and of its neighbouring space, the remodelling of the traditional industrial branches, the appearance and development of several new branches and sub-branches, to offer jobs for the qualified and available labour force, and to create complementary income sources for the local budgets. The industrial park might be

placed between the two towns of Dej and Gherla and should have specialised in paper production (articles needed in the education process), in food industry (fruit preservation, juice), and in wood processing industry (furniture for hotels and offices). This proposal was taken into account because of the following: the extant industry, the raw material sources, and the local labour force.

Social and economic changes dynamics as reflected into the population’s features (1930-2005)

The dependence between Dej municipality and the neighbouring rural space was not motivated only by the need of the latter for accessing some of the service sector present only in the urban space, but also by the industrial profile of the town that had to be supported by *the periurban space* (as defined by Nicolae, 2002) (where the individual agricultural activity dominated) both through its labour force and through its agricultural products (Surd, 2003). The hierarchy of the five neighbouring communes – Cășeu, Cățcău, Cuzdrioara, Jichișu de Jos, and Mica – (in the P.A.T.J. quoted in the P.A.T.I.C., vol. 1, p.32) highlighted the differences between them in what their viability was concerned, according to the development opportunities they had in the years to follow (this state of facts was first noticed in 1997): Cuzdrioara – high viability, Mica, Cășeu, and Cățcău medium viability, and Jichișu de Jos characterised by low viability. So, the proximity of Dej municipality was a favourability factor on a long term.

Because the connection between Dej and the neighbouring rural space was dominated by the economic component, in the beginning we discussed the features of the urban centre economy and of the six communes as they were reflected in their demographic structures. The impact of the economic activities of Dej was reflected in the population natural and migrational movements, in its economic structure, and in the age groups structure etc.

After 1960, territorial mobility followed the development model promoted by the communist system, within which the accomplishment of three processes was observed. These processes affected both the Romanian urban and rural space: industrialisation, collectivisation, and urbanisation (Benedek, 2003, p. 115-116). Benedek J. (2003) differentiated between towns as reception space for migrants, being affected by industrialisation and the effects of the collectivisation in the rural space and the rural space for migrants' emission. The latter space was also affected by collectivisation and the consequences of urbanisation. For instance, at the 1956 census, in Cluj region, no person worked in the production of cellulose and paper. This situation changed, the 1966 census mentioning for Cluj region 2.094 persons active in that branch of activity².

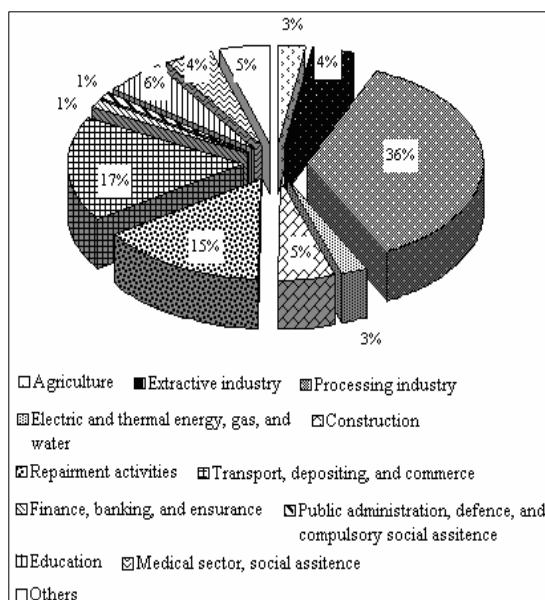


Figure 1. Dej municipality population structure on activity branches (2004).

While analysing the mean number of employees in the industry of Dej municipality, between 1985 and 2002, using the data in the locality sheet, we noticed an ascendant trend during 1985 and 1990, followed by a descendant one between 1990 and 2002.

The same situation could be noticed for the mean number of employees in all the activity branches of the town, but with several fluctuations. Nevertheless, while in 1985 these were 19.665 persons, with a peak in 1990 (23.057 persons), in 2002, their number was only 12.842 persons.

In 2004, the highest number of employees in the economy of Dej was in the processing industry, followed by that in the transport, depositing, and commerce sector (figure 1).

² Relevant for the situation in Dej.

**Impact of the Industrial Activity on Demography in the
Neighbouring Rural Area of Dej Municipality, between 1930 and 2004**

The economic structure of the population, according to the data of the 1992 census (table 1), as well as its economic situation in 1992 and 2002 (tables 2 and 3), showed the features of the urban and periurban space and their development directions.

Table 1. Population economic structure in 1992.

Activity sectors	Primary (%)	Secondary (%)	Tertiary (%)
Dej municipality	11,0	56,0	22,0
Cășeiu	90,7	4,3	5,0
Cățcău	81,7	6,3	12,0
Cuzdrioara	83,4	14,3	2,3
Jichișu de Jos	93,4	2,4	4,2
Mica	93,6	2,9	3,5
Rural total	88,7	6,0	5,3
Area total	29,8	44,0	17,6

Table 2. Population according to its economic situation in 1992.

Locality	Active population			Inactive population		
	T ³	M ⁴	F ⁵	T	M	F
Dej	19.514	10.699	8.815	21.702	9.546	12.156
Cășeiu	1.911	1.211	700	2.856	1.216	1.640
Cățcău	1.023	577	446	1.394	610	784
Cuzdrioara	1.246	669	577	1.615	745	870
Jichișu de Jos	621	344	277	745	342	403
Mica	1.478	856	620	2.410	1.069	1.324

Table 3. Population according to its economic situation in 2002.

Locality	Active population			Inactive population		
	T	M	F	T	M	F
Dej	15.770	8.723	7.047	22.667	10.000	12.667
Cășeiu	1.459	969	490	3.423	1.477	1.946
Cățcău	685	465	220	1.813	774	1.039
Cuzdrioara	929	589	340	2.046	832	1.214
Jichișu de Jos	290	205	85	1.037	443	594
Mica	1.122	742	380	2.714	1.165	1.549

Table 4. Population migrational growth between 1966 and 1984.

Year	Dej municipality	Cășeiu	Cățcău	Cuzdrioara	Jichișu de Jos	Mica
1966	716	-46	-5	-1	-64	-29
1970	515	-62	-21	-13	-44	-33
1975	757	-98	-47	-34	-41	-43
1976	573	-115	-52	-26	-50	-49
1977	496	-136	-69	-45	-42	-42
1978	574	-172	-44	-75	-62	-55
1979	503	-69	-75	-38	-48	-89
1980	619	-164	-77	-57	-52	-106
1981	737	-214	-77	-67	-84	-110
1982	530	-204	-61	-63	-88	-113
1983	423	-143	-27	-49	-74	-76
1984	208	-129	-62	-59	-51	-75

The people's economic situation was reflected into the demographic dependency rate, the latter being also influenced by the population age groups structure and by the two types of population movements: natural and migrational. Analysing *the population migrational growth between 1966 and 1984* – the climax of industrialisation for Dej municipality – we noticed the constancy of the positive growth for the urban centre and of the negative growth for the

³ Total.

⁴ Male.

⁵ Female.

neighbouring communes. The highest values of the negative growth overlapped the following years: 1980, 1981, 1982 (table 4), when the same high values were also characteristic of Dej and thus a communicative vessels type of relation could be noticed.

Comparing the population natural movement with its migrational one between 1985 and 1997 (table 6), we noticed the constant fluctuation of the population natural growth and of the migrational growth for Dej (one's values rising over the other's and vice versa). Thus the demographic stability of the urban centre was affected.

When analysing each type of population movement, we noticed the negative values of the migrational growth after 1990, with a peak of departures in 1990, and the negative absolute values of the population natural growth since 1993.

The negative values of the migrational growth were a characteristic of all the studied communes during the above-mentioned period.

Only in the case of Cuzdrioara and Cășeu, more attractive in comparison with the other, positive values appeared after 1993. Positive values were also characteristic of Jichișu de Jos and Mica in 1996 and 1997. Except of Cășeu (during 1985-1990) and Cățcău (in 1987 and 1989), the population natural growth had constant negative values in the rural space.

Table 5. Persons living in the commune and working in Dej or Cluj-Napoca (P.A.T.I.C., vol. 1, p.28).

Commune	Commuters	To Dej	From Cluj-Napoca
Cășeu	850	830	20
Cățcău	326	326	-
Cuzdrioara	989	989	-
Jichișu de Jos	225	223	2
Mica	397	397	-
Rural total	2.787	2.765	22

Between 1998 and 2002, the migrational growth of Dej municipality was negative in the first half of that period and positive in the second half of: -167, -147, and of +196, +51, +223 persons respectively. The negative trend characterising the migrational growth for Dej was the same between 2000 and 2005, while the positive trend remained the same for

the five communes (a positive trend characteristic of the majority of them since 1993-1994). Nevertheless, 2005 was a threshold for all the analysed administrative units: almost a doubling of the above-mentioned negative migrational growth (in absolute values) for the population of Dej and a negative migrational growth for all the units of the rural space (table 7).

The number and the origin of the commuters made the different degrees of attractiveness characterising the settlements of the area explicit. We chose the 1985-1988 period for exemplifying.

The attractiveness of Dej municipality was very high as more than a quarter of those commuting to Dej were from outside the county of Cluj (table 8).

That was also evidence in support of its considerable influence on the neighbouring rural space. Out of the five communes, only Cășeu was attractive for outside-the-county commuters. That commune was also the target of the greatest number of inside-the-county commuters heading to the rural area neighbouring Dej.

In an analysis worked out in September 1997⁶ of the commuting phenomenon in the studied area, the fluxes of persons from the neighbouring rural space to Dej and Cluj-Napoca were pointed out (table 5).

The greater intensity of commuting was more obvious when we compared the number of commuters heading from the studied rural space to Dej (2,765 persons) with that of the commuters from remote communes (645 persons from Bobâlna, Chiuiiești, Iclod, Mintiu Gherlii, Unguraș, and Vad) (P.A.T.I.C., vol. 1, p.29). For the same period, from a total number of 296 people commuting from Dej to the neighbouring rural space (figure 2), 175 persons worked in the five communes, 33 in Gherla, and 88 were commuting to Cluj-Napoca (P.A.T.I.C., vol. 1, p.29). Except for Cuzdrioara commune, the medical personnel and the teachers were the majority of those commuting from Dej to anyone of the neighbouring communes.

The favourability of Dej for occupying the labour force in its economy was reflected by the male activity rate of 52,8% in comparison with the female one of 42,0% (P.A.T.I.C., vol. 1, p.27), while in the neighbouring rural space the male activity rate was of 34%, and the female one of 28% (in 1992).

⁶ *** (1997), *Planul de Amenajare a Teritoriului Intercomunal Cășeu, Cățcău, Cuzdrioara, Jichișu de Jos, Mica* (P.A.T.I.C.), vol. I, pp. 27-30.

Impact of the Industrial Activity on Demography in the Neighbouring Rural Area of Dej Municipality, between 1930 and 2004

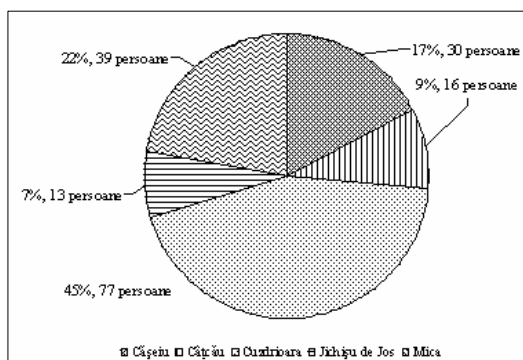


Figure 2. Commuters from Dej moving to the neighbouring communes (after the date from P.A.T.I.C., vol. 1, p.30).

After its industrialisation (1956-1992), the population of Dej municipality was characterised by constant growth, while the first 21st century census drew attention to its population decrease with 2,779 inhabitants since the 1992 census (figure 3). This was a consequence of the negative population natural and migrational growth in most of the years after 1989.

Table 6. Population natural growth and migrational growth between 1985 and 1997.

Year	Dej municipality		Căței		Cățâu		Cuzdrioara		Jichișu de Jos		Mica	
	Natural growth	Migrat. growth	Natural growth	Migrat. growth	Natural growth	Migrat. growth	Natural growth	Migrat. growth	Natural growth	Migrat. growth	Natural growth	Migrat. growth
1985	218	324	12	-136	-5	-50	-6	-30	-11	-30	-13	-53
1986	309	185	24	-107	-12	-13	-13	-27	-2	-32	-4	-36
1987	281	285	28	-57	9	-14	-10	-41	-5	-28	-20	-45
1988	332	385	15	-89	-8	-44	-4	-42	-10	-60	-8	-74
1989	370	332	2	-93	19	-22	-6	-15	-6	-31	-18	-84
1990	240	-451	9	-239	-2	-93	-5	-44	-8	-97	-25	-92
1991	116	-30	-19	-72	-10	-29	-2	-8	-24	-13	-27	-15
1992	109	-39	-16	-38	13	-45	-5	-1	-8	-11	-41	-50
1993	-1	-80	-19	6	-13	-11	-26	-13	-9	-8	-28	-3
1994	-29	31	-7	7	8	-22	-3	8	-17	-15	-41	-7
1995	-8	-33	-19	-48	-13	-17	-2	20	-6	-31	-44	-8
1996	-21	-70	-24	30	-6	14	-9	30	-17	4	-56	13
1997	-77	-15	-16	10	-27	-6	-26	9	-17	11	-34	2

Table 7. Population migrational growth between 2000 and 2005.

Year	Dej municipality	Căței	Cățâu	Cuzdrioara	Jichișu de Jos	Mica
2000	-311	49	26	41	38	63
2001	-54	37	13	3	8	32
2002	-223	41	15	-5	4	6
2003	-276	21	6	48	26	41
2004	-291	69	33	62	8	92
2005	-522	-46	-	-29	-8	-42

Table 8. Commuters. 1985-1988 period.

Year	Dej municipality			Căței			Cățâu		
	From the county	Outside the county	Total	From the county	Outside the county	Total	From the county	Outside the county	Total
1985	3.890	1.206	5.096	88	-	88	35	-	35
1986	3.934	1.198	5.132	86	-	86	36	-	36
1987	4.015	1.087	5.102	92	2	94	31	-	31
1988	3.974	1.022	4.996	97	2	99	27	-	27

Year	Cuzdrioara			Jichișu de Jos			Mica		
	From the county	Outside the county	Total	From the county	Outside the county	Total	From the county	Outside the county	Total
1985	28	-	28	50	-	50	38	-	38
1986	26	-	26	48	-	48	38	-	38
1987	31	-	31	48	-	48	32	-	32
1988	34	-	34	50	-	50	27	-	27

The population of the neighbouring communes had the same trend of constant growth between 1930 and 1977 (figure 4).

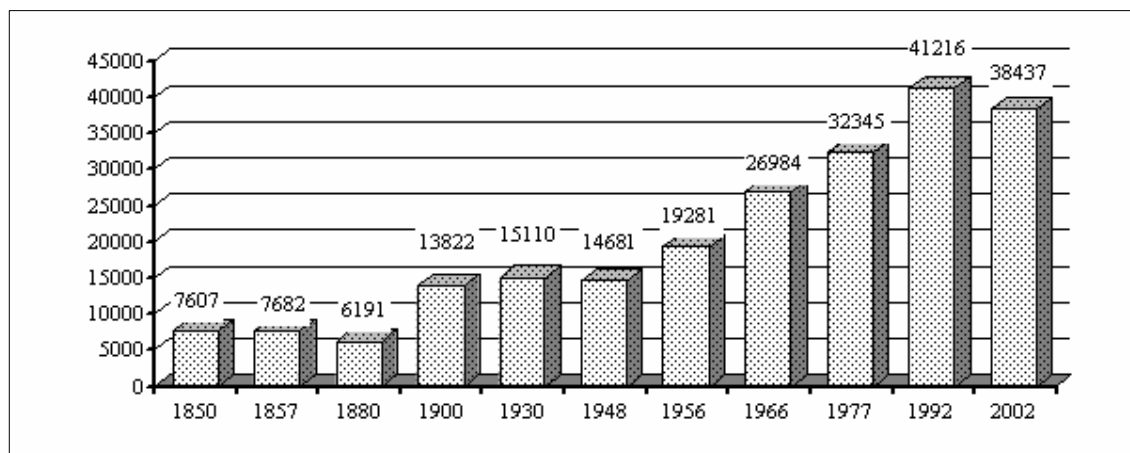


Figure 3. Numerical evolution of the population in Dej municipality, between 1850 and 2002 (censuses).

Between 1977 and 1992, the population of the five communes decreased very much (for Cășeiu with 1,187 inhabitants, Cățcău – 517, Cuzdrioara – 444, Jichișu de Jos – 771, and for Mica with 992 inhabitants). According to the data from the 2002 census the population of three of the five communes increased (Cășeiu, Cățcău, and Cuzdrioara), while the population of Jichișu de Jos decreased with 39 inhabitants and the population of Mica with 52 inhabitants.

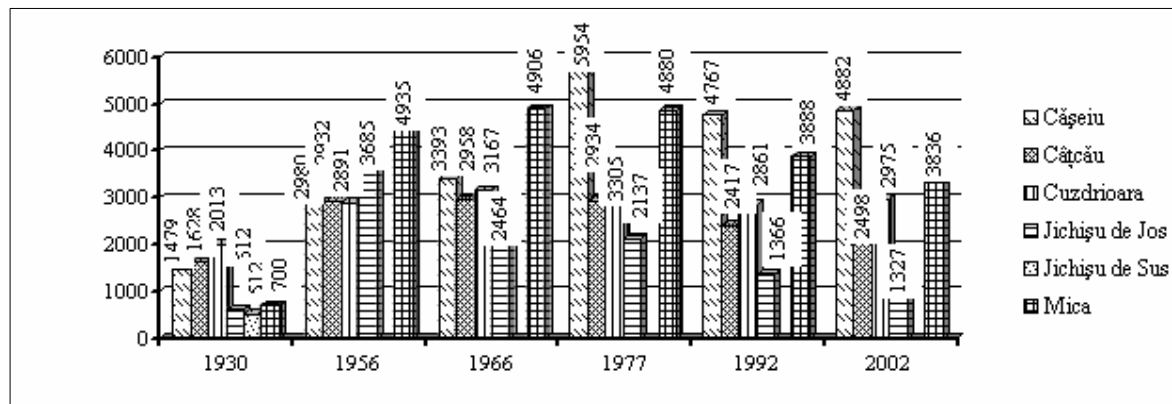


Figure 4. Numerical evolution of the population in the neighbouring communes of Dej municipality, between 1930 and 2002, according to the censuses data.

In the case of Cășeiu and Cuzdrioara, the population constantly increased between 2002 and 2004, while in 2005 their population decreased. In Mica, Jichișu de Jos, and Cățcău the number of people had small fluctuations or was characterised by little growth (figure 5).

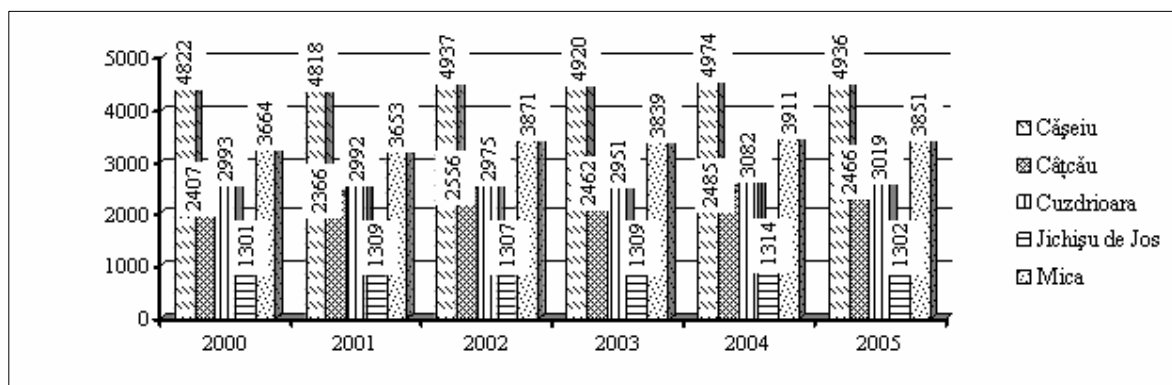


Figure 5. Population on July, 1 between 2000 and 2005.

**Impact of the Industrial Activity on Demography in the
Neighbouring Rural Area of Dej Municipality, between 1930 and 2004**

The suburbanisation of the rural space was supported by the decrease of the urban population percentage between the last two censuses (from 72,9% in 1992 to 71,24% in 2002) and the increase of the rural population percentage (from 27,1% to 28,76% in 2002), but on the background of the general decrease of population. The population decrease in this area may be analysed by the centre⁷-periphery model, as the annual decrease rhythm of “the population in the periphery villages is faster than that of the central villages or that of the administrative village in each commune” (P.A.T.I.C., vol. 1, p.25). Observing this rule, Cuzdrioara and Cășeiu had a balanced population evolution between the last two censuses (1992 and 2002), because of the proximity of Dej municipality, while the population of the other communes decreased.

Although we did not use the same five-year periods for the age groups in 1930 and 1992, the population ageing could still be noticed between the two census moments (see the case of Dej municipality, where the calculation could be done according to both variants – table 9). In 1930, the population of the area was young. In 1992, the population of Dej municipality, although having a high ageing degree (above the good number of 0,42), was the youngest in the area, while in 1930 it had a higher ageing rate than the neighbouring rural population. In 1992, the rural population was the most ageing, its values rising above the mean of the area itself. The population in Jichișu de Jos had the highest ageing rate, Mica commune following it (table 9). The population ageing degree had higher values for five of the six administrative units of the area, except for Jichișu de Jos. Although the population of the entire area had aged in comparison with the one ten years ago, the rural population had lower values in 2002 than in 1992 just because of Jichișu de Jos commune where the ageing rate had lowered (table 9).

Table 9. Population ageing in 1930, 1992, and 2002 (censuses).

Census	1930 ⁸	1992 ⁹	1992 ¹⁰	2002 ¹¹
Dej municipality	0,124	0,566	0,283	0,923
Cășeiu	0,091	1,144	-	1,195
Cățcău	0,118	1,497	-	1,618
Cuzdrioara	0,101	1,345	-	1,354
Jichișu de Jos + Jichișu de Sus (for 1930)	0,101	3,368	-	2,790
Mica	0,063	1,688	-	1,794
Area total	0,096	1,601	-	1,612
Rural total	0,094	1,808	-	1,750

Population ageing came together with its feminisation. The gender structure of the population at the 2002 census drew attention to the percentage decrease of the males as compared to the data in 1992. That was the case for all the administrative-territorial units, except for Mica commune. The rural population of the area was more feminised than that in Dej municipality but the difference was not significant (table 10).

Table 10. Sex structure of population in 1930, 1992, and 2002.

Census	Percentage of male population		
	1930	1992	2002
Dej municipality	52,87	49,22	48,71
Cășeiu	49,62	50,91	50,10
Cățcău	48,21	49,11	49,59
Cuzdrioara	50,86	49,42	47,76
Jichișu de Jos	50,62	50,22	48,83
Mica	50,85	50,00	50,28
Area total	50,50	49,58	49,21
Rural total	50,03	49,93	49,31

Comparing *the demographic dependency rate* of 1930, 1992, and 2002, we noticed that in 1992 it decreased for all the communities of the area (Dej and the five communes) from the values in 1930, and thus pointed to the higher percentage of those active.

⁷ Dej municipality is the only administrative unit in the area that had a permanent positive natural growth (P.A.T.I.C., vol. 1, p. 24).

⁸ For the 1930 census, the age groups were: 0-19 years (young), 20-64 years (adult), and 65 years and over (old).

⁹ For the 1992 census, the age groups were: 0-14 years (young), 15-59 years (adult), and 60 years and over (old).

¹⁰ Calculation for Dej municipality took into account the following age groups: 0-19 years (young), 20-64 years (adult), and 65 years and over (old). The data were available only for Dej municipality.

¹¹ For the 2002 census, the age groups were: 0-14 years (young), 15-59 years (adult), and 60 years and over (old).

Despite this, for all the administrative-territorial units of the area, the demographic dependency rate still had high values, rising above 50% (table 11), thus showing the pressure of the inactive on the active. The situation in 1992 (of rate decrease as compared to 1930) was still valid only for the people of Dej. For the rural communities, the demographic dependency rate had a growth from several percentages to over 10%. The growth of the rate in the rural space of the area was an effect of the birth rate decrease, of the negative or of insignificantly positive migrational growth, all these on the background of an ageing population. In 1992, the demographic dependency rate for the whole area was above 70% and just a little higher in the rural space, and in 2002 a 7% increase was registered for the entire area and on approximately 10% for the rural space (table 11).

Table 11. Demographic dependency rate in 1930, 1992, and 2002.

Census	1930 ¹² (%)	1992 ¹³ (%)	1992 ¹⁴ (%)	2002 ¹⁵ (%)
Dej municipality	79,0	56,5	65,4	49,0
Cășeu	96,6	74,9	-	81,2
Cățcău	97,4	71,0	-	84,9
Cuzdriora	15,4	67,6	-	68,5
Jichișu de Jos + Jichișu de Sus (for 1930)	123,8	82,1	-	107,0
Mica	122,2	73,8	-	77,1
Area total	89,06	70,98	-	77,95
Rural total	91,08	73,88	-	83,74

Conclusions

In our study we focused on the demographic features of the rural space neighbouring Dej municipality and we highlighted the strong relation between those features and the polarising town. The urban and rural population decrease in the area came together with other two phenomena: the population ageing and the tendency of feminisation especially in the neighbouring rural space. The high ageing degree and the high values of the demographic dependency rate drew our attention toward this area from the perspective of *the demographic component's critical features* as population was seen as a resource for sustainable development. We also concluded that the urban and rural populations' behaviour underlined *the suburbanisation process for the rural neighbouring space of Dej municipality*.

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¹² For the 1930 census, the age groups were: 0-19 years (young), 20-64 years (adult), and 65 years and over (old).

¹³ For the 1992 census, the age groups were: 0-14 years (young), 15-59 years (adult), and 60 years and over (old).

¹⁴ Calculation for Dej municipality took into account the following age groups: 0-19 years (young), 20-64 years (adult), and 65 years and over (old). The data were available only for Dej municipality.

¹⁵ For the 2002 census, the age groups were: 0-14 years (young), 15-59 years (adult), and 60 years and over (old).

**Impact of the Industrial Activity on Demography in the
Neighbouring Rural Area of Dej Municipality, between 1930 and 2004**

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