

North-East Regional Development Plan 2007-2013

Social-Economic Analysis

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1. Main characteristics of the region

The region covers the North-East part of the country and according to the tradition it is a part of the old historical region of Moldavia.

Geographically, the region is neighboring Ukraine in the North, Galati and Vrancea counties in the South (South-East Region), Republic of Moldova at the East and the counties of Maramures and Bistrita-Nasaud (North-West Region), as well as Mures, Harghita and Covasna counties (Centre Region).

Taking the benefit of a rich historical, cultural and spiritual background, the region harmoniously combines tradition with modernism and the past with the present, its potential being used in development of infrastructure, rural areas, tourism and human resources

Relief

The region is characterized by a harmonious combination between all the forms of relief, 30% being represented by mountains, 30% by Sub-Carpathian (hilly) relief, and 40% by plateaus and plains. This last form of relief covers more than 70% of Botosani, Vaslui and Iasi counties

A longitudinal cross-section through the region looks like a slope plunging from West to East with different variations.

In the West, the Carpathian Mountains stand as a wall with heights of nearly 2,000 meters in the North (Pietrosu, Rarau, Giumalau, Ocolasu Mare and Hasmasu Mare Peaks) and height drop toward South (Ciuc Mountains, Trotus Mountains and, to a low extent, Vrancea Mountains).

The Sub-Carpathians have heights ranging between 7-800 meters and surround the mountains like a tight belt. Going further, the Eastern half is split in two large areas: the Moldavian Plain in the North and Barlad Plateau in the South

The North-West part of the region is known as Plateau of Suceava, is 500 meters in height and famous for its "obcine" (slight waving of the ground constituted as a chain of petrified waves)

Climate

The various types of relief create climate areas that show significant differences between mountains and hills and plains.

In the region's mountain area (West of Suceava, Neamt and Bacau counties) the climate is moderate continental, with cool summers and winters rich in snowfalls. In the Sub-Carpathian area, which includes hills and plains (East parts of Suceava, Neamt and Bacau counties, as well as the entire territory of Botosani, Iasi and Vaslui counties), the climate is continental, with hot and dry summers and cold winters, most of the times with no snow at all. The yearly average temperature in the air is 2°C in the mountain area and 9°C in the Sub-Carpathian area of hills and plains.

Hydrological network

The region is crossed by eight important water-streams, which stretch on North-South direction, the largest hydrographical basins being Siret (42,890 sq. km) and Prut (10,990 sq. km). The latter represents the natural border of Romania with the Republic of Moldova along circa 680 km.

Many of the water-streams in the region were subject to vast arrangement and breastworks. Even since the '70s a chain of seven hydro-electrical dams have been built along Bistrita River together with the largest artificial lake of the region (Bicaz-Neamt), with a 1.130 million cubic meters at normal water retention level

Underground natural resources

- 1) Manganese: Dadu, Ciocanesti-Oarta, Vatra Dornei, Iacobeni, Saru Dornei, Brosteni;
- 2) Poly-iron sulphides: Carlibaba, Fundu Moldovei, Valea Corbului, Gemenea, Lesul Ursului;
- 3) Mineral sparkling water: Neagra Sarului, Saru Dornei, Vatra Dornei, Poiana Negrii, Dorna Candreni, Poiana Stampei, Cosna, Oglinzi, Baltatesti;
- 4) Sulphurous and iron-bearing water: Strunga, Nicolina Iasi – Iasi County, Branceni, Murgesti, Pungesti, Gura Morii – Vaslui County, Baile Slanic, Moinesti, Targu Ocna, Poiana Sarata, Sarata-Bacau – Bacau County;
- 5) Construction materials:
 - Limestone: Pojorata, Campulung Moldovenesc, Botus – Suceava County, Bicaz Chei - Neamt County, Barbatesti, Costesti, Ipatele, Paun, Schitu Duca, Deleni, Strunga – Iasi County, Darabani, Stefanesti, Lipceni – Botosani County, in Vaslui County the limestone could be found mostly on the rivers' banks;
 - Clay: Bistrita, Timisesti, Tasca, Girov, Ozana – Neamt County, Vladiceni – Iasi County, Bucecea, Dorohoi, Leorda, Mihaileni, Botosani – Botosani County, Doftana, Magura, Calugara – Bacau County;
 - Sandstone: Tarcau – Neamt County, Cosula, Tudora, Hudesti - Botosani County, in Vaslui County the sandstone and and the sand could be found on the river banks, Ghimes Faget and to East of Slanic Moldova area – Bacau County, Solca Platinoasa – Suceava County, Doabra. Frasin;
 - Gypsum: Miorcani, Darabani - Botosani County, Perchiu Onesti – Bacau County;
 - Quartz sands: Miorcani and Alba Duesti;
 - Construction sand: Hudesti – Botosani County, Lespezi – Iasi County, Cornatel, Urechesti Garleni, Orbeni – Bacau County;
- 6) Peat: Poiana Stampei – Suceava County, Dersca – Botosani County;
- 7) Salt: Cacica – Suceava County, Moinesti, Sarata, Targu Ocna – Bacau County.
- 8) Sulphur fields in Caliman Mountains;
- 9) Bituminous schist field in Tazlau – Neamt County;
- 10) Natural gas: Tazlau-Oituz - Bacau County, Tazlau, Roman – Neamt County, Todiresti and Frasin.

Region's administrative units (counties, cities, towns and communes)

The North-East Region consists of six counties (Bacau, Botosani, Iasi, Neamt, Suceava and Vaslui) and has a total population of 3.674.367 inhabitants (according to the last census carried out in 2002) being situated from this point of view on the first place among the eight regions of the country (16.94% of the total Romania's population).

In terms of expansion, the region covers a surface of 36,850 km² (15.46% of total country surface), the most expanded counties being Suceava with a total surface of 8.553 km² and Bacau, with 6.621 km².

Territorial administrative units

Territorial unit	Total	surface	Number	of	Number	of	Number	of	Number	of
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	(square km)	inhabitants (on 18.03.2002)*	municipalities	of cities	communes	villages
BACAU	6.621	706.623	3	5	79	490
BOTOSANI	4.986	452.834	2	2	68	336
IASI	5.476	816.910	2	2	85	420
NEAMT	5.896	554.516	2	2	70	347
SUCEAVA	8.553	688.435	5	3	90	396
VASLUI	5.318	455.049	3	1	71	456
REGION TOTAL	36.850	3.674.367	17	15	463	2.445

Source: Romania's Statistics Yearbook 2003

* Note:

- data provided according to census of population and dwellings;
- according to Romania Statistics Yearbook 2003, on December 31st 2002 the population of the region was of 3,743,242 inhabitants;
- in the present document, as calculation basis for other statistic indicators, the information provided by Romania Statistics Yearbook was used.

Main centers of the region (positioning, accessibility, distances)

- **Main urban centers of the region**

Bacau County is located in the Eastern half of the country, in the middle basin of Siret and Trotus Rivers. Its location has contributed to the development of the area by taking the advantages given by the European road that crosses the county. Towns like Targu Ocna and Trotus have been developed thanks to the existing natural resources (mountains of salt). The Slanic Moldova health resort obtained an international fame due to its healing waters rich in salt. Bacau, the county capital hosted a catholic bishopric, statute obtained through a patent from Pope Bonifaciu the 9th. A wide range of enterprises from the industrial sector, business infrastructure and banking sector as well as public and private education institutions is concentrated also in Bacau.

Botosani County is located in the North extremity of Romania, between the superior water courses of Siret River at the West and Prut River at the East.

Botosani town appeared on a favorable commercial crossroad, which has assured its prosperity right from the beginning. It is specially known for giving to Romanian culture some of its greatest genies: Mihai Eminescu, George Enescu and Nicolae Iorga.

Iasi County is located in the Central-Eastern part of Moldavia, in the middle basins of the Prut and Siret Rivers.

The city of Iasi, also called the capital of historical Moldavia, is the largest city in the region (320.888 inhabitants) being an important academic centre with its seven higher education institutions. Iasi is also the location of an important research-development nucleus for the industrial sector, represented by most of its branches. Here there is the greatest Orthodox bower in Romania – the Metropolitan Cathedral (1840-1880). With the occasion of celebrating 2,000 years of Christianity, the city of Iasi had been nominated as being one of the 5 European cities intended for international pilgrimage.

Neamt County is located in the Central-Northern part of Moldavia, in the basins of Bistrita, Siret and Moldova Rivers.

The county capital Piatra-Neamt, historically attested in 1392 under the name of Craciun's Stone, situated near the Ceahlau Masiff, this true „Moldavia's Olympus”, cannot be considered only a tourism crossroad but also an important tourism and industrial objective with various both historical and architectural monuments

Suceava County is located in the North of Moldavia, in the superior basins of Siret and Bistrita Rivers. The churches with external paintings of Suceava are famous and known worldwide. They were included in the UNESCO World Heritage List, alongside Putna and Probota. Suceava town was advantaged by the fact that here the main customs office of the country functioned having also the role of storehouse. The town had the privilege of being the mediator for the commerce with oriental products to Poland and Hungary.

Vaslui County is located in the Eastern part of Romania, on the middle course of the Barlad River. In spite of its historical richness monuments less represent Vaslui. The existing ones did not resisted through the time and had been restored. The natural richness that brought reputation to these places was represented by the vineyards (the remarkable wines of Husi). Also here, through a long time experienced wine purifying system, very good high quality brandy is obtained.

- **Road and railway access to the main centers of the region.**

Road access:

- Bucuresti – Bacau – Roman – Suceava - Siret (border check and cross-point) – E85 European road;
- Suceava – Vatra Dornei – Cluj Napoca (E576) which connects with E60 European road Cluj Napoca – Oradea’
- Bacau – Brasov – Pitesti, E577 European road (which links with E70 European road Craiova – Vidin - Scopje);
- Bucuresti - Barlad – Albita - Chisinau - E581 European road that crosses Vaslui County.
- Roman -Tg. Frumos, which turns-out to Botosani (E58) and Iasi - Sculeni (E 583).

Railway access:

- Bucuresti – Bacau – Roman - Suceava – Siret – Ukrain – main line 500
- Bucuresti - Iasi – Ungheni – Republic of Moldova – main line 600.

The following airports provide the air transport within the region:

- Bacau Airport – domestic and international flights
- Iasi Airport – domestic and international flights.
- Suceava Airport – domestic and international flights.

Road distances between main centers of the region and Bucharest (km):

Road distances between main towns of the region and Bucharest (kilometres):

	Bacau	Botosani	Iasi	Piatra-Neamt	Suceava	Vaslui	Bucharest
Bacau	-	193	130	58	151	83	294
Botosani	193	-	125	145	42	258	499
Iasi	130	187	-	139	145	71	430
Piatra-Neamt	58	145	139	-	103	129	354
Suceava	151	42	145	103	-	216	457
Vaslui	83	258	71	129	216	-	359

Source: Romania's Statistics Yearbook 2003

Having a total area of 36,850 sq. km and a number of **3,674,367** inhabitants, the North-East Region is the largest of all the eight development regions in Romania.

The rich relief includes hills and plains that are suitable for a wide range of agriculture crops and mountain areas with spectacular landscapes favorable for tourism development.

The region has cross-border points with the Republic of Moldova and Ukraine (by roads and railways), and three civil airports (Bacau, Iasi and Suceava).

2. Social – economic framework

2.1 General social – economic development

2.1.1 Regional economic context

The geographical and historical conditions have determined a serious social and economic gap in the North-East Region. The economic feature of the '60s was agriculture prevalence, the living standard being very low.

During 1965-1985 the region was subject to a forced industrialization, aimed at restoring the existing economic condition by purchasing modern state-of-the-art producing capacities, fact that determined the establishment of an industrial culture, labor force qualification and training of a large number of specialists.

Nevertheless, the industrial development was planned to be too diversified and didn't take into consideration the natural, energetic and environmental resources available in the region.

**Evolution of regional and national GDP, expressed in billion lei current prices
According to SEC 1995 methodology**

	1998	1999	2000	2001
North-East Region GDP	50385.4	68522.3	96348.4	143397.3
North-East Region GDP (million USD)	5677	4469	4442	4934
North-East Region Real GDP	32464.8	46361.5	66769.5	104364.8
North-East Region Real GDP growth rate (%)	-	-7.98	-2.51	+8.32
National Level GDP	373798.2	545730.2	803773.1	1167687
National Level GDP (million USD)	42118	35594	37054	40180
National Level Real GDP	240849.3	369235.5	557015.3	849844.9
National Level Real GDP growth rate (%)	-	-1.22	+2.06	+5.73

Source: Romania's Statistics Yearbook 2003

Remark: Unreal GDP growth rate has been calculated based on the average annual exchange rate USD-ROL communicated by Romanian National Bank (RNB).

It could be ascertained that the during 1998-1999 there was a decline registered at both regional and national level due to effects of liberalization of the foreign currency exchange rate against Romanian Leu and because of the loss resulted from the restructuring process initiated during 1997.

The faulty management, a direct result of the reticence in implementing the quality standard system for the production and products, the enterprise development strategy, the marketing rules in promoting the products alongside the loss of sales markets and drop in the level of competitiveness of the products due to the lack of resources for maintaining the investment, have caused a sharp decrease in the industry since 1997, with serious implications on the development of the region as concerning all the other sectors. The economic decline in 1999 is with 50% higher than the one registered at national level.

In 2000 the economic decrease was much lower than during the previous year (2.51%) while the national level economic increase was of 2.06%.

In 2001 the region registered the first economic growth of 8.32%, superior to the national one, as a result of both monetary and fiscal policy promoted at national level and of the funds the North-East Region took the benefit of starting with 1999.

At the same time, in 2001 the region brought its own contribution of 12.28% to the national GDP.

2.1.2 Comparisons in terms of GDP/inhabitant

The regional GDP / inhabitant is one of the indexes that provide relevant information about the economic situation of the North-East Region because it is not influenced by the differences existing between the regions' population level.

The table below shows the North-East regional GDP evolution in 2000 and 2001 by comparison with the GDP of other regions and the national level as well. The analysis of available data reveals that the North-East region has the lowest GDP/inhabitant by comparison with the other regions, representing 70% of the national value in 2000 and 71.72% in 2001 and placing the region on the last place from this point of view.

Regional GDP in 2000 and 2001, expressed in billion lei current prices In accordance with SEC 1995 methodology

	Year	National	North-East	South-East	South	South-West	West	North-West	Centre	Bucharest
GDP	2000	803773	96348	92868	98070	74888	75267	95009	101775	168791
GDP/ inhabitant (thousand Lei)		35826	25067	31852	29207	30009	36767	33313	38386	74082
GDP/inhabitant as percentage of national GDP (%)		100	70.00	88.90	81.50	83.80	102.60	93.00	107.10	206.80
GDP	2001	1167687	143397.3	131652.3	143122.8	104850.7	112235.8	136673	144211.6	250719.4
GDP/ inhabitant (thousand Lei)		52110	37374	44900	41380	43781	55212	48111	54650	110286
GDP/inhabitant as percentage of national GDP (%)		100	71.72	86.16	79.40	84.01	105.95	92.32	104.87	211.64

Source: Romania's Statistics Yearbook 2003

The highest gap in terms of regional GDP exists between the North-East Region and Bucharest Ilfov's levels, the first one representing almost one third of the latter's. The North-East Region finds itself as being situated within the group of the poorest development regions that includes also South Muntenia, South-West and North-West regions, these ones having GDP values under the national average of presented indicator.

Comparative situation of regional GDP and sector added value against the national level (billions lei) in accordance with SEC 1995 methodology

(The growth rate has been calculated based on the annual USD-ROL exchange rate communicated by NBR)

	2001	1999/1998 (%)	2000/1999 (%)	2001/2000 (%)
Total North-East	143397.3	-7.98	-2.51	+8.32
Industry	40939.3	-20.4	11.0	16.4
Agriculture	26819.9	-8.8	-13.0	18.4
Constructions	7048.5	-22.4	20.5	17.3
Transport	13132.8	5.7	0.5	7.7
Trade	11324.8	-2.5	-14.6	-4.3
Other services	44141.2	0.04	-5.5	-0.9
Total Romania	1167687	-1.22	+2.06	+5.73
Industry	323046.8	-6.7	12.3	7.1
Agriculture	156128.6	-8.4	-15.2	27.6
Constructions	62333.7	-2.66	-0.5	15.4
Transport	116813.2	3.4	2.5	5.8
Trade	106640.7	0.7	-9.9	-5.7
Other services	402724	4.4	4.2	-0.06

Source: Romania's Statistics Yearbook 2003

As far as the sector gross value added is concerned it can be noticed that in 1999 compared with 1998 all sectors have registered decreases both at regional and national level. Higher decreases have been registered especially in industry -20.4% (compared with -6.7% at national level), constructions – 22.4% (compared with – 2.66% at national level).

In 2000, by comparison with 1999, a decrease of the agriculture sector has been reported at both regional and national level due the bad climate conditions of the year 2000. Surprisingly there is an increase of 20.5% in the construction sector (compared with the decrease of 0.5% at national level) and a steep fall of trade activities – 14.6%. The existing situation in the construction sector is a result of the upward trend shown in 2000.

In 2000, the real increase of regional gross added value was provided by industry with 16.4% (7.1% at national level), agriculture with 18.4% (27.6% at national level) and construction sector with 17.3%. As concerning the services (including trade) the regional gross added value continued to drop.

2.1.3 Sector structure of regional GDP and labor productivity

One of the indexes that could provide relevant information about the economic situation of the region is represented by participation to the GDP make up by comparison with other regions' levels and labor productivity comparing with national level.

Participation to GDP make-up by comparison with other regions' levels in 2001 (billion Lei current prices, according with SEC 1995 methodology)

	Total	North - East	Contribution of RGDP to NGDP %
Agriculture	156128.6	26810.7	17.17
Forestry exploitation and hunting economy, fishery and pisciculture.	50.6	9.2	18.18
Industry	323046.8	40939.3	12.67
Construction	62333.7	7048.5	11.30
Commerce	106640.7	11324.8	10.61
Transport and storage	116813.2	13132.8	11.24

Financial transactions	23006.5	1945.6	8.45
Immovable transactions and other services	156554.4	13486.7	8.61
Public administration and defense	42486.9	4855.8	11.42
Education	31087.6	5513.6	17.73
Health and social care	18082.9	2740	15.15
Indirectly measured financial transactions (IMFT)	-17984.6	-2206.4	12.26
Regional gross added value (VGAV)	1042837.3	127939.3	12.26
Taxes on products	121857.7	14950	12.26
Customs duties	9038.2	1108.8	12.26
Subventions on products	-6046.2	-600.8	9.93
Regional GDP - total	1167687	143397.3	12.28
Regional and national GDP / inhabitant (lei)	52109359	37373852	

Comparative situation of regional and national real productivity levels

Regional level	1998			1999		
	GAV (billion lei)	Employed population	Productivity Million lei / employed person	GAV (billion lei)	Employed population	Productivity Million lei / employed person
Agriculture*	9745.6	667300	1.46	13129.3	696900	1.27
Industry	13575	307900	4.41	15956	284700	3.79
Services	22205.5	409600	5.42	32220	382600	5.69
Of which - Constructions	2192	48800	4.49	2511	42800	3.96
National level	GAV (billion lei)	Employed population	Productivity Million lei / employed person	GAV (billion lei)	Employed population	Productivity Million lei / employed person
Agriculture*	53753.8	3348800	1.60	72776	3466100	1.42
Industry	98213	2316900	4.24	135344	2054000	4.45
Services	185126.6	2980800	6.21	280732.7	2753000	6.89
Of which - Constructions	19029	391000	4.87	27377	338400	5.47

Regional level	2000			2001		
	GAV (billion lei)	Employed population	Productivity Million lei / employed person	GAV (billion lei)	Employed population	Productivity Million lei / employed person
	16470.4	721500	1.07	26819.9	706900	1.29
Agriculture*	25577	269700	4.44	40939.3	280200	4.98
Industry	44190.6	396000	5.23	62386.5	392700	5.42
Services	4370	47000	4.35	7048.5	44000	5.46
Of which - Constructions						
National level	GAV (billion lei)	Employed population	Productivity Million lei / employed person	GAV (billion lei)	Employed population	Productivity Million lei / employed person
	88984.3	3569600	1.16	156128.6	3498000	1.52
	219480	2004100	5.13	323046.8	2016600	5.46
Agriculture*	411414.4	2895900	6.66	581595.9	2885800	6.87
Industry	39287	353300	5.21	62333.7	340100	6.25

Source: Romania's Statistics Yearbooks 1999-2003

* Agriculture=agriculture + silviculture, forests exploitation and hunting economy

In 2000, the services sector had the highest contribution on making up the regional GAV (gross added value) (47.03%), followed by industry (31.99%) and agriculture (20.96%). The first two mentioned sectors showed an annual increase of real productivity/employed person while the agriculture has a fluctuant evolution. Nevertheless the regional productivity during the analyzed period is inferior to the national one.

The regional share to the national GDP is high in agriculture and fishing sectors (17% respectively 18%), medium as concerning the industry and low when considering the services. As far as health care and education are concerned their share to national GDP is high at regional level.

Key issues in the general social-economic development

The regional GDP / inhabitant has the lowest value of all the regions, representing 71.7% of the national value.

The share of agriculture to regional GDP (20.96%) is higher than the national one (14.97%) in 2001.

The labor productivity in all activity sectors is lower than the national one.

2.2 Business environment

An enterprise could be considered as being micro-, small- or medium-sized if complies to all the conditions related to hired staff and turnover.

Comparing the definition of small-medium enterprises (SMEs) in Romania with the one recommended by EU it could be noticed that – in terms of number of employees – it is identical. As concerning the annual turnover, the Romanian definition, comparing with similar EU classification, is a more restrictive one, the maximum level of the annual turnover being of only 8 million euro (in EU – the turnover levels are: 7 million Euro for small-sized enterprises and 40 million Euro for the medium-sized ones).

Small and medium enterprises are an important segment of the regional economy, absorbing at the level of 2002 a great part of the total number of employees working in firms (40.40 %). If taking into consideration also the employees working in micro-enterprises it results a total share of 55.10%. In 2000 and 2001 the number of the SMEs existing in the region represented only 11.7% of the total existing in Romania. During 2000 – 2002, the number of SMEs/thousand inhabitants was the lowest comparing with the other regions (12.18 SMEs/thou inhabitants –2000; 12.27 SMEs/thou inhabitants – 2001 and 9.17 SMEs/thou inhabitants – 2002)

Generally, they have a better flexibility, are more receptive to the market needs, more innovative and skilful in answering to the consumers requirements, improving the competition environment, amplifying the organizational culture and creating the conditions for social stability.

Firms distribution in NE Region as well as their participation to Turnover and Gross Investments during 2000-2002

Size Number of employees		0 - 9			10 - 49			50 - 249			> 249			Total		
		2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Number of units	Number of units	31666	32007	32239	3721	3845	3944	994	1045	1057	307	302	294	36688	37199	37534
Turnover	Billion lei current prices	18989	31354	48257	29200	35519	52800	21887	36906	50827	48300	75686	99539	118376	179465	251423
Turnover	Mil. EURO	952	1205	1544	1463	1365	1689	1097	1418	1626	2420	2908	3185	5932	6895	8044
Personnel	Number of persons	64575	71493	69664	76450	74802	78643	105209	110623	113227	241195	235421	212856	487429	492339	474390
Gross investments	Billion lei current prices	1152	2044	4991	2321	2947	4559	2647	3812	6642	8245	12521	19997	14365	21324	36189
Gross investments	Mil. EURO	57.72	78.53	159.68	116.30	113.22	145.86	132.64	146.46	212.50	413.16	481.08	639.80	733.37	819.30	1157.85
% nr. of Units in NE region.	%	86.30	86.00	85.8	10.10	10.30	10.5	2.70	2.80	2.8	0.80	0.80	0.8	100	100	100
% Turnover in NE Region	%	16.00	17.50	19.2	24.70	19.80	21.0	18.50	20.60	20.2	40.80	42.20	39.6	100	100	100
% employees in NE region.	%	13.20	14.50	14.7	15.70	15.20	16.6	21.60	22.50	23.8	49.50	47.80	44.9	100	100	100
% gross investments in NE Region.	%	8.02	9.59	13.8	16.16	13.82	12.6	18.43	17.88	18.3	57.40	58.72	55.3	100.00	100.00	100

Source: Romania's Statistics Yearbooks 2001/2002/2003

During 1998-2000 the numbers of firms within the region has continuously decreased as a consequence of economic decline that occurred during 1997-1999.

In 2001, when the economy showed a significant boost, an increase of SMEs number has been reported (37,199 units). At the level of 2001 the highest share was represented by micro-enterprises (86.00%), followed by SMEs (13.10%). Although they represent 0.8% of the total number of the firms existing in the region, the large enterprises have a contribution of 42.20% to the total turnover and employ 47.80% from the total employees. As concerning the gross investments, 58.72% of them are carried out by large enterprises.

In 2002 the situation was similar to the one of 2001. The period 2000-2002 is characterized by an increase of the turnover and number of employees at the level of micro-enterprises and a decrease at the level of large enterprises. In this respect, the evolution of SMEs maintains a constant trend.

Distribution of local working units on activity sectors in 2002 and percentage of units per total sector

Number of units Activities (CAEN sections)	Total	Size classes, according to the number of employees				Percentage of units, on size classes per total sector (%)		
		0-9	10-49	50-249	>250	0-9	10-249	>250
Total North-East Region	37534	32239	3944	1057	294	85.90	13.33	0.79
Extractive Industry	68	25	27	8	8	36.77	51.47	11.77
Processing Industry	6505	4416	1356	554	179	67.89	29.37	2.76
Power and heat, gas and water	65	5	8	19	33	7.70	41.54	50.77
Constructions	1678	1099	387	169	23	65.50	33.14	1.37
Trade, car services and goods	22124	20353	1609	153	9	92.00	7.97	0.04

Number of units Activities (CAEN sections)	Total	Size classes, according to the number of employees				Percentage of units, on size classes per total sector (%)		
		0-9	10-49	50-249	>250	0-9	10-249	>250
Hotels and restaurants	1644	1445	170	29	0	87.79	12.11	0
Transport and storage	1866	1624	152	54	36	87.04	11.04	1.93
Post and telecommunications	2435	2218	164	49	4	91.09	8.75	0.17
Immovable agreements, renting, services	83	73	10	0	0	87.96	12.05	0
Health and social care	424	413	11	0	0	97.41	2.60	0
Community, social and personal services	642	568	50	22	2	88.48	11.22	0.32
Total Romania	322188	278879	32281	8656	2372	86.56	12.71	0.74
Extractive Industry	604	226	167	93	118	37.41	43.04	19.53
Processing Industry	47582	32428	9755	4140	1259	68.15	29.20	2.64
Power and heat, gas and water	532	78	92	161	201	14.66	47.55	37.78
Constructions	17057	12180	3389	1282	206	71.40	27.38	1.20
Trade, car services and goods	181388	167035	12895	1347	111	92.08	7.85	0.06
Hotels and restaurants	13678	11958	1440	262	18	87.42	12.44	0.09
Transport and storage	18648	16133	1724	482	309	86.51	11.82	1.65
Post and telecommunications	30941	28088	2080	657	116	90.77	8.84	0.37
Immovable agreements, renting, services	779	715	59	4	1	91.78	8.08	0.12
Health and social care	4441	4285	139	17	0	96.48	3.52	0
Community, social and personal services	6538	5753	541	211	33	87.99	11.50	0.50

Source: Romania's Statistics Yearbook 2003

The distribution of SMEs per activity sectors of economy observes their national distribution in terms of trade, services and industry. The private capital is also predominant and mainly relates to micro- and small-enterprises.

At the level of 2002, in the North-East Region the share of micro-enterprises from the total active units represents the majority with 85.90% (very close to the national value), followed by SMEs with 13.33% (higher than the national value of 12.51%).

As concerning the processing industry and the field of services, the majority of the total active units is represented by micro-enterprises. 92.00% of the total active units are involved in the trade sector, 87.79% of them are hotels and restaurants, 87.04% operate in transport and 65.50% in construction sector.

As regarding the structure of SMEs per activity sectors, they are highly represented in the extractive industry (51.47%), power and heat production (41.54%) and processing industry (29.37%). Most of the large enterprises operate in the field of electricity and heat production representing 50.77% of the total active units.

The turnover of local active units, structured on activities and size classes in 2002

	Total Billion lei	Of which: on size classes and activity sector			
		0-9	10-49	50-249	>250
		Values expressed in percentages			
Total at the National Level	2658998	18.33	21.30	21.00	39.36
Extractive Industry	60166	0.77	3.05	8.20	87.96
Processing Industry	847187	5.29	11.71	22.24	60.74
Power and heat, gas and water	217520	0.04	0.25	5.67	94.02
Constructions	160256	11.68	21.02	38.60	28.68
Trade, car repairing and goods	1020597	34.61	34.73	21.51	9.15
Hotels and restaurants	26701	28.90	28.05	28.46	14.56
Transport and storage	209272	12.54	17.41	15.70	54.35
Immovable transactions, renting, services	94746	33.65	31.14	25.34	9.87
Community, social and personal services	22553	18.33	14.14	30.78	36.52
Total at the level of North-East Region	251423	19.19	21.00	20.21	39.60
Extractive Industry	2301	2.95	13.73	37.67	45.65
Processing Industry	100503	5.60	10.36	19.73	64.31
Power and heat, gas and water	16306	0.06	0.30	3.76	95.88
Constructions	17577	12.88	18.95	40.87	27.30
Trade, car repairing and goods	91745	38.33	37.40	18.00	6.27
Hotels and restaurants	2359	37.60	28.44	33.96	0.00
Transport and storage	15757	13.44	16.11	22.35	48.50
Immovable transactions, renting, services	3782	48.78	25.78	24.00	1.46
Community, social and personal services	1093	24.97	16.55	54.62	3.86
<i>Source: Romania's Statistics Yearbook 2003</i>					

The small-medium enterprises have the highest contribution to the total regional turnover (41.21%) followed by the large enterprises (39.60%) and, to a lower extent, the micro-enterprises (19.19%). The micro-enterprises bring also the greatest contribution in the trade sector with 38.33%, immovable transactions (48.78%) and hotels and restaurants (37.60%).

The SMEs have the highest contribution to the total regional turnover in the sector of hotels and restaurants (62.40%), immovable transactions (49.78%), constructions (59.82%) and trade (53.41%).

The large enterprises contribute to the regional turnover of each activity sector (except the hotels sector), having the major contribution in sectors such as the extractive industry, processing industry and power sector.

- **Services provided by SMEs at regional level**

Within North-East Region operates a EuroInfo Center and an IRE (Innovation Relay Centre) in Iasi, there are 3 business incubators and 33 consultancy centers. The EuroInfo Center was created in 1999 as part of EuroInfo Romanian Network.

The EuroInfo Center provides:

- Services to entrepreneurs;
- Designing and creation of a portal destined for SMEs that will be intended for providing consultation in terms of specific legislation for SMEs;
- Development of new financing programs;
- Strengthening the capacity of interaction with Euro Info centers (EIC);
- Development of SMEs promotion-oriented activities through international and European cooperation relationships.

The three existing business incubators provide the incubation services for 118 firms contributing to creation of 230 new jobs.

The 33 consultancy centers of the region provide training, informing and consultancy services. The consultancy mainly aims the juridical and financial-accounting fields, the business-related consultancy being low represented. The quality level of the services provided is rather low and the activity needs to be "calibrated" according to quality efficiency indicators.

The present in-progress construction of the Technological and Industrial Park of Iasi and Software Park of Hemeiusi under PHARE 2000 programme (projects that are described in the sub-chapter „Business infrastructure”) is a favorable prerequisite for the development in the near future of a regional business environment. During the next period there are still to be built Bucovina Economic Center (Suceava) under PHARE 2001 programme and a business incubator in Botosani and Tutova Business Center in Barlad, under Phare 2002.

Business infrastructure

One of the main objectives of PHARE SEC programme – regional infrastructure component, is the development of business infrastructure as well as the possibility to access this infrastructure in order to improve the access to business environment, to information, services and technologies. Under this component of the programme, the following business infrastructure projects have been approved for the North-East Region:

❖ PHARE SEC 2000:

1. The business infrastructure development park for SMEs and private entrepreneurs located in Bacau County (HIT Industrial Park of Hemeiusi).

When locating this park the geographic positioning, the existing infrastructure within the counties, dynamics of business environment and the opportunities for labor force qualifying and specialization were taken into consideration. Therefore, it was decided to locate this park near Bacau having in view that this city is first ranked in the central part of Moldavia in terms of communication infrastructure and medium and high-level existing education institutions necessary for the specialization of labor force into the IT&C technology.

The HIT Industrial Park of Hemeiusi represents an opportunity both for the counties of North-East Region and for the Northern counties of South-East Region (specifically Vrancea and Galati counties), with positive effects on reducing the labor force migration to other more economically developed regions and consequently decreasing the unemployment level and related social costs.

The park is advantaged by the fact that its location is close to various access ways: 1 km away from national road DN 15 Bacau – Piatra Neamt, 13 km away from Bacau airport, 5,5 km far from railway.

The total area of the park will be of 10.85 ha. It will be located in Hemeiusi commune, at 9 km distance from Bacau. The works that have been financed under the programme consist of the main infrastructure of the park (buildings, rooms, facilities, utilities, etc.)

The park is structured in different component areas as following:

- Area for services and software production for SMEs (1,450 square meters)
- Area for industrial production (in total 5,000 square meters, consisting in 4 production houses and a warehouse)
- Area for services (built area of 500 square meters)
- Commercial area
- Spaces intended for production and services composed of 2 sections of 216 square meters each
- IT training center (two building with a built area of 63 square meters)
- Parks administrative building (345 square meters)
- Business center (292 square meters)

The project includes works to be carried out for providing the following utilities: water supply, household and rain drain sewerage system, natural gas and electricity supply, access roads and communication networks.

This industrial park, based on IT&C, will assimilate the unemployed labor force and will actuate the development of this economic activity sector at regional level. Circa 50 new direct jobs are to be created during the implementation phase and about 200 other jobs during the operational phase.

2. The academic innovation center and business development park for SMEs and investors – Iasi

The objective of this project is creation of an industrial park intended for high-tech industries that include companies operational into the IT&C and bio-technology fields. The purpose is stopping the migration of young specialized labor force by providing jobs for the graduates of these academic fields. In the first phase there will be built a 5,000 square meters building intended for

business purposes, with facilities of high transfer rate internet connection network. The park is to be located in Iasi, at 5 minutes distance from Nicolina railway station and national road Bucharest – Iasi and at only 35 minutes far away from Iasi Airport.

The park will include 14 lots for small-sized industrial buildings, 10 lots for medium-sized industrial buildings and 8 lots for large buildings.

The works to be financed are:

- Providing the connection of park to all necessary utilities, carrying out water, natural gas and electricity supply network as well as the sewerage system and heating (approx. 400 m)
- Construction of internal roads of the park
- An industrial building (model) functional for SMEs (200 square meters)
- Two industrial houses (models) functional for SMEs 600 square meters)
- An industrial house for large enterprises (800 square meters – model)
- Re-making 2 already existing industrial houses and conversion into offices hosting facility (650 square meters, respectively 2,500 square meters)
- Providing the furniture and equipment
- Civil construction works for soil stabilization.

❖ PHARE SEC 2001:

1. SMEs business incubator of Botosani

The specific objective of this project is to generate new jobs and facilitate the access to these jobs of different categories of population, to provide the transfer of feasible ideas between different companies and facilitate the application into practice of the results of scientific research, development of entrepreneurship spirit. The incubator will be the right place for evaluation, launching and application in practice of the entrepreneurial ideas. It will provide the following services:

- Consultancy;
- Training;
- Access to offices, training, communication tools, meeting rooms against accessible leasing rates;
- Financial assistance to SMEs.

Under the project 2 groups of buildings are to be rehabilitated and adapted to the needs of different activities of consultancy/assistance as well as to activities of production and services to be carried out by the incubated SMEs. The buildings have been selected based on the following reasons:

- The first group of buildings is located into the commercial center of Botosani town, near to the offices of financial and communication suppliers. Moreover, these buildings have a parking lot that is to be rehabilitated and expanded.
- The second group of buildings is situated in the industrial area and includes production and exhibiting facilities.

Project estimated budget:

Total budget: 2.70 million Euros, out of which:

- Phare funding: 1.65 million Euros
- Co-financing provided by National Fund: 0.66 million Euros
- Local co-financing: 0.38 million Euros

2. Bucovina Economic Center of Suceava

The following objectives are to be carried out under the project:

- a) A business incubator represented by a building for offices of a total area of 1,260 square meters.

- b) Spaces intended for production activities (8 production houses of 3,626 square meters in total)
- c) Exhibiting center with pavilions for presentation
- d) Improved access to Economic Center.

Project estimated budget:

Total budget: 4.99 million Euros, out of which:

- Phare funding: 3.12 million Euros
- Co-financing provided by National Fund: 1.21 million Euros
- Local co-financing: 0.65 million Euros

❖ PHARE SEC 2002

1. Tutova-Barlad Business Center, Vaslui County

The objective of this project is to carry out an exhibiting center, a business incubator and spaces intended for production-related activities.

The exhibiting center will have an all-purpose area of approx. 2,400 square meters and will include exhibition rooms, offices spaces, conference and presentation and training rooms.

The buildings intended for production activities will have a total area of approx. 2,500 square meters and will include 6 production houses.

All the buildings will be connected to water-sewerage-natural gas-electricity supply networks as well as to phone lines. The necessary logistics will be also provided in terms of parking lots, loading-unloading platforms, etc.

Project estimated budget:

Total budget: 4,985 million Euros, of which:

- Phare funding: 3.21 million Euros
- Co-financing from National Fund: 1.07 million Euros
- Local co-financing: 0.705 million Euros

Key issues of the business environment

- During 2000-2002 the number of smes/1,000 inhabitants was the lowest comparing with the other regions
- The contribution of SMEs to the turnover of processing industry is of only 30.09%.

2.3 Economic sector structure

2.3.1 Agriculture and silviculture

In 2001 the agriculture sector had a contribution of 20.96% to the regional gross added value (RGAV), superior to the contribution of the sector to the national gross added value (NGAV) (14.97%).

The contribution of North-East Region to the total agriculture production was of 17.17%. The agriculture sector showed a similar evolution with the national one during 1998-2000, registering a period of decline during 1998-2000 because of unfavorable climate conditions.

The population share occupied in agriculture in 2002 in the region was very high (51.12%, with 40.4% higher than the national one) and showed an annual ascending trend. 20.2% of the country's total population employed in agriculture is represented by North-East Region.

Contribution of agriculture (+ hunting, silviculture, fishing and pisciculture) to GDP, expressed in billion current prices, according to SEC 1995 methodology

	1998	1999	2000	2001	Annual growth rate (%)			% sector/ GDP 2000	% sector/ GDP 2001
					1999/1998	2000/1999	2001/2000		
North-East	9749	13134.9	16477	26819.9	-8.8	-13.0	18.4	17.10	18.70
North-East (million Euro)	976	806	825	1030					
Romania	53772.9	72805.2	89015	156179.2	-8.4	-15.2	27.6	11.07	13.37
Romania (million Euro)	5383	4467	4460	6000					

Source: Romania's Statistics Yearbooks 1999-2003

In 2001 the contribution of agriculture to regional GDP was of 18.70%, higher than the contribution to national GDP (13.37%) meaning that the regional economy is highly depending on agriculture. During 1998-2000 the contribution of this sector has continuously decreased due to unfavorable weather conditions and low productivity.

Comparative situation of agriculture production among regions in 2000 and 2001 (according to SEC 1995 methodology)

Agriculture	Total	North-East	South-East	South	South-West	west	North-West	Center	Bucharest
2000									
Billion lei	89015	16477	13099	13614	10395	9066	13110	12041	1235
%region/national	100	18.51	14.71	15.29	11.67	10.18	14.72	13.52	1.38
2001									
Billion lei	156179	26819	20447	28399	20765	18462	21368	17761	2083
%region/national	100.0	17.17	13.09	18.18	13.29	11.82	13.68	11.37	1.33

Source: Romania's Statistics Yearbook 2003

In 2001, the North-East Region brought its highest contribution to national agriculture production (17.17%). The last rated was Bucharest – Ilfov Region with only 1.33%.

Distribution of agriculture and forest lands in 2002 (and 2003), in ha

Territorial unit	Total surface	Agriculture surface	Forests 2002	Forests 2003
Romania	23839071	14836585	6388000	6368000
North-East Region	3684983	2131421	1185000	1188000
Bacau	662052	323468	267000	270000
Botosani	498569	392905	56000	56000
Iasi	547558	380997	97000	97000
Neamt	589614	283789	260000	259000
Suceava	855350	349131	435000	435000
Vaslui	531840	401131	70000	71000

Source: Romania's Statistics Yearbook 2003

The North-East Region holds 15.45% of total Romania's agriculture surface and 18.49% total surface covered by forests. The counties with the most stretched agriculture-dedicated lands are Vaslui, Botosani and Iasi and those with the most stretched forests are Suceava, Bacau and Neamt.

The works aimed at providing protection against erosion are carried out on too smaller areas of the bad land due to the high costs and insufficient equipment.

Agriculture

Although the North-East Region includes a large area of agriculture land - 15.45% of the total agricultural surface of the country, this resource cannot be efficiently capitalized, as the productivity is low for all types of crops, due to the influence of the following factors:

- Land quality, alternation of different soil categories, land fragmentation
- agricultural land is worked on small plots (1-3 ha), due to fragmentation of the land fund, as a result of privatization of the land under Law No. 18/1991 and the low level of mechanization, considering that a profitable land exploitation is achieved on plots of at least 50 ha per tractor.
- aged labor force (more than 28% of the rural population is over 60 years old), while young people migrate towards the urban centers
- high poverty level of the owners, who face many difficulties in crop production and animal breeding
- lack of capital for agriculture restructuring and modernization
- soil instability and erosion, numerous land slides

Due to the destruction of supply and pumping equipment throughout the irrigation systems of the region, the areas fitted out with irrigation equipment represent 135,441 ha (Bacau 20,920 ha, Botosani 20,234 ha, Iasi 50,433 ha, Neamt 10,414 ha, Suceava 3,778 ha, Vaslui 29,662 ha), the areas actually irrigated being, in fact, even smaller.

Land fund as used on December 31st, 2001- thousand hectares

County	Bacau	Botosani	Iasi	Neamt	Suceava	Vaslui	NE Region
Total area	662052	498569	547558	589614	855350	531840	3684983
Area for agricultural purposes	323468	392905	380997	283789	349131	401131	2131421
Of which: private sector	320308	388469	370233	276684	340299	395847	2091840
Arable	184628	298477	253491	170473	179859	288080	1375008
Pastures	87528	75146	88109	69394	91108	87349	498634
Hay fields	40247	14769	19651	40108	74819	7664	197258
Vineyards	7614	1847	11706	1111	-	15027	37305
Orchards	3451	2666	8040	2703	3345	3011	23216
Forests	279001	57187	99022	261330	456394	79182	1232116
Water	14765	13849	12589	10374	13630	8156	73363
Other areas	44818	34628	54950	34121	36195	43371	248083

Source: Romania's Statistics Yearbooks, 2002

The private agriculture sector is characterized by an excessive division of the land, due to the restoration of property rights under Law No. 18/1991, thus areas between 1 and 3 ha becoming the property of each owner. Of the total agricultural area in the private sector, the level of association of land owners ranges between 3 and 5% in Bacau County, 10.8% in Botosani County, 7.5% in Neamt County and 9% in Suceava County.

Animal breeding sector

As concerning the evolution of animal breeding sector in the region, the data analysis presented in the table below reveals a steady number of cattle, an increased number of bee families and a reduction of swine number. The sheep, horses and poultries contingencies didn't show significant variations during 1998-2001.

Livestock evolution in the North East Region - period 1998 – 2002 (thousands heads)

		2002	2001	2000	1999	1998
Cattle	Total	677.9	636	653	664	664
	Of which: for reproduction	405.6	394	395	384	382
Swine	Total	709	609	660	726	780
	Of which: for reproduction	47.8	41	39	41	51
Sheep	Total	1401.6	1406	1453	1543	1577
	Of which: for reproduction	1151.6	1154	1144	1212	1233
Horses	Total	217.8	206	203	196	187
Poultry	Total	12994.9	11630	11124	10869	11306
	Din care: adult layers	7970	7143	7007	6609	6425
Bees	Total (thousands families)	142.7	129	106	106	104

Source: Romania's Statistics Yearbook, 2002

The reports pointed out that more than 90% of the livestock are under private ownership, while the state sector, which used to have an industrial animal breeding system is in fact destroyed as a result of the poultry breeding sites, fatteners and farms have been shutdown.

As the number of animals is concerned, the counties having the best situation are:

- Cattle: Suceava County - 114.000 heads
- Swine: Bacau County - 154.000 heads
- Sheep: Iasi County - 336.000 heads.

Silviculture

Forest exploitations have a considerable contribution (to what???) through the high wood volume produced in the North-East Region and large existing timbered areas (Suceava 456,579 ha, Bacau 279,048 ha, Neamt 261,330 ha), supplying in 2001, 32.83% of the total wood volume in Romania.

Due to the lack of investment programmes and poor technology level existing in wood processing and furniture manufacturing industry, instead of exporting finished products for a better capitalization level, higher productivity and consequently for reviving this economic sector, large amounts of wooden raw material (as timber and cut wood) is being exported leading this way, in the near future, to an unreasonable exploitation of the forest fund and a degradation of the environment.

Wooden volume introduced into the economic circuit in 2002 (thou cubic meters):

Territorial unit	Total	Coniferous	Beech	Oak	Various hard species	Various soft species
Romania	16383.1	7165,6	4439,2	1494,8	1805,2	1478,3
1. North – East	5380,6	3789,9	824,1	110,0	338,1	318,5
Bacau	667,5	241,9	286,5	21,7	66,5	50,9

Botosani	125,0	5,2	19,7	23,6	46,3	30,2
Iasi	278,4	8,1	44,5	27,7	86,8	111,3
Neamt	1014,8	649,9	256,7	13,0	49,5	45,7
Suceava	3124,5	2884,0	190,0	7,1	31,8	11,6
Vaslui	170,4	0,8	26,7	16,9	57,2	68,8

Source: Romania's Statistics Yearbook, 2003

As illustrated, the Suceava County had the highest share of the wood volume introduced into the economic circuit in 2002, respectively 3,124 thousands cubic meters, Botosani County being situated at the opposite pole with only 125 thousands cubic meters.

The North-East Region includes more than 1,500 ha of forest, fauna and flora reservations as well as monuments of nature typical to the mountain sector, the most important being as following:

- Bacau county – the forest reservations of Slanic Moldova and Targu Ocna (Oriental pine tree)
- Iasi county – David's Valley (floral reservation located 5 km away from Iasi), Uricani Forest (8 km away from Iasi, a reservation of very nice oak and holm forests) and Dealu Mare forest, located near Deleni, with century-old beech woods)
- Neamt county – "Copper" Woods (30 km away from Piatra Neamt – a forest reservation with century-old holms), Silver Forest (a reservation with century-old birch trees), Padurea Gosmanu (forest reservation with spruce fir, fir tree and century-old beech trees of impressive sizes) and the Ceahlau National Park
- Suceava county – century old woods of Slatioara (300-400 years old specimens of spruce fir, beech and fir tree).

Key issues of agriculture and silviculture:

- In 2001, the contribution of agriculture sector to RGAV (20.96%) was higher than to NGAV (14.97%) that emphasizes the highly dependence on agriculture of the regional economy.
- Agriculture exploitation is carried out on small plots that vary from 1 to 3 ha.
- Low level of land owners association – 8% in terms of lands and 3% in animal breeding

2.3.2 Industry

In 2001 the North-East Region's share of national industrial production was of 12.67%. The industry share of regional GDP was of 28.55%, value that is very close to the contribution of this sector to the national GDP (27.66%).

The industrial production during 1998-2001, expressed in lei current prices (according to SEC 1995)

	1998	1999	2000	2001	Annual growth rate			% sector/ GDP 2000	% sector/ GDP 2001
					1999/1998	2000/1999	2001/2000		
North-East	13575	15955	25577	40939	-20.4	11.0	16.4	26.50	28.55
North-East (thou Euro)	1530	1041	1179	1408					
Romania	98212	135343	219479	323046	-6.7	12.3	7.1	27.30	27.66
Romania (thou Euro)	11066	8827	10118	11116					

Source: Romania's Statistics Yearbook, 2003

The industrial production decreased during 1990-1999 as a result of the following factors:

- ✓ Low capacity of adjusting to the changes occurred on domestic and external sales markets;

- ✓ Intense de-capitalization due to increasing inflation, sharp depreciation of national currency, low volume of investments, etc.
- ✓ Slow rhythm of privatization and restructuring
- ✓ Unstable and incoherent legislative framework that did not stimulate foreign and domestic capital investment.

After the industrial decline of 1999, there was a re-launching of the sector in 2000, in similar way with the national trend that determined an increase of 11%. The ascendant trend continued also in 2001 (16.4%) being higher than the one of national level (7.1%).

20.58% of North-East Region population is employed in this sector, the level being slight lower than the national one (23.60%)

Comparative situation between North-East and the other regions, in 2001

Industry	Total	North-East	South-East	South	South-West	west	North-West	Center	Bucharest
Billion lei	323046.8	40939.3	37941.9	41476.1	32058.7	30330.8	36394.8	52201.5	51312.1
Percentage	100.0	12.67	11.74	12.83	9.46	9.38	11.26	16.16	15.88

Source: Romania's Statistics Yearbook 2003

Banking sector in the North – East Region

In the region and in the most of its towns the following commercial banks are operational and provide banking services to legal and natural persons:

- Romanian Commercial Bank
- Romanian Development Bank
- Banc Post
- Transilvania Bank
- Ion Tiriac Commercial Bank
- Raiffeissen Bank
- CEC (House of Savings)

The EU funded programmes intended for providing credit support to SMEs in the region are:

- PHARE SEC 2000 Programme – credit line for SME's in total value of 8.1 million Euro for 4 regions, North-East Region being one of them, with a PHARE contribution of maximum 20% of the project value – implemented through Romanian Commercial Bank;
- PHARE SEC 2001 Programme – financial support provided to SMEs of a total value of the grant/region of 3,341,900 Euro, PHARE contribution of maximum 40% of the project value;
- ERDB Programme – SMEs Finance Facility amounted to 75 million Euro, launched in 1999;
- ERDB Programme – Trade Facilities which provides support to the importers and exporters with transactions within the ERDB operational area;
- PHARE Funds for productive investments up to 5,000,000 Euro representing maximum 85% of the investment value, credit granted for a period of 1 to 6 years and implemented through the Commercial Bank Ion Tiriac.
- The Rural Credit Guarantying Fund (RCGF) - guarantees up to 70% of the credit granted by the Bank for Food Industry and Agriculture – carried out through the Romanian Commercial Bank.
- Credits for micro-enterprises and SMEs from PHARE funds, with at least 20% Romanian capital, totally amounted to max. 500.000 Euro, granted for 6 years period and representing maximum 85% of the investment value.

- Capital credits financed by EBRD, granted for SMEs with an annual turnover up to 2 million Euro for financing the circulating capital needed for production, trade or services, totally amounted to 125.000 Euro, for maximum 1 year period.

Description of key enterprises in the region

Even under the conditions of the industrial decline in the region, the higher turnover and number of employees are to be found in state-majority ownership enterprises with more than 250 employees (see 2.2). They operate almost exclusively in the large municipalities (Iasi, Bacau, Piatra Neamt, Suceava, and Botosani).

In the North-East Region the success firms mentioned in the Firms Top (publication edited by the Chambers of Commerce and Industry at county level) operate in the following sectors:

- engineering, plant and machinery industry
- food industry;
- wood, cellulose and paper manufacturing industry, furniture manufacturing;
- light industry (knitwear, garments, footwear)
- medicines;
- tourism;
- transports;

Romanian legislation, which has not encouraged the potential strategic investors, promoted a high fiscal level concomitantly with low performance interests on loans generating the "financial blockage" phenomenon.

A privatization of the state-owned companies without coherent programmes and the excessive bureaucracy corroborated with the inappropriate management of the main shareholders, have gradually lead to loss of sales markets shares, decrease of the competitiveness of the products supplied on the market and technological limitation, reasons for shutting down many productive units and generation of an impressive number of unemployed. During the past period (1996-2002) part of the mentioned companies benefited of coherent programmes and foreign capital infusion and experienced an important economic re-launch.

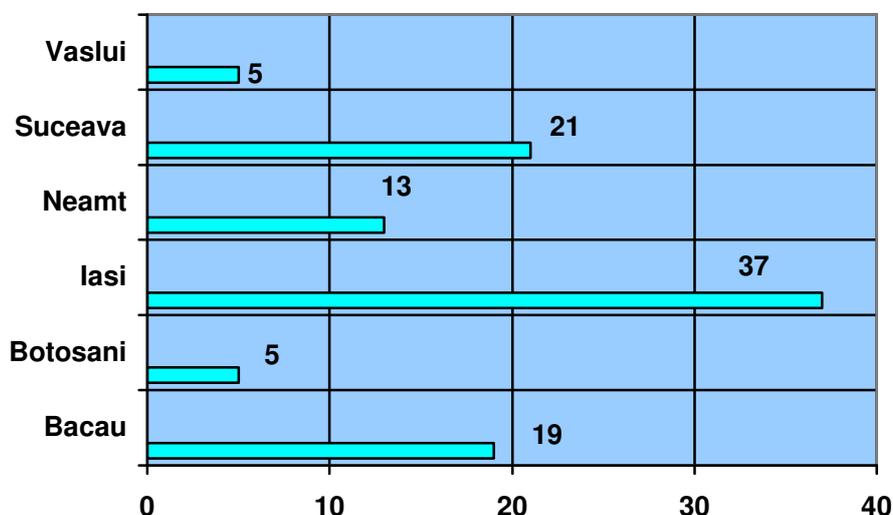
Foreign capital participation to the companies in the region (1999)

County	No. of foreign capital enterprises	Total value of subscribed capital (thou lei)	Total value of foreign currency subscribed capital (thou USD)	% foreign capital in the region
Bacau	442	190541,2	25195,4	19,0
Botosani	119	30057,4	13017,0	5,0
Iasi	879	254500,6	54133,3	37,0
Neamt	309	102799,6	14956,4	13,0
Suceava	486	302714,5	21529,4	21,0
Vaslui	115	27509,4	4830,8	5,0
Total region	2350	908122,7	13362,7	100,0

Source: County Statistics Directorates, December 31st 1999

Late 1999, the total value of foreign capital investments was 133,662.7 million USD, irregularly distributed within the region, the highest level of investments being concentrated in Iasi County (37%) while Vaslui and Botosani counties altogether having only 10% of the total.

Foreign currency capital subscribed in the region (%)



Key issues in the industry

Low percentage of foreign investments in Botosani and Vaslui counties, each of them with a share of 5% of the total foreign investments carried out within North-East Region.

2.3.3 Services

The following table illustrates the evolution of the services sector in North-East Region during 1998-2001 comparing with the national level and a comparative situation with the other regions at the level of year 2001.

Contribution of the services sector to the GDP, expressed in billions lei current prices in accordance with SEC 1995 methodology

Contribution of services to GDP	1998	1999	2000	2001	Annual growth rate (%)			% sector/ GDP 2000	% sector/ GDP 2001
					1999/1998	2000/1999	2001/2000		
North-East	22205.5	32220	44190	62386.5	-1.3	-4.7	3.0	45.86	41.87
North-East (million Euro)	2223	1977	2214	2307					
Romania	185126.6	280732.7	411414.4	581595.9	3.15	1.77	3.1	51.18	47.70
Romania (million Euro)	18532	17227	20616	21401					

Source: Romania's Statistics Yearbook 2002

Remark: the growth rate was calculated based on the inflation rate provided by NRB

At regional level there was an annual decrease (of what????) during 1998-2000 (opposite to national trend), followed by a re-launching in 2001 with 3% (????). In 2001, the services sector brought a contribution of 41.87% to the regional GDP, showing a slight decrease comparing with the previous year.

Services sector - Comparison between North-East Region and the other regions in 2001 (according to SEC 1995 methodology)

Units	Total	North-East	South-East	South	South-West	West	North-West	Center	Bucharest
Constructions									
Billion lei	62333.7	7048.5	9467	6952.9	6255.7	6367.5	6822.4	6767.8	12651.9
%	100	11.30	15.18	11.15	10.03	10.21	10.94	10.85	20.29
Trade (including hotels and restaurants)									
Billion lei	106640.7	11324.8	10198	11580.5	7252.4	9214	12064.7	11639.8	33366.5
%	100	10.61	9.56	10.85	6.80	8.64	11.31	10.91	31.28
Transport, storage and communications									
Billion lei	116813.2	13132.8	12478	13213.6	8776.7	12584.9	13908.2	12849.4	29869.6
%	100	11.24	10.68	11.31	7.51	10.77	11.90	10.99	25.57
Financial, banking and insurance activities									
Billion lei	23006.5	1945.6	1705.8	1840	1293.1	1471.6	2124.4	2493.1	10132.9
%	100	8.45	7.41	7.99	5.62	6.39	9.23	10.83	44.04
Immovable transactions and other services									
Billion lei	156554.4	13486.7	13029.5	13439.5	8080.1	13658.3	17889.1	13682.9	63288.3
%	100	8.61	8.32	8.58	5.16	8.72	11.42	8.74	40.42
Public administration									
Billion lei	42486.9	4855.8	4381.4	5259.7	4250.8	3720.3	4371.4	4117.9	11176.4
%	100	11.42	10.31	12.37	10.00	8.75	10.28	9.69	26.30
Education									
Billion lei	31087.6	5513.6	3392.8	3748.8	3236.5	2814.2	4557.9	3763.9	4059.9
%	100	17.73	10.91	12.05	10.41	9.05	14.66	12.10	13.05
Health care and social assistance									
Billion lei	18082.9	2740	2176.8	2169.8	1783.4	1911.1	2421.7	2333.2	2546.9
%	100	15.15	12.03	11.99	9.86	10.56	13.39	12.90	14.08

Source: Romania's Statistics Yearbook 2002

As concerning the constructions, trade and transport sectors the region contributes to the national total (of what????) close to the national average while the immovable transactions and financial-banking related activities having inferior values (lack of subject?!?).

As far as the public services of education and health care sectors the contribution to the national value on each mentioned sub-sector is higher than the national average and provides the most important contribution (17.73% respectively 15.15%). At the opposite pole there is a more reduced contribution coming from financial-banking and immovable transactions sub-sectors.

In 2002, the percentage of population occupied in services sector of the total region was 28.87%, value that is extremely low when reported with the share owned by this sector in EU regions.

This sector is characterized by:

- A strong concentration of its operational units in the developed centers of the region (Iasi and Bacau municipalities) while in the rest of the territory the percentage being rather low;
- A focusing on trade and public nourishment activities, the services supplied directly to the population are insufficient and of poor quality;

- Tourism services that are not capitalized at the level of the existing potential
- Consultancy services which doesn't provide the quality level expected by customers;
- Health care and social assistance services that are under the quality standards.

The activities concerning cargo and passenger transport have been oriented on two baselines:

- Railway transport is still under state ownership and was subject to restructuring at the level of regional subsidiaries in the view of updating the existing infrastructure
- Road transport was preponderantly developed in the private sector, as new cargo and passenger transport companies were established and organized in modern and efficient manner.

Tourism represents an important economic sector with an insufficiently developed potential if considering its importance and its contribution to the GDP in countries like Spain, Greece, Great Britain, Italy, where the suitable and supported strategies for tourism development, focused on exploitation of specific regional assets, led to important economic revenues to be obtained from this sector of industrial activity.

Along with the picturesque of the region, its well-known hospitality, folk traditions, customs and Romanian cuisine, the traditional wine tasting in the vineyards of Cotnari and Husi give a more attractive shade of color to the region and increase the number of tourists attracted within the region.

Detailed information concerning tourism can be found at Chapter 6.

2.4 The situation of physical infrastructure

The infrastructure is the sum of the technical-material base elements used by the communities for carrying out all flows and transfers of material, human, services and information resources in due time.

These elements are described by the following components:

- Road and railway transport as well as other transport means (airway, waterway, etc.)
- Telecommunication services, television, radio, etc.
- Dwelling utilities and structure;
- Social infrastructure.

2.4. Transport infrastructure

Railway infrastructure

The railway network is comparable with national average in terms of technical endowment and sections length but the geographical conditions and location are the ones that impose some circulation-related restrictions. By the end of 2002 the percentage of the regional railway network of the total length of national railway network was of 13.70%, value higher than the national average.

As concerning the regional railway network density this is illustrated in the table below together with the data concerning the national level and similar data for the rest of the regions (the table below does not include any detailed info about any other regions?!?!?). It can be noticed that the railway network density per 1000 sq. km in the region is 40.9, value that is situated under the national average of 46.1.

Comparative evolution of railway network in operation

Territorial unit	Total surface of the region (km ²)	Total length of railway network (km)					Density of railway per 1000 sq. km of territory on December 31 st , 2002
		1998	1999	2000	2001	2002	
North-East	36850	1505	1507	1506	1506	1506	40,9
Romania	238391	11010	10981	11015	11015	11002	46,1

Source: Romania's Statistics Yearbooks 1999-2003

The region is crossed by the 2 of the 8 railway main lines:

Bucuresti – Bacau – Suceava – Siret towards Ukraine - main railway 500;
Bucuresti - Iasi – Ungheni towards Republic of Moldova – main railway 600.

The public road network infrastructure

The North - East Region is crossed by a series of Pan-European roads, as following:

- Bucuresti – Bacau – Roman - Suceava - Siret (check and cross-border point) – the European road E85;
- Suceava – Vatra Dornei – Cluj (E576) which provides connection to European road E60 Cluj Napoca – Oradea;
- Bacau – Brasov – Pitesti European road E574 (which provide the connection with the European road E70 Craiova – Vidin - Skopje);
- Bucuresti-Barlad – Albita - Chisinau - European road E581, which crosses Vaslui County.
- Roman -Tg. Frumos with ramification towards Botosani (E58) and Iasi (E 583).

The table below shows the situation of the national, county and commune roads from all country's regions (31.12.2002) illustrating that in terms of both the density of total public roads and of the subcategories (national, county and commune roads) per 100 sq. km of territory and their percentage in the total length of road infrastructure – the North - East Region is ranked at levels superior to the national average.

The comparative situation of public roads in 2002

Territorial unit	Total public roads (km)	Public roads density per 100 km ² of territory	National roads (km)		National roads density per 100 km ² of territory	County and commune roads (km)		County and commune roads density per 100 km ² of territory
			Total	Percentage of total public roads %		Total	Percentage of total public roads %	
North-East	13388	36.3	2606	19,46	7,07	10782	80,53	29,25
Romania	78896	33.0	14832	18.80	6,22	64064	81,20	26,87

Source: Romania's Statistics Yearbook 2003

Evolution of road infrastructure conditions within North-East Region structured on road categories, 1998-2002

Roads conditions		2002	Variation % 1998/1997	Variation % 1999/1998	Variation% 2000/1999	Variation% 2001/2000	Variation% 2002/2001
Public roads	total, of which:	13388	-0,03	0,31	4,00	0,09	0.22
	- modernized	3114	1,42	0,11	11,18	2,02	0.97
	- with light covering	2524	-0,74	0,14	-8,45	-2,55	0.08
	Of which: - density per 100 km2 of territory	36.3	0,02	0,01	1,40	0.00	0.27
National roads	total, of which:	2606	0,00	-0,04	5,33	-0,08	0.03
	- modernized	2303	0,09	-0,18	3,34	-0,95	0.08
	- with light covering	261	-1,09	1,65	30,81	8,26	-0.38
County and commune roads	total, of which:	10782	-0,04	0,40	3,68	0,13	0.27
	- modernized	811	8,41	1,51	48,62	11,86	3.57
	- with light covering	2263	-0,73	0,04	-11,20	-3,67	0.13
Percentage of the modernized roads of the total public roads length %		23.26	0,30	-0,04	1,46	0,44	0.73
Percentage of the light covered roads in the total public roads length %		18.85	-0,17	-0,04	-2,64	-0,51	-0.15

Source: Romania's Statistics Yearbook 1998-2003

It can be noticed that during 1998-2002 there were no significant changes of the road infrastructure in the North – East Region, being no spectacular year-to-year variations with the exception of some isolated situations that occurred in 2000.

The main aspect is represented by the percentage of the modernized roads of the total public roads length of the region, which on December 31st 2002 was of only 23.25%. If to this percentage an additional 18.85% is added (representing the percentage of the roads with light asphalt covering on December 31st, 2002) it will result that almost 58% of road infrastructure within North – East Region is under the minimum acceptable standard. Besides that, if taking into account the fact that of the total roads length, modernized or provided light covering, almost 50% are highly worn out due to intensive exploitation specifically between the residential cities of the counties and the development poles of the region, than this will give an unpleasant image of the regional road infrastructure.

Air transport infrastructure

The air transport is supported by a specific infrastructure consisting of three airports that provide domestic flights and occasionally external flights, the regular flights ensuring the connection with the country capital, Bucharest.

The three existing airports are located in Bacau, Iasi and Suceava.

Bacau Airport is located at 6.5 km South from Bacau and ensures the necessary infrastructure for safe conditions flights of aircrafts up to 400 tones, for domestic and external flights. The airport is

servicing air-operations for a program of 12 and 24 hours, presently providing flights on 7 foreign routes to Germany and Italy destinations.

Iasi Airport is the oldest of Romania, was built up in 1932, is situated at 8 km North from Iasi City at an altitude of 120 m and it is intended for domestic and partly external charter passenger flights. In 1998 there were 6,000 flights registered: 1,600 commercial flights of which 60 abroad destination flights and a total of 70,000 passengers transported. Iasi Airport has now a 1,800 m long concrete taxiway, a runway of 135 m X 15 m and a platform of 64 m X 132m.

The present status of the resistance structure of the airside does not allow landing and maneuvering of aircrafts heavier than 47 tones the PCN (Pavement Concrete Number) index being of only 16. PCN is a coefficient which is determined through special technical methods and which describes the weight of aircrafts that could land and their frequency in a certain time space for a given landing taxiway.

In EU the air traffic operators regularly use 60 – 120 tons aircrafts that provide higher efficiency for each transport. Given the above-mentioned conditions, the EU community operators could not have regular flights to and from this airport. On regular basis Iasi Airport is operated only by aircrafts of 19 and 14 tons belonging to Tarom and Carpatair companies. These aircrafts capacities are of 48 respectively 33 passengers.

The parking as well as landing-take off platform is able to simultaneously service maximum 4 aircrafts, which leads to serious operational limitations. Therefore, the often requests of other companies for using on irregular mode the services of this airport exceed its available capacity.

Radio-navigation instruments used for navigation within the terminal area of the airport (TMA) are certified under Category I. There are works in progress carried out by ROMATSA SA – company assigned from national level to provide overall air traffic control - aimed at installing an ILS (Instrumental Landing System) certified under Category II, device that could automatically control the aircrafts when landing regardless of low visibility or improper weather conditions.

	2000	2001	2002	2003	2004	2005	2006
Passengers flow	9488	10388	10383	23018	29500	33300	39000
Cargo volume (t)	63,2	61,5	87,7	202,8	262,8	290	330
Number of air flight destinations services	1 – int.	1 – int.	1 – int.	1 – int. 1– ext.	1-int 1-ext	1-int. 1-ext.	1-int. 1-ext
Number of passengers per destinations	9488	10388	10383	Domes.- 18957 Ext. – 3133	Domes.- 18500 Ext.- 11000	Domes.- 20000 ext.- 13300	Domes.- 23000 Ext. 16000
CA (EURO)	308385	345547	406781	653629	691358	787400	886300
Environment impact (% increase)	+ 0,1	+0,11	+0,26	+1,12	+1,4	+1,5	+1,6

Information provided by Iasi Airport management

The passenger potential was identified in North-East Region as a result of the market survey elaborated by GAC – German Airport Consulting Group – Hamburg. This survey was drafted in 2003 on special order of Iasi Airport and had as thematic a study of the marketing in the North-East Region and development perspectives.

According to different destinations, in North-East Region the following passengers potential was identified:

Budapest	24.000 passengers / year
Frankfurt	22.000 passengers / year
Vienna	19.000 passengers / year

Munich	15.000 passengers / year
Amsterdam	14.000 passengers / year
Paris	14.000 passengers / year
Istanbul	13.000 passengers / year
Zurich	10.000 passengers / year
London	8.000 passengers / year
TOTAL	139.000 passengers / year

Also, according to the research carried out by the Iasi Airport itself, there were identified also opportunities of opening other air flight destinations as following:

Moscow	5.000 passengers / year
Athens	5.000 passengers / year

Sticking to the same context it is estimated that the actual air traffic is not lost but improved, the domestic route from Iasi to Otopeni (the latter being a national air traffic node) showing an important increase of up to 22,000 on yearly basis. It is also estimated that due to the external air traffic serviced by Carpatair Company there will be an increase of up to 15,000 passengers annually.

Suceava Airport, located on the territory of Salcea commune at 15 km East from Suceava town and 40 km away from Botosani, with access being provided by the National Road DN29, is intended for domestic passenger charter air flights. The first air flights operated on this airport are dated 1960 and since 1963 the airport was fitted with a concrete taxiway (1,800 x 30 m), airport beaconing system and landing-take off platform (127 x 72 m).

The airport allows landing-take off of charter and medium-type aircrafts in optimal conditions, having a minimum guaranteed visibility standard of 1,200 meters and a ceiling of 60 meters. The airport station has been built in 1982, having a capacity of 250 passengers/hour and a special structure appropriate for servicing flows of passengers flying to/from both domestic/external destinations.

Air traffic situation between 2000 – 2004

Year	Flights			Passengers						Cargo		
	External	Domestic	total	boarded external	landed domestic	boarded external	landed domestic	total	transit intern	boarded	landed	total
2000	24	458	482	57	2635	90	2598	5380	2843	1,77	4,3	6,07
2001	28	438	466	90	2844	51	2792	5777	2845	1,01	4,51	5,53
2002	28	614	642	66	2590	66	2758	5480	1008	0,03	4,2	4,24
2003	7	547	554	8	2295	8	2099	4410	923	0	0	0
2004*	8	48	56	4	118	3	102	227	32	0	0	0
Total	95	2105	2200	225	10482	218	10349	21274	7651	2.81	13.01	15.84

Information provided by Suceava Airport management

Companies that operated regular-basis flights

Period of operation (year)	Company	Flights/week
2000	Tarom	5
2001	Tarom	5
2002	Tarom (until April)	5
2002	Angel Airlines (since April)	7
2003	Angel Airlines	7
2004	Angel Airlines (until February)	5
2004	Tarom (since June)	3

Information provided by Suceava Airport management

Unfortunately the existing infrastructure doesn't allow to any of the three airports to perform current external flights. So, it is necessary to modernize and to develop the infrastructure of at least one of the airports and to provide its endowment in order to comply with all the requirements of any modern airport and to service any domestic and external flights of passengers and cargo.

Suceava County has 5 heliports and in Iasi there is a utilitarian airport of 30 years experience in the field in terms of utilitarian and medical flights.

Key issues of physical infrastructure:

- Lack of an European road corridor on East-West direction;
- Low percentage of roads modernized within the region: 41.97% of their total length;
- Incapacity of the three existing airports to perform regular external air flights due to poor endowments.

2.4.2 Utility infrastructure

The utility infrastructure includes: water supply services, sewerage and waste water treatment system, natural gas distribution pipelines, heating system and electricity supply network.

Water supply services

Drinking water network and volume supplied in North-East Region in 2002

Territorial unit	Connected localities		Simple network length (km)	Drinking water supplied		Household consumed volume	
		Of which m		(thou m ³)	%	(thou m ³)	%
Bacau		8	7	3908	23.01	24880	24.5
Botosani		4	7	1845	10.86	6921	6.81
Iasi		4	10	5944	35.01	34719	34.19
Neamt		4	7	1969	11.59	14718	14.49
Suceava		8	6	1992	11.73	9809	9.66
Vaslui		4	7	1319	7.80	10477	10.31
North-East Region	3	32	46	16979	100.0	101524	100.0
Romania		268	402	134903		810625	

Source: Romania's Statistics Yearbook, 2003

The volume of drinking water supplied in the North-East Region represents 12.58% of the national value, close to the national average but, if taking into account that NE is the region with the highest population, the value is still very low. The household consumption represents 12.52% of the total national level.

The table below illustrates the number of localities / regions that have drinking water networks. For a better comparison between regions we included also the percentage of the localities that have water supply networks against the total number of localities in that region.

Comparative evolution of the number of localities connected to drinking water supply

Territorial unit	Number of localities connected to drinking water supply									
	1998	Percentage of total localities in the region %	1999	Percentage of total localities in the region %	2000	Percentage of total localities in the region %	2001	Percentage of total localities in the region %	2002	Percentage of total localities in the region %
North-East	310	10.54	324	11.02	344	11.70	357	12.14	375	12.74
Romania	2911	18.14	2997	18.67	3029	18.88	3092	19.27	3236	20.15

Source: Romania's Statistics Yearbooks 1999-2003

At the end of 2000, the percentage of localities that had drinking water supply networks ranked North-East Region on the last place this being of 12.74% compared with 20.15% the average of the country and with the other regions. Moreover, the number of new localities that were connected to the drinking water networks during 1998-2001 (???) increased but with a slow trend, reason why the percentage difference between the connected localities at the end of 1998 and those connected at the end of the year 2002 (???) was of only 2.2%.

The table below presents the evolution of drinking water supply networks during 1998-2002 at both regional and national level.

Comparative evolution of drinking water supply network

The total simple length of drinking water supply network (km)

Territorial unit	1998	Variation comparing with previous year %	1999	Variation comparing with previous year %	2000	Variation comparing with previous year %	2001	Variation comparing with previous year %	2002	Variation comparing with previous year %
North-East	4000	3,84	4154	3,85	4346	4,62	4452	2.44	4625	3.88
Romania	36608	3,74	37417	2,21	38238	2,19	39104	2.26	40269	2.97

Source: Romania's Statistics Yearbooks 1999- 2003

The total simple length of drinking water supply network sluggishly increased in most of the regions because there were not so many localities that took the benefit during 1998-2002 of the new networks that became operational. The North-East Region registered an increase on yearly basis with rate higher than the national increase rate.

The following table presents a comparison of the water volume distributed to all the consumers, including the domestic ones, as well as the percentage of the volume for the domestic use of the total volume of the potable water distributed.

Comparative evolution of water volume distributed

Territorial unit	Drinking water volume distributed to consumers (thou m ³)							
	1998	Variation comparing with previous year %	1999	Variation comparing with previous year %	2000	Variation comparing with previous year %	2001	Variation comparing with previous year %
North-East	236303	-2,56	217065	-8,14	214964	-0,97	182040	-15,32
Romania	1999548	-1,29	1848833	-7,54	1700349	-8,03	1530241	-10.00
Of which for domestic (household) use (thou m ³)								
North-East	161609	-0,06	137185	-15,11	130802	-4,65	115665	-11,57
Romania	1297181	0,46	1207966	-6,88	1105789	-8,46	988359	-10.61
Percentage of domestic (household) consume of the total volume of drinking water distributed %								
North-East	68,39		63.20		60.85		63,54	
Romania	64,87		65.34		65.03		64.58	

Source: Romania's Statistics Yearbooks 1999-2003

Territorial unit	Drinking water volume distributed to consumers (thou m ³)
------------------	---

	2002	Variation % 1998/1997	Variation % 1999/1998	Variation % 2000/1999	Variation % 2001/2000	Variation % 2002/2001
North – East	169792	-2,56	-8,14	-0,97	-15,32	-6.72
Romania	1349035	-1,29	-7,54	-8,03	-10.00	-11.84
Of which for domestic (household) use (thou m³)						
North – East	101524	-0,06	-15,11	-4,65	-11,57	-12.22
Romania	810625	0,46	-6,88	-8,46	-10.61	-17.98
Percentage of domestic (household) consume of the total volume of drinking water distributed %						
	1998	1999	2000	2001	2002	
North – East	68,39	63.20	60.85	63,54	59.79	
Romania	64,87	65.34	65.03	64.58	60.08	

Source: Romania's Statistics Yearbooks 1999-2003

From the table results that the total and domestic (household) drinking water consumption is decreasing in the entire country, including in North-East Region. On the other side, the percentage of domestic drinking water consumption of the total water volume distributed in North-East Region is pretty low (59.79%), close to the country average value. This is due to water measurement equipment used by the population in the last years for the domestic consumption of potable water and to the consumptions related to the existing standard of living.

Comparative situation of the density of drinking water distribution network on December 31st, 2002

Region	Total surface (km ²)	Population	Total length of potable water distribution network (km)	Km of potable water network / 1000 inhabitants	Km of network / 100km ² surface	Potable water consumption per capita (m ³ /inhabitant)	
						Total	Domestic consumption
North - East	36850	3743242	4625	1.23	12.55	45.35	27.12
Romania	238391	21794793	40269	1.84	16.89	61.89	37.19

Source: Romania's Statistics Yearbook, 2003.

From the above presented data results that the density of potable water network at national level is of 16.89 km network/100 sq. km and North-East Region registers one of the lowest density value: 12.55 km network/100 sq. km. Also, it can be noticed that in North-East Region, only 1.23 km of potable water network corresponds to 1000 inhabitants in comparison with the average in the country that is 1.84 km of network. The consumption of potable water per capita registered one of the lowest values, both as concerning the distributed volume (45.53 m³/ capita) and the domestic consumption (27.12 m³/ capita) for 1 year period. These values are situated under the international standards and prove the poor utilities development level as well as the existing living standard.

There is to be mentioned that the only potable water supply from the underground is the one from the Timisesti source, which partially provides the inhabitants' needs of Iasi municipality. The other towns of North-East Region are supplied from surface waters that are made potable by water treatment plants. Unfortunately, the water supply systems of the North-East Region cannot service all consumers (domestic and industrial) 24 hours a day due to capacity limitation. The potable water supply pipelines are worn out and don't satisfy the regional population's consumption needs. On the other side, the water treatment plants are also very old and worn out and could not process the water quantity needed by all consumers of the region.

Sewerage system

Public sewerage network – comparative situation on 31.12. 2002

County	Localities with sewerage systems		Length of simple public sewerage pipelines (km)
	Total	Of which municipalities and towns	
Bacau	48	8	488
Botosani	18	4	224
Iasi	12	4	535
Neamt	13	4	314
Suceava	28	8	547
Vaslui	11	4	359
North-East Region	130	32	2467
Romania	679	266	16812

Source: Romania's Statistics Yearbooks, 2003

All the municipalities and towns of the region are connected to sewerage systems while only 98 communes and villages of the total 2,908 are connected. 95.58% of the total localities of the region are not connected to public sewerage networks.

Comparative evolution of public sewerage systems

Territorial unit	Number of localities with sewerage systems									
	1998	Percentage of the total localities of the region %	1999	Percentage of the total localities of the region %	2000	Percentage of the total localities of the region %	2001	Percentage of the total localities of the region %	2002	Percentage of the total localities of the region %
North East	104	3.53	110	3.74	128	4.35	131	4.45	130	4.41
Romania	636	3.96	654	4.07	674	4.20	682	4.25	679	4.22

Source: Romania's Statistics Yearbooks 1999- 2003

It can be noticed that from one year to another the number of localities with sewerage systems increased but if comparing the number of localities with own potable water supply network (375) with the ones having sewerage systems (130) results a high discrepancy in the sense that more than a half of them don't have sewerage systems situation that leads to increased environmental pollution.

Length of sewerage system										
Territorial unit	1998	Variation (%) comparing to previous year	1999	Variation (%) comparing to previous year	2000	Variation (%) comparing to previous year	2001	Variation (%) comparing to previous year	2002	Variation (%) comparing to previous year
North-East	2527	9,16	2382	-5,74	2446	2,69	2461	0.61	2467	0.24
Romania	16012	3,29	16080	0,43	16348	1,67	16590	1.48	16812	1.33

Source: Romania's Statistics Yearbooks 1999-2003

From the data presented in the table above results that the length of the sewerage network hasn't registered an increase required by the necessity of building new sewerage network for the localities having already water supply systems but surprisingly registered a decrease of network

length by comparison with 1998 because some very old and worn out pipes are not operational anymore.

It has to be specified that as regarding the waste water treatment plants they are functioning only in municipalities and cities of the region, are under-dimensioned and could not process efficiently the full quantity of wasted water.

Comparative situation of sewerage networks density on 31.12.2002

Territorial unit	Total surface (km ²)	Population	Total length of sewerage network (km)	Km of sewerage network / 1000 inhabitants	Km network / 100 km ²
North – East	36850	3743242	2467	0.65	6.69
Romania	238391	21794793	16812	0.77	7.05

Source: Romania's Statistics Yearbook, 2003

From the data illustrated in the table results that the density of the sewerage network in North – East Region is a little lower than the national average, 6.69 Km network / 100 sq. km surface comparing with 7.05 Km network / 100 sq. km surface. Also it can be noticed that in the region there is only 0.65 km of sewerage network / 1000 inhabitants in comparison with the national average of 0.77 km of sewerage network / 1000 inhabitants.

At the end of the year 2002 the total length of the public sewerage network in NE region was of 2,467 Km, representing 14.67% of the total length existing at national level.

The network and the volume of natural gas distributed in the region

The natural gas distribution system of North-East Region could be analyzed by following the indicators below:

The network and the volume of natural gas distributed – comparative situation, in 2002

County	Connected localities		Length of simple network (km)	Volume of natural gas distributed	
		Of which m		(thou m ³)	Of which for domestic use
Bacau		8	6	31040	132635
Botosani		2	1	7442	36402
Iasi		3	5	26094	122550
Neamt		4	3	18110	111663
Suceava		3	2	11069	31831
Vaslui		2	1	4748	31917
North-East Region		22	20	98505	466998
Romania		177	240	1001763	3085561

Source: Romania's Statistics Yearbook, 2003

In the North-East Region the volume of natural gas distributed represents 9.8% of the total national volume and if taking into consideration that this is the region with the highest number of inhabitants than the value could be considered as being very low. The domestic consumption represents 15.13% of the total/country. Only 22 municipalities and towns of the region are connected to natural gas distribution network while an increased number of communes and villages are still

unconnected. Effectively only 2.1% of the total localities of the region are connected to natural gas distribution networks.

Comparative evolution of the number of localities connected to natural gas network										
Territorial unit	1998	% of total localities of the region	1999	% of total localities of the region	2000	% of total localities of the region	2001	% of total localities of the region	2002	% of total localities of the region
North East	55	1.87	56	1.90	57	1.93	60	2.04	62	2.10
Romania	915	5.70	993	6.18	1021	6.36	1120	6.98	1182	7.36

Source: Romania's Statistics Yearbooks 1999-2003

During 1998 –2002 there was a slight increase of the number of the localities connected to the natural gas network.

In 2002, there were 62 localities of the region connected to the natural gas network was 60, out of which 22 municipalities and towns.

The length of the North-east Region's natural gas network and its evolution during 1998-2002 is presented in the table below by comparison the country level.

Comparative situation of the length of natural gas pipeline (km)

Territorial unit	1998	Variation (%) comparing with previous year	1999	Variation (%) comparing with previous year	2000	Variation (%) comparing with previous year	2001	Variation (%) comparing with previous year	2002	Variation (%) comparing with previous year
North East	1548	9,43	1651	6,65	1774	7,45	1928	8.68	2018	4.66
Romania	19444	7,92	20331	4,56	21598	6,23	23951	10.89	24068	0.48

Source: Romania's Statistics Yearbooks 1999- 2003

During 1998-2002 there was an annual-basis increase of total natural gas pipeline length.

	Natural gas network on december 31st, 2002							
	Total surface (square km)	Population	Total length of natural gas network (km)	Km natural gas network per 1000 inhabitants	Km of natural gas network/ 100 sq. m	Natural gas consumption (thou m³)		Domestic consumption / capita (cubic meters)
						total	Of which domestic consumption	
North – East	36850	3.743.242	2018	0.59	5.47	985.057	466.998	124.75
Romania	238391	21.794.793	24068	1.10	10.09	10.017.637	3.085.561	141.57

Source: Romania's Statistics Yearbooks 2003

By comparing the North-East Region with the other regions (the comparison is only with the country level?!?!?) results that the region has the lower length of natural gas network of only 0,59 km / 1000 inhabitants by comparison with country average of 1,10 km / 1000 inhabitants. If the comparison is related to the total surface of the region we find the same situation – only 5,47 km natural gas pipeline / 100 sq. km comparing with country average of 10,09 km network / 100 sq. km.

As concerning the volume of natural gas supplied the North-East Region is better situated than other regions (it results from...?!?!?) but the percentage of natural gas volume supplied in the region out of the total/country is of only 10,32% considering that the share of population living in the

region is 17% of the total Romania. The natural gas consumption of the region per capita is close to the national average.

Thermal energy (heating) supplying services

As concerning thermal energy supply it must be mentioned right from the beginning that in the whole country the central-heating stations were designed to service an entire town, large or small (except larger cities as Bucharest). Due to the high losses of the heating network such a system is not efficient neither profitable, creating discontentment among the final beneficiaries especially during the winter. Given the context, for a small part of the population (with a higher income level) an alternative to this service came up and the solution was to buy and install an individual heating unit. But for the great majority of population the option would be the acquisition and installation of heating units able to service a block of flats or an estate or even replacing the old central-heating stations with brand-new high performance ones able to reduce as much as possible the costs of heating and hot water production. In order to solve these problems there is the need of funds from sources that, so far, haven't been identified yet.

On the other hand I, with some exceptions, in the rural areas there are no services of supplying thermal energy available.

The comparative evolution of the number of localities that have thermal energy systems in place (hot water and heating)

	1998		1999		2000		2001		2002	
	total	of which municipalities and towns								
North - East	41	31	38	31	36	31	32	28	31	27
Romania	306	234	280	227	259	217	239	202	214	185

Source: Romania's Statistics Yearbooks 1999-2003

There is a continuous decrease of the number of localities connected to the thermal energy supplying networks both at North-East Region level as well as in the other regions. The main cause is bad administration of these networks after 1990 fact that led to the single available option – heating units operational only for an entire block of flats or for an apartment – and the trend will continue to show an ascendant evolution in the coming years.

As concerning the number of localities within the region that still have centralized systems of thermal energy supply, the situation is summarized in the table below.

	2000		2001		2002	
	Localities with thermal energy supplying systems					
	Total localities	Municipalities and towns	Total localities	Municipalities and towns	Total localities	Municipalities and towns
Bacau	9	8	7	7	6	6
Botosani	5	4	4	4	4	4
Iasi	4	4	4	4	4	4
Neamt	7	4	3	6	3	3
Suceava	8	8	7	7	7	7
Vaslui	3	3	3	3	3	3
North-East Region	36	31	33	28	31	27
Romania	259	217	233	202	214	185
% NE Region / Romania	13,90	14,28	13,38	13,86	14,48	14,59

Source: Romania's Statistics Yearbooks, 2001-2003

It can be observed that as concerning the total number of localities of North - East Region that have centralized thermal energy supply system, the situation is good in the sense that is better than at national level but, as we have commented above, the thermal energy plants which produce and distribute the thermal energy and are directly subordinated to the Local Councils cannot not provide these services at a convenient quality/price ratio to all the beneficiaries. Given the facts, this issue could become soon a real social issue if the financial resources for the rehabilitation and the modernization of thermal energy supply system in the North-East localities will not be found, as in these localities with systems already in place almost half of the population from the most populated region of Romania is living.

Sources of recoverable energy

Biomass

The North-East Region has a high potential of recoverable biomass divided on the following combustion sources:

- Waste resulted from forest exploitations;
- Wood waste – sawdust and other wooden residues;
- Agriculture waste resulted from cereals, corn stalks, vineyards vegetal waste, etc.;
- biogas;
- Urban household waste.

Circa 54% of the biomass-based heat produced is obtained by burning the wooden waste; 89% of the heat needed for heating up the dwellings and cooking food (preponderantly in the rural areas) is produced by burning vegetal waste.

Key issues of utility infrastructure

- The potable water network is inadequately sized in relation to North-East Region's surface and population of year 2002:
 - Km of potable water network / 100 sq. km surface: 12.55 compared with 16.89 at national level;
 - Km of potable water network / 1000 inhabitants: 1.23 compared with 1.84 nationally;
 - 87.25% of total localities are not connected to the network;
- The sewerage network is inadequately sized in relation to North-East Region's surface and population of year 2002:
 - only 131 out of total 357 localities connected to the potable water network are connected to the sewerage network;
 - 95.58% of total localities are not connected
- The natural gas network is inadequately sized in relation to North-East Region's surface and population of year 2002:
 - Km of natural gas network /1000 inhabitants: 0.59 compared with 1.10 at national level;
 - Km of natural gas network /100 sq. km surface: 5.47 compared with 10.09 at national level;
 - Only 2.1% of total localities are connected to the system;
- Reduced usage level of recoverable resources (biomass)

2.5 Educational and health care infrastructure

2.5.1 Educational infrastructure

The essential factor in developing a national or a regional economy is highly represented by the human capital. Although it is difficult to quantify and represents a controversial concept, the human capital could include the human resources having a certain level of education.

Comparative evolution of the number of school units, structured on level of training

Categories of scholar units	Absolute values in school year 2002/2003		Growth rate in school year 1999/2000		Growth rate in school year 2000/2001		Growth rate in school year 2001/2002		Growth rate in school year 2002/2003	
	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region
Kindergarten	9547	1384	0,56	0,80	-21,44	-43,92	-0.99	0,63	-4.34	-3.15
Elementary schools (primary and middle)	12456	2536	-4,65	-2,52	-3,38	-5,02	0.64	-1,40	-1.35	-0.94
High schools	1388	197	1,90	1,16	2,01	6,86	0.87	1,07	0.65	4.23
Trades and apprentices school	85	28	-87,88	-76,52	-4,12	3,70	-4.30	0,00	-4.49	0
Post-High school	78	13	-81,13	-79,49	19,54	-6,25	-1.92	13,33	-23.53	-23.53
Foremen school	-	-	-98.20	-100	-33.33	-	-50.00	-	-	-
Total	22166	4158								

Source: Romania's Statistics Yearbooks 1999-2003

The number of educational units of the region represents 18.75% of the total educational units number existing at national level. This aspect confirms that the region has the greatest surface and population of the 8 development regions.

As far as the kindergartens, elementary schools and high schools are concerned, the region shows the same trend with the national one and approximately the same rate (except the school year 2000-2001 for kindergartens, when the decrease was double comparing with national level and high schools where the regional growth was three times higher). The region had registered opposite trends against national level in the school years 2000-2001 and 2001-2002 as concerning the number of vocational and post-high schools.

Comparative evolution of school population of all education levels

Number of pupils enlisted in schools on categories of education units	Absolute values in school year 2002/2003		Growth rate in school year 1999/2000		Growth rate in school year 2000/2001		Growth rate in school year 2001/2002		Growth rate in school year 2002/2003	
	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region
Kindergarten	629703	122702	-1,35	0,68	-0,86	-1,96	0.81	2,50	2.22	2.12
Elementary schools (primary and middle)	2171147	422924	-2,30	-1,31	-3,47	-2,26	-3.77	-4,50	-5.19	-4.48
High schools	740404	113361	-3,29	-1,70	-0,93	-0,69	3.30	3,93	4.18	5.69
Trades and apprentices school	270215	54652	-2,35	-2,47	7,79	6,17	5.34	-33,84	7.08	0.70
Post-High school	61855	8128	1,76	2,89	-13,21	-21,17	-10.85	-15,73	-14.90	-20.54
Foremen school	3873324	721767	-21,66	-28,96	-13,94	-41,65	-16.64	-28,31	2.22	2.12
Total	629703	122702								

Source: Romania's Statistics Yearbooks 1999-2003

The NE Region has 19,48% of total pupils enlisted at national level, situation explained by the fact that the region is the greatest in the country as surface, number of inhabitants, school people and the highest fertility rate (51.6 by comparison with the next ranked of 41.1 and the national average of 40.3). The evolution of pupils' number per categories of education units shows the same trend as the national level.

A comparative situation of educational units number (kindergartens, elementary schools, high schools, trades and apprentices schools, post-high school and foremen schools) existing at national and regional level is illustrated in the table below.

Territorial unit	Number of educational units for school year 2002-2003					
	Kindergartens	Elementary schools	High schools	Trades and apprentices schools	Post-high school	Foremen schools
North - East	1384	2536	197	28	13	-
Romania	9547	12456	1388	85	78	-

Source: Romania's Statistics Yearbook, 2003

By comparison, during school year 2002-2002, the NE Region had the highest number of elementary schools, trades and apprentices schools while as concerning the other types of educational units the region situated at average level.

Excepting the foremen schools, the NE Region had the highest number of pupils enlisted in educational units in school year 2002-2003.

Territorial unit	Number of pupils enlisted in educational units during school year 2002/2003				
	Kindergartens	Elementary schools	High schools	Vocational and apprentices schools	Post-high schools and foremen schools
North - East	122702	427903	113361	54652	8128
Romania	629703	2198312	740404	270215	61855

The number of educational units during school year 2002-2003

County/region	Kindergartens	Elementary schools	High schools	Schools of arts and trades	Post-high schools
		Primary and gymnasium			
Bacau	88	531	32	9	4
Botosani	355	371	27	1	1
Iasi	459	473	48	4	4
Neamt	33	356	32	5	2
Suceava	65	379	40	5	1
Vaslui	384	426	18	4	1
North-East	1384	2536	197	28	13
ROMANIA	9547	12456	1388	85	78
%	14.50	20.36	14.19	32.94	16.67

Source: Romania's Statistics Yearbook, 2003

The first three counties that count about 60% of the total number of schools in the region are the following three academic centers: Bacau, Suceava and Iasi, sharing 21%, 18% and 18%, situation explained by the concentration of students in these academic centers and by the fact that these counties have the highest school population comparing with the other three counties in the region.

The NE Region comprises all kind of education forms, the number of pupils enlisted in pre-university education in school year 2002-2003 being of 726,747 pupils, approximately 20% of all region population, and, as far as the academic education is concerned, in the three universities

North - East	2700	2688	-0,44	2661	-1,00	2589	-2.70	2579	-0.38
Romania	1382 1	13785	-0,26	13422	-2,63	13442	0.14	13377	-0.48

Source: Romania's Statistics Yearbook, 2003

In 2002, there were 2,579 libraries within North-East Region, in decrease with 0.38% by comparison with the previous year. There was a descendent trend during 2002/1999 at both national level and for every single region, but the decrease rate was lower in North-East than in the other regions.

Most of the libraries are located in the same three academic centers but this is absolutely normal if we take into account the population level of these counties, especially the number of students coming from the region and/or other regions.

Within North-East Region there are a satisfactory number of libraries but the true problems of this sector – similar to the ones existing in educational field – include bad conditions of the buildings, poor endowment with endowment with IT systems which could make work much easier in this sector.

2.5.2 Health care infrastructure

The health care system is characterized by the difficult transition from a centralized system and limited freedom of opinions to local autonomy, privatization and competition. The reform process of the last years tried to fundamentally change the health care system in order to unitary rebuild the legislation and organization, to introduce the Health Social Insurances and to diversify the financial resources mechanism at the same time with the transfer of health care services towards ambulatory assistance.

The privatization was encouraged in different ways, starting from introducing the competition among suppliers and finishing with decentralization of the health care system by increasing the involvement of local authorities, professional associations, financing institutions, the communities, etc.

90% of the hospitals funding is provided from services contracts between hospitals' administration and Health Insurance County Office of each county. Based on the Governmental Ordinance no. 124/1999 total privatization of medical primary assistance services (100%) was achieved in both urban and rural environment, as well as of the ambulatory assistance services in a percentage of 70%.

The actual health care infrastructure situation is presented in the following tables.

North - East Region is situated on the first place as number of sanitary units (hospitals, clinics, tuberculosis sanatoriums, pharmacies. etc) having 172 units. This statistic refers only to sanitary units of public ownership. Presently, in the North-East Region, as in the entire country, there are private medical units but their number is rather small (except the pharmacies and surgeries).

If from this point of view the general picture of the region looks good, the health care infrastructure – similarly to the educational one – is in bad shape and some hospitals take the risk of not getting the functioning permits. The technical specific equipment is worn out and does not correspond anymore to the actual needs and technology. These remarks are valid for the public sanitary services infrastructure, especially for all types of hospitals in the region that hardly survive without being modernized and equipped at European standards.

The best position within this activity field, in the North - East Region, is occupied by Iasi County, with its great number of medical units diversified on different specializations (such as neuro-surgery, infectious diseases, emergencies, psychiatry, etc) that is due to the high population level in this county and of the fact that Iasi is an academic city. In Iasi there are also a university hospital and medical research centers as well.

Number of sanitary units of major state ownership (2002)

County/region	Hospitals	Policlinics	Medical dispensaries	Health care centres	TBC sanatoriums	Balneary sanatoriums	Preventories	Nursery
Bacau	9	2	15	-	-	1	-	9
Botosani	11	-	9	3	1	-	-	1
Iasi	20	-	5	2	-	-	2	13
Neamt	5	1	5	2	1	-	-	7
Suceava	9	1	7	3	-	-	1	3
Vaslui	9	-	11	-	-	-	-	4
North-East	63	4	52	10	2	1	3	37
TOTAL	442	44	442	74	11	4	8	288
%	14.25	9.90	11.76	13.51	18.18	25	37.50	12.85

Source: Romania's Statistics Yearbook, 2003

The North-East Region owns 14.35% of the total public medical units, most of them being located in Iasi, Bacau and Vaslui.

There are 20 policlinics, 694 surgeries, 506 dentist offices, 61 medical labs and 665 pharmacies in full private ownership.

Evolution of sanitary units under major state ownership

Sanitary units	Absolute values in 2002		Growth rate in 1999		Growth rate in 2000		Growth rate in 2001		Growth rate in 2002	
	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region
Hospitals	442	63	2,66	3,28	3,29	0,00	0,68	0,00	0,00	0,00
Policlinics	44	4	-36,61	-31,75	-70,29	-72,09	-31,11	-25,00	-29,03	-55,55
Medical dispensaries	442	52	-75,05	-72,22	-26,42	-40,93	-55,28	-59,84	8,87	1,96
Health care centers	74	10	-5,32	0,00	2,25	0,00	-3,29	0,00	-15,91	-28,57
TBC sanatoriums	11	2	7,69	0,00	0,00	0,00	-14,28	0,00	-8,33	0,00
Preventories	8	3	-7,14	0,00	-15,38	0,00	0,00	0,00	-27,27	-25,00
Nurseries	288	37	-8,71	-5,77	-7,73	-2,04	-2,79	0,00	-17,24	-22,92

Source: Romania's Statistics Yearbooks 1999-2003

In the region the number of policlinics decreased during 1998-2002 in a rhythm almost identical with the national one. An alarming situation is represented by the annual-basis decrease of the number of medical dispensaries. There is no variation of the other type of units. Late 2002, the North - East Region was placed among the first regions in the country in terms of number of hospital beds and doctors (15.31% of the national total). During 1998-1999 there was a fluctuant evolution of the number of beds, doctors, pharmacists and medium qualified medical staff. In 2002

there was a decrease of the number of all mentioned categories of personnel, trend similar with the national one.

	Absolute values in 2002		Growth rate in 1999		Growth rate in 2000		Growth rate in 2001		Growth rate in 2002	
	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region
Number of beds in hospitals	162588	24902	-0,22	-0,35	1,62	-1,83	0.64	0.79	-3.15	-4.80
Number of doctors	41547	5860	4,03	2,56	-1,41	4,99	-0.07	-3.74	-1.87	-1.66
Dentists	4873	856	-1,98	-2,09	-5,28	-3,91	1.48	9.25	-3.64	-3.28
Pharmacists	1371	224	-2,68	-1,63	-0,63	8,71	-6.17	-6.87	-7.99	-8.20
Medium qualified medical staff	113620	17532	-3,14	-17,73	-3,37	14,18	-0.05	-2.30	2.12	1.30

Source: Romania's Statistics Yearbooks, 1999 -2003

Number of hospital beds and doctors, in 2002

County/region	Hospital beds	Doctors
Bacau	3761	914
Botosani	3380	552
Iasi	7972	2416
Neamt	3011	701
Suceava	3783	816
Vaslui	2995	461
North-East	24902	5860
Romania	162588	41547
%	15.32	14.10

Source: Romania's Statistics Yearbook, 2003

At county level, Iasi County exceeds the regional average in terms of above mentioned indicators their values being double or even triple comparing with the other counties of the region (Vaslui, Botosani).

2.6 Social services

The social services in the region are strongly affected by the dominant characteristics of the transition period the whole country is facing with and by the fact that this region has the highest population comparing with the rest of the regions as well as the lowest GDP per capita.

On one side, the demand for these services increased more and more in the last years because of massive dismissals that occurred in the economy and also because of the incapacity of the companies to absorb the young labor force. On the other side, the high demand is due to the high level of poverty, especially of some disadvantaged social categories such as the elderly people, people with chronic diseases or different handicaps. A consequence of this poverty level is the increasing number of cases of parents leaving their children in the social and placement centers of the region. At their turn, these children need complex and very expensive social assistance.

The social services provided were quantitatively extremely low in the region due to the generally small local budgets that are contributing for some years to the funding of these services. There are also numerous NGOs that are involved in social activities, especially in the area of children and

elderly people rights protection. For this purpose there are different orphanages and asylums financed by religious organizations.

In this respect, the counties registering the worse situation are Botosani and Vaslui, being situated on the first place as concerning the unemployment rate and poverty level.

Comparative evolution of social protection costs

	Absolute values in 2002		Growth rate in 1999		Growth rate in 2000		Growth rate in 2001		Growth rate in 2002	
	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region	Romania	NE Region
Unemployment social protection costs (million lei)	11344334	1617062	5.18	-3.66	-21.98	-36.43	-26.66	-20.66	-2.32	-0.16
Number of social assistance soup kitchens	199	36	-8,41	0,00	25,53	6,90	7.90	0.00	4.18	16.12

Source: Romania's Statistics Yearbook 1999-2003

The social protection expenditure in North-East Region has registered the highest level, especially in Vaslui County as expected, where – in nominal terms – there was an increase of approx. 50%. In change, although Bacau County is the most developed and has the lowest unemployment rate, it was situated on the second place in terms of social protection costs.

As concerning the percentage of regional social protection-related expenditure share of the national total there was an increase from 13.90% (2001) to 14.25% (in 2002) due to the fact that North-East is the poorest region of Romania.

Costs for the social protection of unemployed in 2001 and 2002 (million lei)

County/region	Total costs for social protection of unemployed (million lei)		Social protection expenditure of the counties from total region (%)	
	2001	2002	2001	2002
Bacau	305235	329943	23.30	20.40
Botosani	144216	182446	11.00	11.30
Iasi	216681	255097	16.50	15.77
Neamt	237893	293221	18.10	18.13
Suceava	195644	225153	14.90	13.92
Vaslui	211875	331202	16.20	20.48
North-East	1311544	1617062	100.00	100
Romania	9404370	11344334		
%	13.90	14.25		

Source: Romania's Statistics Yearbooks 2002, 2003

Another side of the social services is represented by social soup kitchens that are operational in every county of the region. Here, the poverty-stricken persons, those lacked of subsistence means and homeless take the benefit of daily free of charge meals.

In 2002 there were 36 social soup kitchens in the region representing 18% of total existing at national level.

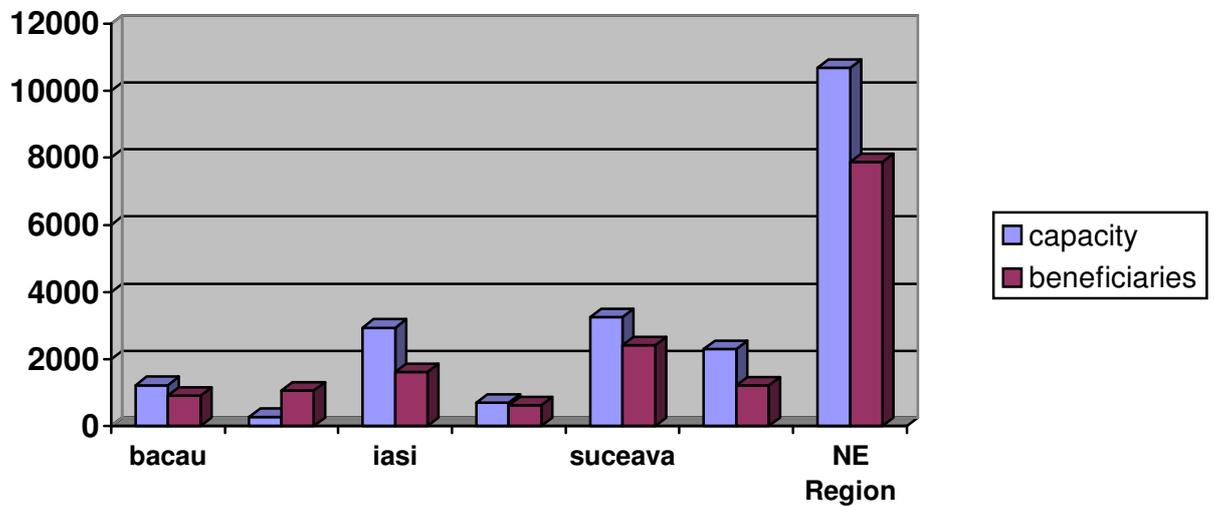
The total capacity provide by these units is of 8,889 places, representing 20.66% of total national capacity. In 2002 a total number of 5602 persons benefited of the existing regional capacity.

Number of social soup kitchens existing in 2001 and 2002

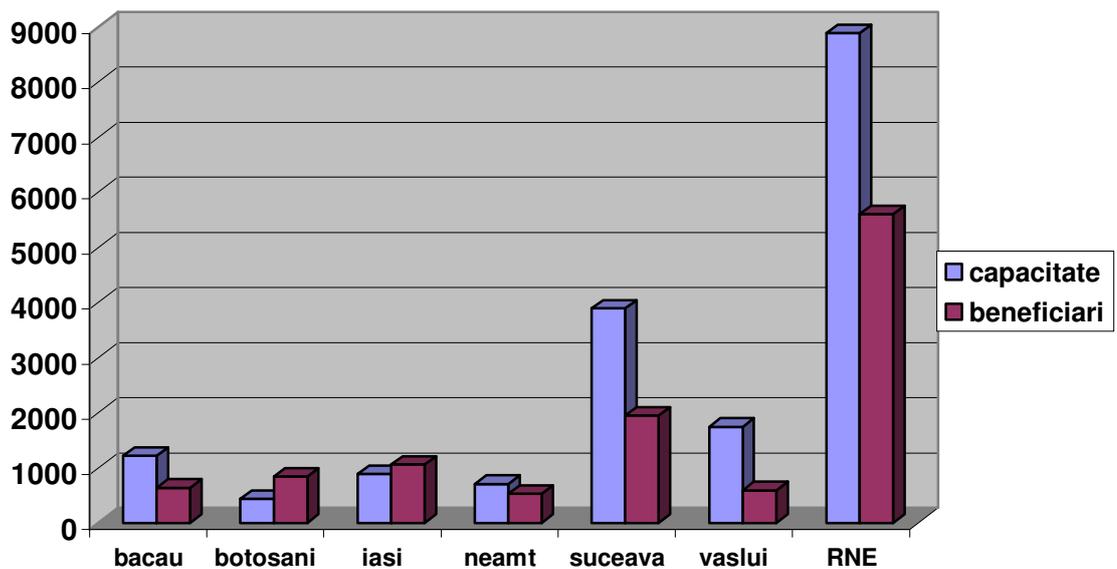
Territorial unit	Number of soup kitchens		Capacity (places)		Number of beneficiaries	
	2001	2002	2001	2002	2001	2002
Bacau	3	3	1226	1220	920	636
Botosani	4	7	275	434	1070	843
Iasi	7	9	2938	887	1620	1057
Neamt	5	6	697	708	624	528
Suceava	8	7	3260	3890	2423	1949
Vaslui	4	4	2300	1750	1221	589
North-East	31	36	10696	8889	7878	5602
Romania	191	199	46860	43007	37083	30183
%	16.20	18.09	22.80	20.67	21.20	18.56

Source: Romania's Statistics Yearbook, 2002

Capacity and number of beneficiaries at county level and the total/region in 2001



Capacity and number of beneficiaries at county level and the total/region in 2002



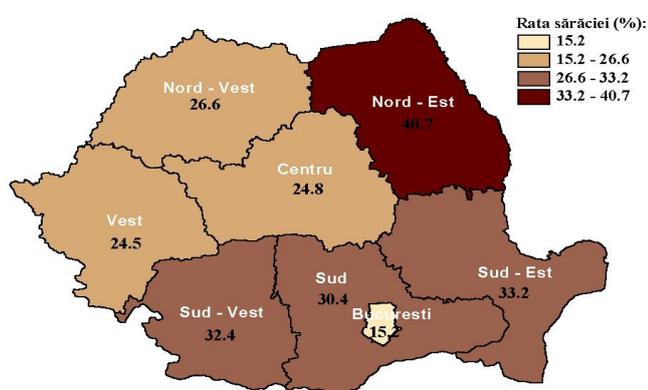
Even if at the regional level – during the analysed period – the servicing capacity exceeds the number of beneficiaries, in Botosani County the situation is quite opposite.

Poverty distribution at regional level

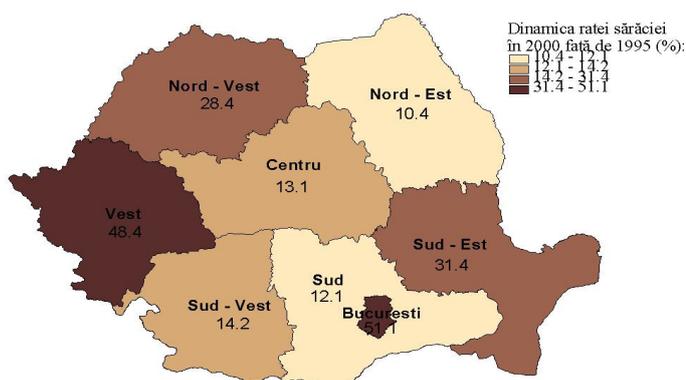
The economic crisis that occurred in last years unequally affected all regions of the country. Poverty incidence is higher in the East and South and lower in West. The situation is severe in the North-East Region where poverty rate exceeds 40%, in other words over 1.5 million poor people.

Situation altered during 2000-2001, when the changes of poverty rate in 6 regions show negative values but with a continuous increase trend in South-West and North-East Regions, the poorest areas of the country.

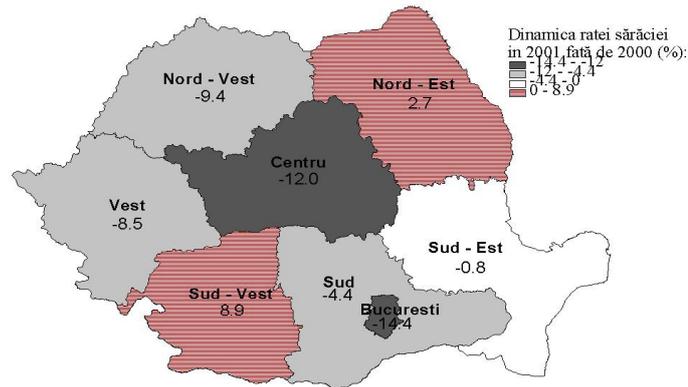
Regional poverty distribution in the country, in 2001



Alterations of poverty rate in 2001 comparing with 1995



Alterations of poverty rate in 2001 comparing with 2000



Note: the information was taken from the Anti-Poverty and Social Inclusion Promotion National Plan. Poverty rate was calculated based on CAPSIS methodology, having as calculation basis the aggregated indicator of social revenues and benefits.

Key issues:

- The North-East Region has the highest poverty level (40.7%) that shows an increasing annual trend.

2.7 Research and development, technological transfer and IT infrastructure

Science, technology and innovation are strategic fields that provide the technological progress of a country and, consequently, development sustainability and economic competitiveness of a county.

In North East Region, the level of performance of the R&D and innovation system depends on the characteristics of the transition from a centralized economy towards a market-oriented economy. A primary analysis of the research-development-innovation sector leads to the following general characteristics:

- 60 % of the financing of research-innovation sector is provided from the state budget, the funds being enough to ensure only its survival;
- During 1999-2002 the annual regional research & development-related expenditure in both public and private sectors was relatively stable without exceeding 5.5% of national expenditure;
- The research & development expenditure carried out by enterprises represent only 0.07% of regional turnover of 2002
- The number of employees working in research & development field reduced on yearly-basis, in 2002 being of 3,368 – 8.76% of national total.
- There are 607 companies involved in innovation activities, representing 15.3% of national total, with total innovation-related expenditure of 61 million Euro (7.8% of national total)
- There is a continuous migration of the specialists from this sector to other sectors or even to other countries;
- The research activities are often carried out without coordination between academic environment, research institutes and economic environment; 87% of RDI activities being carried out in research institutes and only 13% in companies;
- the efficiency of RDI activities is very low, as only 12% of the results are effectively implemented in industry;

- innovation and technological transfer towards economy is in an early stage of development due to the lack of infrastructure for dissemination, transfer and capitalization of the RDI results ;
- decrease of the funds allotted every year for the sector;
- low interest of the economical-industrial operators in achievements of RDI due to the insufficiency of financial resources;
- lack of communication between parties and therefore lack of partnerships able to promote the development of this sector;
- low development of transport and utility infrastructure leads to a reduced attractiveness for investors from outside the region or potential foreign investors.

In spite of the fact that the human resources potential is high the North-East Region is the last placed by comparison with the other regions as a result of the lack of interest showed by companies to RDI, TT and IT&C as well as because of the insufficient financial resources allotted to these fields.

This field is characterized by dynamism and complexity, is based on large scale use of innovation results, technological transfer, fast and modern communication, diversity of information processing methods. These led to a new type of society, known as "information society". The technological background of this new concept of information society is based on three elements: communication technology, information technology and multimedia production sector. The interference of these components brought out new services and applications (mobile phone networks, computer networks such as Intranet and Internet, etc.).

Thus, RDI, TT and IT&C are nowadays self-supporting economic sectors that provide, at their turn, support for the development of other sectors, open new horizons for increased competitiveness of companies and last but not least, lead to creation of new jobs.

Taking into account that North-East Region has an unexploited human resource potential and, on the other hand, few large cities – county capitals – have a starting base infrastructure (airports, universities, utilities, available spaces), we can estimate that, through specific measures of intervention, the RDI, TT, IT&C sectors in the region will register a re-launch and development through specific investments that will have a significant impact on general economical development of the North-East Region.

Presently, many RDI programs are developed at national level as following:

- The National Plan For Research, Development and Innovation – the main purpose is creating new development and innovation sources for economy and society, answering to some concrete demands or international integration requirements of Romanian science-technology system which to lead to generation of direct economical effects on short or medium term.
- The national programme "Development of innovation and technological transfer infrastructure" – INFRATECH, approved by Government Decision 128/2004, instrument that will provide financial and logistic support for creating and developing institutions specialized in innovation and technological transfer infrastructure and technological and scientific park;
- The National Programme of Development-Research "Horizon 2000" - whose main purpose is to support and develop the existent research-development potential, for the development of researches in fields and directions of general interest and/or strategic importance for economy and society

Several measures were taken at national and regional level for creating and developing new institutional structures in the RDI field.

The main actions initiated in this respect and in full progress are:

- The establishment of national research & development institutes in strategic branches of national economy as well as in fields of public interest as a result of the evaluation carried out based on the methodology approved by Government Decision no. 135/1996 ;
- In the major educational institutes, there are activities of research & development, design, consultancy or expertise organized within departments, faculties or own units of scientific research by collaboration with educational and research institutes of the country or from abroad;
- Supporting the development of “excellence centers” - nucleus and research centers and networks whose activity should reach a quality level recognized at European/international level (in accordance with the international standards in the field) through the RELANSIN programme in the framework of the national plan for development, research and innovation. The action was started on the basis of competition at the end year 2000;
- The development of innovation infrastructure through the RELANSIN programme of the National Plan which aims at the creation and/or development of technological/scientific parks, innovation and business centers (BIC/TIC), technological transfer centers, technological information centers, centers for human resources development in RDI field, offices of relationship with industry, others (centers for public utility services in the environmental or health care fields, etc.)

At present, in the North-East Region there are only few Research-Development Institutes and some companies carrying out Research & Development – related activities.

The infrastructure of scientific research, technological development and innovation in the region

Territorial unit	Number of institutes	(%)	RD Institutes	Tertiary education institutions	Medical units	Agriculture research units	Companies
2002							
North-East	73	12,0	16	13	-	17	27

Source: Romania's Statistics Yearbook, 2003

There are 73 research & development units in the region representing 12% of the total existing number at national level. There is to be mentioned that those created in education units represent a quarter of those created at national level.

Institutes:

- The National Institute of Research & Development For Technical Physics - IFT Iasi;
- The National Institute of Inventions of Iasi
- Institute for Forest Research and Administration of Cimpulung Moldovenesc (Suceava County)
- Vegetal Genetic Resources Bank, Suceava
- Tree Research and Production Unit, Falticeni, Suceava

Companies involved in research-related activities:

- S.C. Aerostar S.A., Bacau;
- S.C. Caom S.A., Pascani;
- S.C. Impex Romcatel S.A., Iasi;
- Tehno – Util, Suceava;
- Tehnoton, Iasi;
- Ceproplast – Center for research, engineering, production and processing of plastics, Iasi.

There are also many research centers operational within the universities. Thus, in the University of Bacau there are 4 such centers focused on the following fields: technological and managerial

engineering, chemistry and engineering of natural and synthesis products and of environmental protection, protection and capitalization of biological resources, mechanical engineering.

As concerning the technological transfer, this was mostly achieved in North-East region by privatizing and acquiring the enterprises by private foreigner companies that brought new production technologies, manufactured products of higher quality, at reasonable prices and an increased productivity rate. However, this modality had applicability in only few enterprises due to lack of attractiveness of most of them. The insufficient technological development is a major constraint for enterprises, particularly for SMEs, which don't have enough financial resources needed for the innovation process.

As far as the RDI field is concerned, a positive thing for North-East Region was the implementation of the PARTNER Thematic Network program aimed at supporting the regions with regional innovation strategy projects. Through this project, in which RDA was partner, the following results were obtained:

- Methodological support for regions within candidate countries, which design regional innovation strategy projects;
- Exchange of information, experience and best practice;
- Awareness rising on the importance of regional innovation strategies;
- Cooperation relationships between Member States of the EU, Candidate Countries, Newly Independent States and regions of Mediterranean Countries

This project was located in regions of Member States in EU and of candidate states. The North-East RDA is a member of this network and will participate in the project, according to the cycle of activities and projects included in the Regional Innovation Strategy of each new associated countries, each project being developed in the spirit of the specific problematic of every state.

In the same area of innovative development and academic cooperation with industrial environment, the North-East Regional Development Agency was partner in another programme called SAIL (Strengthening Academic and Industrial Links) Network and its objective was to facilitate the exchange of knowledge and experience at transnational level as concerning the academic and industrial cooperation between regions and it was located in Development Regions of the following states: Germany, Island, Spain, Great Britain, Sweden, Romania, Northern Ireland, Cyprus, Poland, Israel.

Through this program the following results were achieved at the North-East Region level:

- Promotion of innovative development and providing the information on the opportunities of enhancing transnational partnerships, developing experience exchange activities, including the exchange of personnel, study visits;
- Interpolation of industrial and academic cooperation issue on the political agenda of the regions in the network;
- Dissemination of the information through a website, a newsletter and two conferences.

Development of the IT&C side in the Romanian society of transition represents a basic element for modernization and efficiency of each activity field. In the North-East development region, the last years have brought an unprecedentedly development of the information society, by improving the communication network and increasing the number of companies which offer information (IT)-related services.

This development had by far the highest increase rate comparing with any of the other activity sectors in the same time span.

An increase of the hardware and software supplying companies as well as database processing companies has been noticed.

In Iasi County, such companies are as follows:

- Hardware and IT consultancy suppliers: Quartz Matrix, RTD, Radix, Flamingo, Computer House, Infoservice, Autotehnic, Sercom, Q-net, Omega;
- Software and IT consultancy suppliers: Matrix, RTD, Radix, Quartz, Avicena, TH Invest;
- Database processing companies: Matrix, TGH Investment.

In Botosani County, the hardware and software equipment supplying companies are as following: S.C. Petar Computers, Sierra Computers, Elsaco, Quattro, Complay. There is also a database processing company called Informatics Services Company.

In Suceava County, Assist, Warpnet, Asieta, Mics, Dotnet are hardware providers and Assist, Warpnet, Iiruc and Information Processing Centre are data and databases processing companies.

As a general rule, these firms are Internet and e-mail providers. Besides these companies, a remarkable progress has been registered by CONNEX through X-Net service, which offers their clients free-of-charge Internet access via satellite. Satellite-intermediated networks provide higher quality and information transfer rate than phone cable networks.

Cable television showed a significant development in the last years when new specialized companies set up for providing these services. The most important are: Somax TV Botosani, TVS Saveni (Botosani County); Telemach and Tele M Sat (Neamt County); M-Bit, RCS, Telecablu (Iasi County); Agapia and Megaconstruct (Suceava County).

3. POPULATION, HUMAN RESOURCES AND LABOUR MARKET

3.1 Population and human resources development

At 1 January 1998, total population of North East region was of 3.785.530 inhabitants, representing 16,7% out of total country population. At 18.03.2002 (according to census) were 3.674.367 inhabitants and 3.743.242 inhabitants (according to Statistical Year Book of Romania 2003).

We underline here the differences that exist between the two statistical data sources. In this chapter we used first information provided by Statistical Year Book of Romania.

North East region is the first from the point of view of number of inhabitants.

Population of region is concentrated in 32 urban centres, 463 communes and 2 445 villages. The percent of urban population, in 2002, from the total population is of 40.77%, in decreasing given the situation from 2001. Below is presented the situation from NE region in comparison with the other regions:

Comparative situation between regions regarding urban and rural population balance from 2001 and 2002

Region	Romania	NE	SE	S	SW	W	NW	Centre	Bucharest
2001									
Urban(%)	54,6	43,5	56,8	41,6	45,3	62,2	52,6	60,3	88,8
Rural (%)	45,4	56,5	43,2	58,4	54,7	37,8	47,4	39,7	11,2
2002									
Urban(%)	53.26	40,77	55.26	40.64	44.72	61.71	51,14	58,85	88.86
Rural (%)	46.74	59,23	44.74	59.36	55.28	38.29	48,86	41,15	11.14

Source: Statistical Year Book of Romania 2002, 2003

North East region, together with South region, have a population concentrated mostly in rural area.

Population development by gender and averages

Population by gender and averages (persons)						Rate of population development (%)			
Indicator	1998	1999	2000	2001	2002	1999/ 1998	2000/ 1999	2001/ 2000	2002/ 2001
Romania	22502803	22458022	22435205	22408393	21794793	-0,19	-0,10	-0.12	-2.73
Urban, from which:	12347886	12302729	12244598	12243748	11608735	-0,36	-0,47	-0.01	-5.18
Women	6376752	6359021	6336750	6340211	6029693	-0,27	-0,35	0.05	-4.89
Rural, from which:	10154917	10155293	10190607	10164645	10186058	0,003	0,34	-0.25	0.21
Women	5113941	5114472	5129601	5118692	5122562	0,01	0,29	-0.21	0.07
North East region	3801874	3813123	3823492	3836835	3743242	0,29	0,27	0.35	-2.43
Urban, from which:	1677767	1672419	1663685	1664997	1526407	-0,31	-0,52	0.08	-8.32
Women	861893	859395	855697	856543	788275	-0,28	-0,43	0.10	-7.97
Rural, from which:	2124107	2140704	2159807	2171838	2216835	0,78	0,89	0.56	2.07
Women	1058510	1066479	1075191	1081530	1102020	0,75	0,81	0.59	1.89

Source: Romanian Year Book, 1998-2003

From the table presented above can be observed that at national level total population number decreased between 1998-2002 concomitant with a decrease of urban population number. Main causes are both diminution of natural growth and of migration from urban area to rural area.

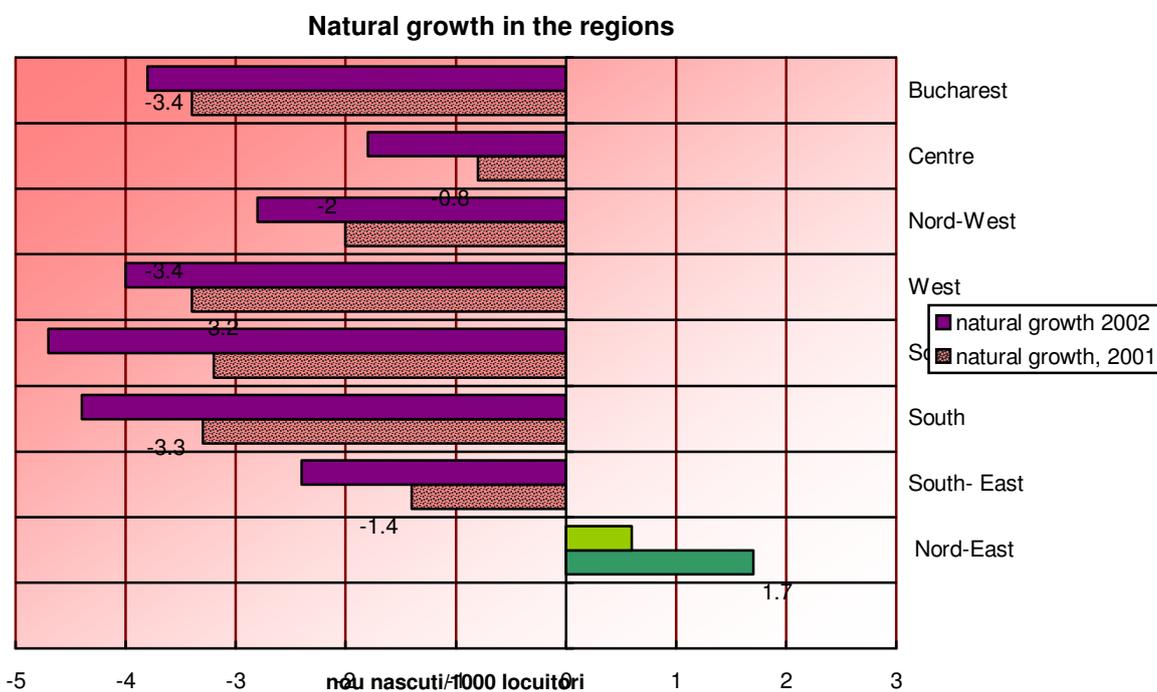
At regional level total population number increased between 1998-2001, followed by a significant decrease with 2.43% in 2002. Unexpected is the evolution at urban – rural level. If, between 1998 – 2000 is registered a slight decrease of urban population number to the prejudice

of rural population, and in 2001 is registered a stagnation, in 2002 is registered a significant decrease of urban population number with 8, 32%.

Concerning evolution of women population: is in the same direction as situation presented regarding urban population. Population from urban area is more concentrated in developed urban centres. This migration fact of population from towns to villages raised from a part of population need to be able to assure sustenance living conditions, as a consequence of massive dismissals from industrial sector (placed prevalent in urban areas), and in connection with implementation of law regarding agricultural land.

In 2002 year, population average density in the region is of 756,4 inhabitants /kmp in urban area and 61,8 inhabitants/kmp in urban area, with an average density of 101.58 inhabitants/kmp, being to a superior level to the average at country level (91.4 inhabitants/kmp). The county with the highest density is Iasi with 147.1 inhabitants /kmp and with the lowest density is Suceava with 82.7 inhabitants/kmp.

In 2001, natural growth in North East region is 1,7 at thousand inhabitants, decreasing in 2002 at 0.6%. North East region is the only region that still records a positive value.



Source: Statistical Year Book of Romania, 2002, 2003

Infant mortality rate in 2002 is the highest in North East region, being of 20,6 demises (under 1 years old) at 1000 inhabitants – national average is of 17,3. This fact can be explained by the high poverty level, especially in rural area, and the low level of education for health and by the minimum conditions of hygiene.

Gender structure of population at global level in the region is well balanced between men and women in North East region: 49.50% from total population are men, and 50.50% women.

From total, young population percent between 15-34 years old is representative (32.87%), but can be also observed a high percent of elderly, with 65 and over, about 13.58% from total.

Population age structure (in percents) – 2002

Territorial unit	Total population	Age groups				
		0-14 years old	15-34 years old	35-49 years old	50-64 years old	65 years old and over
North East	100,0	20,10	32,87	18,24	15,21	13,58
Romania	100,0	17,34	32,51	19,50	16,60	14,05

Source: Statistical Year Book of Romania 2003

From existent data of Human Development National Report, Region North East is placed at medium level in the country regarding life expectancy and level of illiteracy (number of persons of 15 years old and over that has attend or graduated a school or which know to write and read without a graduated school), and with 3,4 percents below medium level regarding attendance of pupils in schools – pupils that are registered in an educational system. Regarding human development indicator, region North East is on the last place (HDI =0.738).

Territorial unit	Life expectancy at birth (years) 1997-1999	Life expectancy at birth (years) 1998-2000			Level of education of adult population % 1999	Gross rate of attendance in education system 1999/2000			Human development indicator (HDI) 1999
		Total	Women	Men		Total	Women	Men	
Romania	69,7	70.5	74.2	67.0	97,1	64,9	65.9	64.0	0,759
North East Region	70,1	70.8	74.2	67.5	97,0	61,5	63.7	59.4	0,738
Bacau		70.4	73.7	67.3	97.0	59.2	61.0	57.4	
Botosani		70.0	74.0	66.2	95.3	57.7	60.5	55.1	
Iasi		70.9	74.4	67.6	97.2	71.9	75.1	68.9	
Neamt		70.6	74.3	67.2	97.7	57.6	58.7	56.5	
Suceava		71.6	74.7	68.6	98.0	59.4	61.3	57.5	
Vaslui		71.0	74.2	67.9	96.0	57.2	59.1	55.4	

Source: Human Development National Report, 2001-2002

To complete the image of the region about population and human resources, we analysed substitution rate indicator, as the report between population with 15-24 years old and population with age between 55 and 65 years old, as is presented in the following table:

Territorial unit	Population with age between		Rate of substitution (%)
	15 –24 years old	55 – 65 years old	
2000			
Total region	655645	367581	178,4
Romania	3680716	2355066	156,3
2001			
Total region	645188	356784	180,8
Romania	3548331	2241238	158,3
2002			
Total region	609938	343522	177,5
Romania	3399313	2184055	155,6

Source: Statistical Year Book of Romania, 2001-2003

Level of substitution rate shows that population in the region is young comparing with situation at national level, but without adequate employment policy rate of unemployment can increase significantly.

Compared evolution of substitution rate

Rate of substitution	Measure unit	1998	1999	2000	2001	2002
Romania	%	156,14	156,29	156,3	158,3	155.6
North East region	%	171,78	173,4	178,4	180,8	177.5

Source: Statistical Year Books of Romania 1999-2003

Can be observed that demographic urge on labour market in the region is superior to national level – where is recorded a relative constant tendency.

From ethnical point of view, population from North East region present a high degree of similitude. According to data collected in 1992, from the total of population, 98,4% is represented by Romanians, 0, 1% by Hungarians, 0,7% by Roma, 0,1 % by Russians, and 0,6% by others.

From the point of view of religion, majority of population are orthodox (91,4%), this fact is close connected with ethnical aspect. The other religions exist but in small percents: Romano-catholic 5,93%, Pentecostal 1,12%, Adventist 0,31% and other religions 1,58%.

Key problems:

- High percent of population concentrated in rural area: 59.23% from total of region population;
- Infant mortality rate in 2001 is the highest from all the regions, 20.6 demises (under 1 years old) at 1000 inhabitants;
- Regarding human development indicator, North East region is situated on the last place (HDI =0.738).

3.2 Structural analyse of labour market and opportunities for employment

Labour market structure

At the end of 2002 year, employed active population in North East region is of 1.645.000 persons, representing 43.80% from the total region population and 17.64% from the total active country population.

In the last decade, the tendency was a permanent decrease of number of employed active population. As a result, economy was affected, many state factories that used to have a high number of employees, has initiated dismisses and closed many departments (activities).

Structure of population from the region, active population (employed – unemployed) and inactive population in 2002

Age groups	Total population	Active Persons			Inactive Persons
		Total	Employed	Unemployed worker ILO	
Total	100,0	47.4	43.8	3.6	52.6
Under 15 years old	100,0	-	-	-	100.0
15 - 24 years old	100,0	44.1	36.0	8.1	55.9
25 - 34 years old	100,0	79.0	72.3	6.7	21.0
35 - 49 years old	100,0	81.3	75.7	5.6	18.7
50 - 64 years old	100,0	55.1	53.9	1.2	44.9
65 years old and over	100,0	29.6	29.6	-	70.4
Urban					
Total	100,0	42.3	36.9	5.4	57.7
Under 15 years old	100,0	-	-	-	100.0
15 - 24 years old	100,0	30.1	19.9	10.2	69.9
25 - 34 years old	100,0	78.3	69.8	8.5	21.7
35 - 49 years old	100,0	77.4	69.7	7.7	22.6
50 - 64 years old	100,0	34.6	32.8	1.8	65.4
65 years old and over	100,0	1.6	1.6	-	98.4

over					
Rural					
Total	100,0	51.0	48.5	2.5	49.0
Under 15 years old	100,0	-	-	-	100.0
15 - 24 years old	100,0	55.8	49.4	6.4	44.2
25 - 34 years old	100,0	79.5	74.0	5.5	20.5
35 - 49 years old	100,0	85.7	82.5	3.2	14.3
50 - 64 years old	100,0	69.2	68.5	0.7	30.8
65 years old and over	100,0	39.6	39.6	-	60.4

Source: Statistical Year Book of Romania –2003 (Research about labour working force in households - 2002).

Can be observed that at regional level from total of population 43,8% represent employed population, 3,8 % are unemployed workers ILO, and 52,6% inactive population.

In the group age 15-24 situation represent a problem, number of unemployed workers ILO is the highest from all the other groups – 8,1%. The group age 25-34 years old is 6,7%. Actually, young population with age between 15-34 years old record the highest number of unemployed workers ILO from total population - 14,8%. Situation is similar in urban and rural areas.

Structure of employed population in the region, age groups and level of education in 2002

Level of education	Total employed population	Age groups (years)				
		15-24	25-34	35-49	50-64	65 and over
Thousands persons						
Total	1645	221	450	515	309	150
Percents %						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Superior/ University	6.6	1.6	8.7	8.9	6.4	0.6
Technical college	3.7	1.5	5.0	3.8	5.1	0.1
High school	24.7	22.1	38.4	30.7	8.2	0.3
Professional, complementary or of apprentice	24.7	26.0	28.0	32.8	15.7	2.8
Gymnasium	25.4	42.1	17.7	20.5	33.2	24.8
Elementary school or without graduated school	14.9	6.7	2.2	3.3	31.4	71.4

Source: Statistical Year Book of Romania –2003

Can be observed that the highest percent is represented by persons with high school and professional school (59.4%), followed by gymnasium education (25,4%). Only 6,6% have university studies.

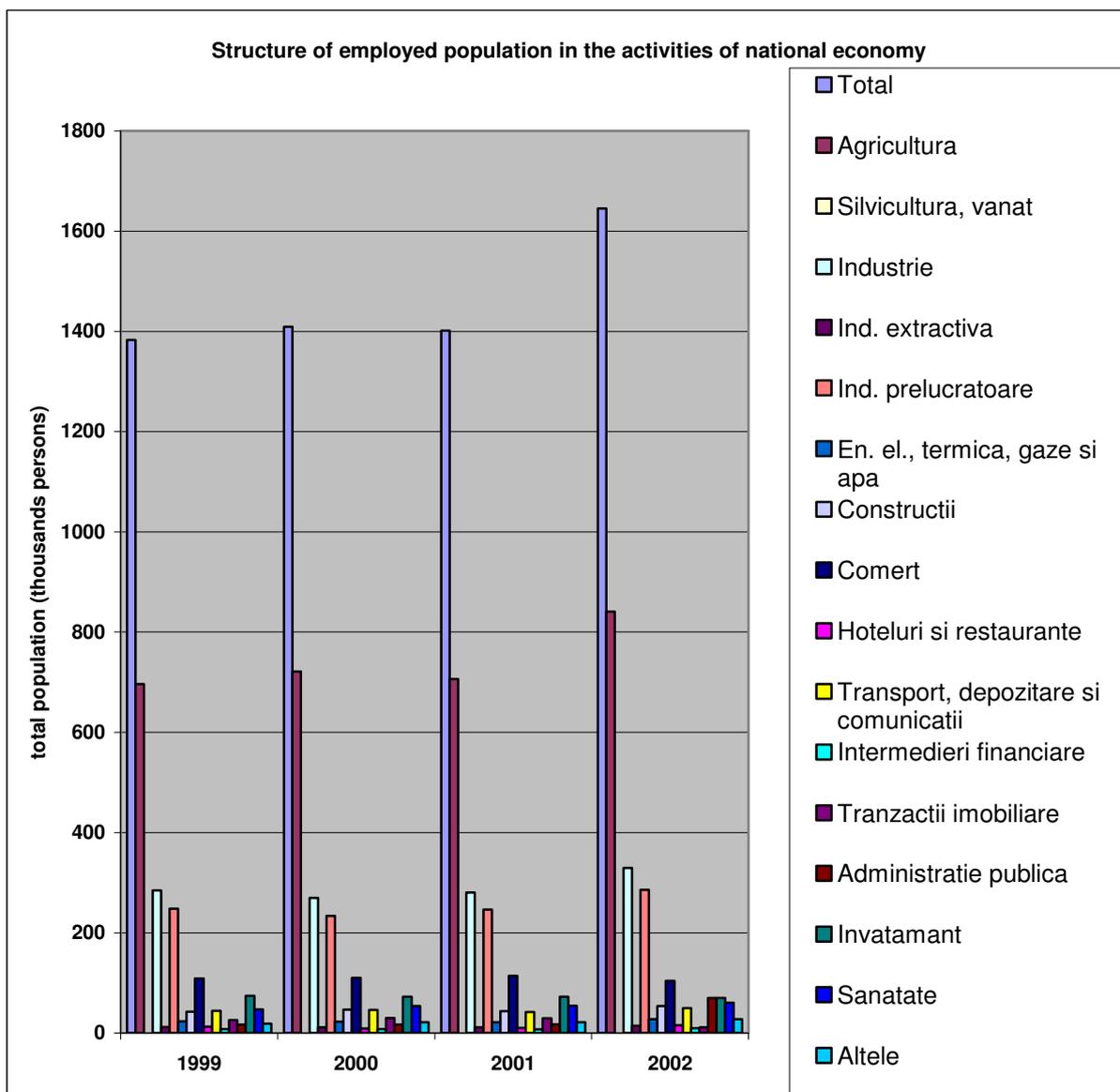
As the age group is higher can be observed a high rate of employed population with a poor level of education.

Structure of population employed in the region, group age and activities of national economy, in 2002

Activity	Total of employed population (thousands persons)	Total employed population (%)	From which, group ages (years), in %:				
			15-24	25-34	35-49	50-64	65 and over
Total	1645	100.00	13.4	27.4	31.3	18.8	9.1
Agriculture, hunting and forestry	841	51.12	14.2	20.5	22.2	25.5	17.6
Fishing and piscinaculture	-	0.00	-	-	-	-	-
Industry (from which)	329	20.00	12.2	33.4	44.7	9.7	-
-Extractive industry	15	0.91	5.7	38.5	46.8	9.0	-

- Processing industry	286	17.39	13.0	33.9	44.2	8.9	-
-Electric and thermic energy, gas and water	28	1.70	7.2	25.9	48.8	18.1	-
Constructions	54	3.28	11.9	33.4	37.8	16.9	-
Trade	104	6.32	16.7	39.8	34.8	8.7	-
Hotels and restaurants	16	0.97	19.8	31.6	41.8	6.8	-
Transport, depositing and communications	50	3.04	10.6	34.6	39.9	14.9	-
Financial mediations	10	0.61	3.2	42.1	42.8	11.9	-
Real estate transactions and other services	12	0.73	8.3	43.7	39.4	8.6	-
Public administration and defence	70	4.26	24.3	34.0	32.4	9.2	0.1
Education	70	4.26	7.0	31.4	40.4	20.0	1.2
Health and social assistance	61	3.71	3.9	36.6	42.2	17.0	0.3
Other activities of national economy	28	1.70	12.7	30.9	43.9	11.9	0.6

Source: Statistical Year Book of Romania –2003

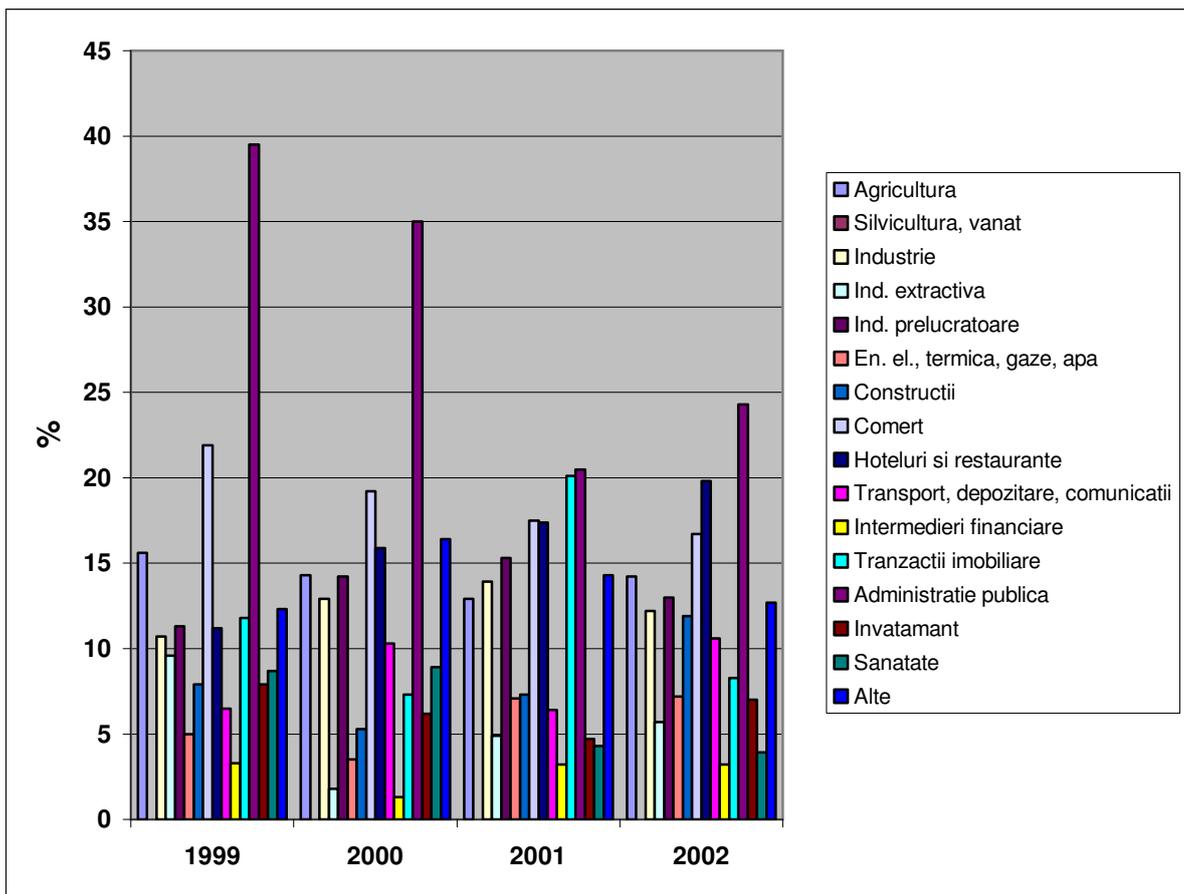


From the total of employed population 51,12% are employed in agriculture, 28,88% in services, and 20% in industry (17,39% in processing industry).

In agriculture field percent of population employed is one of the highest from all the regions of the EU (at least 10 times more). In agriculture from employed population, 25,5% is between 50-64 years old, and 17,6% are over 65 years old – population from agriculture is aging.

In services, many persons are employed in trade activities (6.32% from total), public services (public administration and education with 4.26%, health with 3.71%), constructions (3.28% from total) and transport, depositing and communications with 3.04%. In hotels and restaurants area is employed only 0.97% from active population. Many persons with the age between 25-34 and 35-49.

Structure of population of 15-24 years old and activities of national economy



Rate of growing of employed population between 1998-2002 and sectors of activity

Rate of growing of employed population	2002 (thousands persons)	1999/ 1998 (%)	2000/1999 (%)	2001/ 2000 (%)	2002/2001 (%)
Romania	9234	-4,46	2,49	-0.80	7.84
Region NE	1645	-1,62	1,86	-0,52	17.34
Industry RNE	329	-7,53	-5,27	3,89	17.41
Agriculture RNE	841	4,44	3,53	-2,03	18.97
Total Services RNE	475	-6,05	-20,45	-0.76	20.95
From which: Constructions	54	-12,29	9,81	-6,38	22.72

Source: Statistical Year Book of Romania, 1999-2003

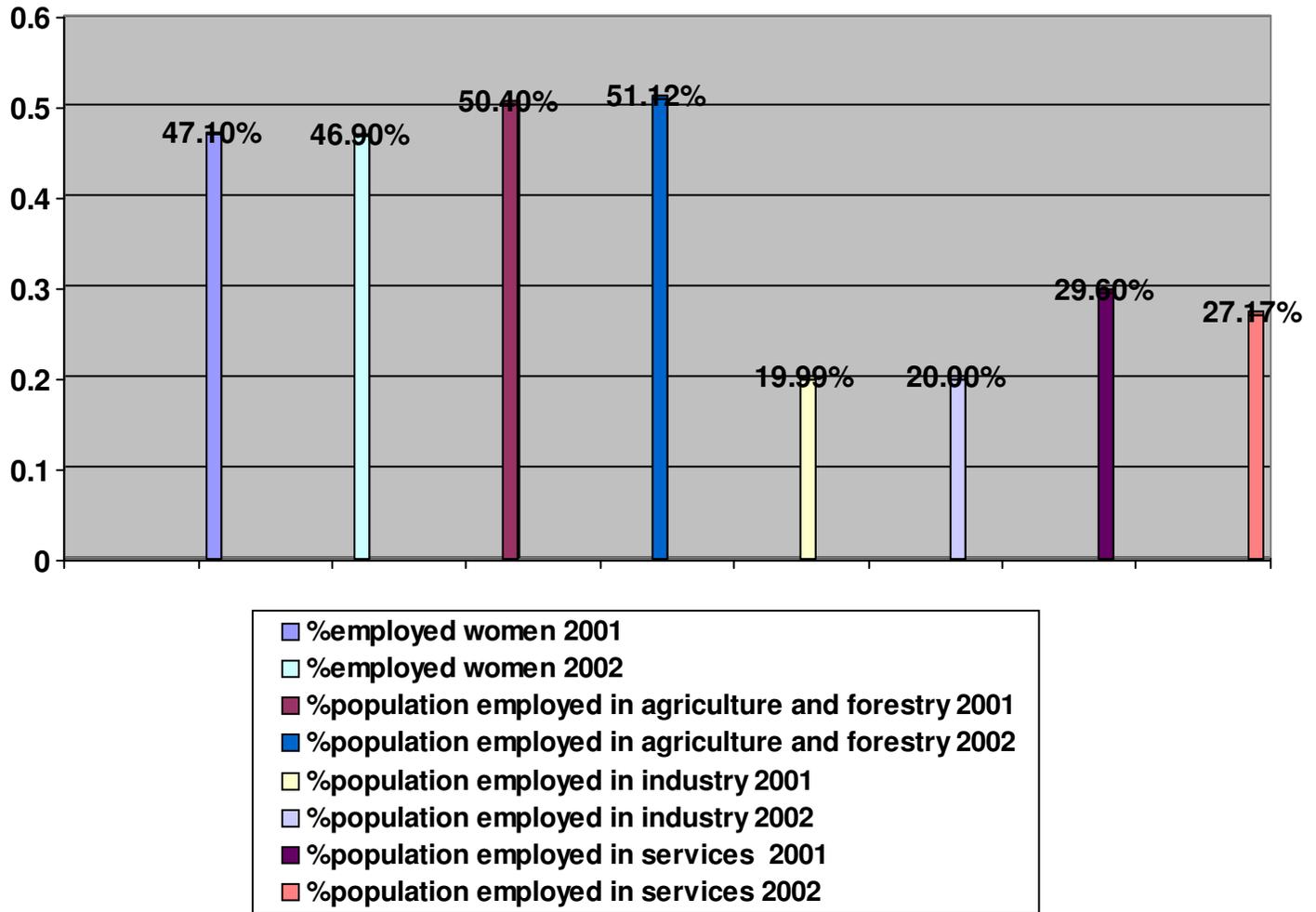
At regional level evolution of employed population has increased during 2000 – 2002 and decreased between 1999 and 2001.

In 2002 was noticed a significant increase (about three times more compared with national level). Increase was equally sustained by the three economical sectors.

Can be also observed that industry sector that decreased between 1999 – 2000, starting with 2001 record an increase in number of employed population in this field. In the same time can be mentioned an increase in number of employed population in services field during 2002.

Unfortunately, population employed in agriculture is not redistributed to the other two sectors. Actually all three sectors recorded increase in the same time.

In the following chart is underlined the structure of population employed in key sectors of national economy, and also the percent of women active and employed in 2001 and 2002.



From the total of active and employed population, 46.90% are women. North East region is situated from this point of view over the national average.

The highest percent of population employed is in agriculture and forestry with 50.40% from total followed by population employed in services with 29.60%.

Region	Employed and active women population (%) 2001	Employed and active women population (%) 2002
North-East	47.10%	46.9
South-East	45,30%	42.2
South	45.30%	44.7
South - West	47.91%	46.6
West	46,40%	45.0
North-West	47,20%	46.5
Centre	44.80%	45.3
Bucharest	47.00%	46.6

Source: Statistical Year Book of Romania 2002,2003

Can be observed an inter-sectoral mobility, through redistribution of the employed population from secondary sector and reorientation of this population to primary and tertiary sector. Same situation can be observed at national level, but to a lower intensity.

Territorial unit		Bacău	Botoşani	Iaşi	Neamţ	Suceava	Vaslui	North East region	Romania
Employed active population (% urban/rural)	Urban	40,19	30,47	46,27	38,2	32,99	37,76	38,43	54,79
	Rural	59,81	69,53	53,73	61,8	67,01	62,24	61,57	45,21

Source: Research on housing and population, March 2002

In the region, percent of population employed is superior in rural area (61.57%), situation that is in contradiction with situation at national level (45.21% in rural area). This situation is the same at the level of all counties from the region.

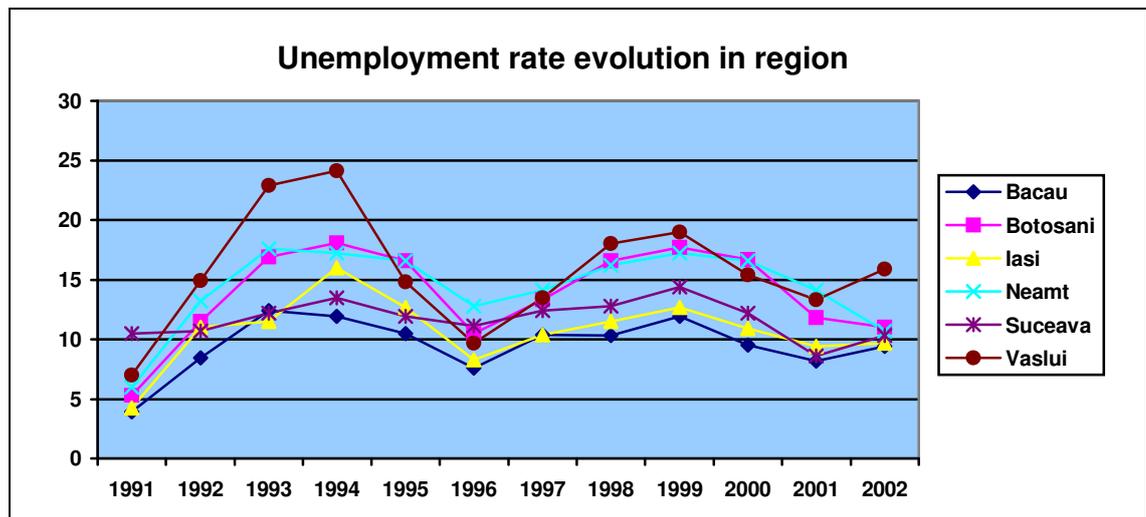
In 2002 number of employees is 765.000, representing 46.50% from the total number of employed population. The highest number is in Iasi County with 167.738 employees, followed by Bacău with 140.800 and Suceava with 105.019. The lowest number is Vaslui County with 65592 and Botosani with 58381 employees.

Structure of unemployment

Region North East is facing with special problems regarding unemployment. Evolution of the last decade of XX century indicated a permanent increase of unemployed workers number, in the same time a lack of capacity of state factories to respond adequately to economy trends. In situation of permanent lack of financial resources – necessary for new investments and improvements of technology – many managers decided to increase labour productivity by staff unemployment.

This fact created existent situation from the region, that present serious consequences especially in areas with a weak industrial diversification (Vaslui and Botosani counties, Bacau and Suceava mining areas).

In this way, at 31.12.2002, if unemployment average in the country is 8.4, in North East region rate of unemployment is 10.8%, in Bacau with minimum 9.4% and maximum 15.9% in Vaslui County. This situation is followed by an increased number of unemployed workers unpaid, because of Law 416 that was implemented, aspect existent in the counties in which were made huge reserves between 1993-1995, fact that confirm a chronic tendency of economy decrease.



Analysing evolution of unemployment rate in the region between 1991- 2002, can be observed two cycles decreasing – increasing with a change of sense in 1996. Tendency of increasing can be noticed starting with 2001.

Positive is the fact that unemployment rate is inferior to the global unemployment rate.

Rate of unemployment comparing with regions between 1998-2002 (total and women)

	1998	1999	2000	2001	2002
Romania, from which	10,4	11,8	10,5	8,8	8.4
Women	10,4	11,6	10,1	8,4	7.8
NE Region, from which	13,9	14,9	13,2	10,6	10.8
Women	12,9	14,2	12,3	9,6	9.7

Source: Statistical Year Book of Romania 1999-2003

At the level of 2002 year, rate of unemployment by gender shows that 56.20% from unemployed workers are men, and 43.80% women, most affected by unemployment are the age group 15-34 years old.

About type of staff and level of education, 69.17% from unemployed workers that receive social benefits have gymnasium and professional education, 25.81% persons have high school and college education and 5.02% are persons with university studies.

From the unpaid unemployed workers, 87.26% have gymnasium and college education, 12.25% have high school education and 0.47% have university studies.

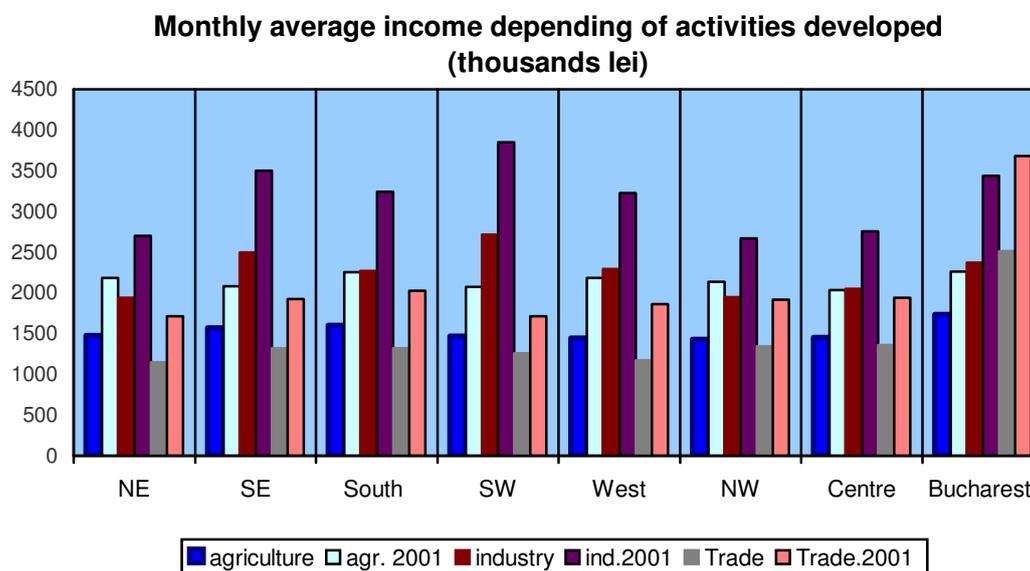
From those 158816 unemployed workers registered at 31.12.2002, 35.6% receive different forms of support from state, and 64.39% are unpaid/ no support.

Key problems regarding labour market analysis:

- The age group 15-24 record the highest number of unemployed workers ILO – 8,1% from total population. Then follow the age group 25-34 years old with 6,7%. Young population, with age between 15-34 years old register the highest number of unemployed workers ILO from the total population– 14,8%;
- From the total of employed population 51,12% are active in agriculture;
- There is a lack of redistribution of employed population from agriculture to services and industry.

Level of incomes on sectors

Statistical data present the fact that region North East is the region with the lowest level of incomes, as is presented in the following table:



Territorial unit	2003	1999/1998	2000/1999	2001/2000	2002/2001	2003/2001
Romania	4839648	46,11	40,46	41,16	25.49	27.72
North East	4321047	40,23	39,96	42,38	29.46	26.68

Source: Statistical Year Book of Romania 1999-2003

Level of medium net income in North East region is the lowest. Can be observed also that in 2002 took place the highest percents increase, at the level of all country, with 29.46%.

4. Environment

4.1 General description of the environmental issues

Sustainable development implies the provision of an optimum balance between economic growth and preservation / reconstruction of the natural landscape in order to ensure a harmonious development capable to comply with both present and future requirements.

This desideratum is not met in the North-East Region, as a consequence of existing oversized production capacities, obsolete technologies of a high degree of wear and tear, lack or insufficiency of financial resources needed for purchasing environment protection equipment as well as of management generally aiming to derive immediate and direct profit.

The present legislation context provides most of the general framework required for reconsidering the environment issues from the sustainable development perspective.

4.2 Indicators for the assessment of the level of degradation of environment factors: air, water, soil, flora and fauna

The quality level of the environmental factors is outlined by specific indicators which are monitored by the laboratories of the County Environment Protection Agencies and Water Management Systems.

The monitoring network existing at county level was expanded as concerns the number of sections and its activity has improved in various ways by expansion of the range of analysed indicators.

Some counties such as Bacau and Neamt have benefited of technical and financial assistance through collaborations between the Ministry of Water, Forest and Environment Protection and the counterpart ministries in The Netherlands and Denmark.

These internally and externally-supported collaborations implemented within the territory by the environment protection agencies have been materialised in the elaboration of the "Environment Protection Local Action Plan" at the level of each county involved.

Another positive factor with long-term advantages is the implementation of complex environment-dedicated projects under the framework of ISPA Programme in the following towns:

- Iasi Municipality (modernization of potable water supply and sewerage system according to Community standard - ISPA contribution: 38,533,500 Euros, total budget: 51,700,000, project to be finished by the end of 2006;
- Piatra-Neamt Municipality (Selective Collection of Household Waste Project - ISPA contribution 10,384,500 Euros and Rehabilitation of potable water supply network, expanding of sewerage system and modernization of wastewater treatment plant, ISPA contribution 21,159.963 Euro, total budget of 28,594,545 Euro);
- Pascani (modernization of potable water supplying system and sewerage system at Community standards – ISPA contribution: 20,400,000 Euros and total budget: 27,200,000 Euros);
- Botosani and neighbored localities (Rehabilitation and modernization of potable water supply system, sewerage system and household wastewater treatment plant – ISPA contribution: 70,000,000 Euros and total budget: 96,000,000 Euros).

As a general overview, the recent year's trend was to reduce the concentration level of various pollutants, as a consequence of the drop of the economic activity carried out by some companies and at a lower extent as a result of upgrading or investments performed in the area.

AIR

According to the data made available by the Statistical Yearbook of Romania the main air pollutants are: storable powders, suspended powders, ammonia, methyl-mercaptan, hydrochloric acid and acid rainfall. Most of the areas registered as being critical zones in terms of air pollution are those located nearby the high polluting industrial sites or those being on the path of important atmospheric currents.

The table below illustrates the values exceeding the maximum admitted concentration of the main air pollutants in 2000 and the localities where such exceeding of the maximum admitted concentration have been registered:

Localities with exceeding of the maximum admitted concentration of air pollutants (2000):

County, locality and pollutant	M.U.	Variation				Frequency of exceeding the maximum admitted concentration
		Maximum concentration		Annual average concentration		
		Minimum	Maximum	Minimum	Maximum	
BACAU County						
Bacau Municipality						
Ammonia	mg /m ³	0,09	0,19	0,03	0,04	0,33
Municipiul Onesti Municipality						
Sulphured hydrogen	μgr /m ³	7,80	10,50	1,49	1,51	0,31
Botosani County	No exceeding of the maximum admitted concentration have been recorded					
Iasi County						
Municipal Iasi Municipality						
Powders	g/m ²	6,28	125,98	2,65	48,43	42,86
Jud. Neamt						
Municipal Piatra Neamt Municipality						
Powders	g/m ²	-	30,93	-	15,57	50,00
Municipal Roman Municipality						
Suspended powders	mg /m ³	-	0,68	-	0,19	67,00
Powders	g/m ²	-	32,69	-	15,42	33,33
Savinesti						
Suspended sulphate	μgr /m ³	-	40,60	-	6,00	10,92
Tasca						
Suspended powders	mg /m ³	0,25	0,26	0,11	0,12	12,26
Suceava County						
Suceava Municipality						
Methyl-mercaptan	μgr /m ³	6,80	17,83	0,25	5,50	29,53
Veresti						
Powders	g/m ²					
Vaslui County						
Vaslui Municipality						
Powders	g/m ²	24,60	29,40	21,10	24,50	100,00
Barlad Municipality						
Powders	g/m ²	25,70	28,30	22,50	24,30	100,00
Husi Municipality						
Powders	g/m ²	24,50	25,80	21,70	22,00	100,00
Negresti						
Powders	g/m ²	25,00	25,60	21,70	22,00	100,00

Source: Romania's Statistics Yearbook 2001

Localities where there was no exceeding of maximum admitted concentration of pollutants in air (2001)

County, locality and pollutant	M.U.	Variation				Frequency of exceeding the maximum admitted concentration
		Maximum effective concentration		Annual average concentration		
		Min.	Max.	Min.	Max.	
Iasi County						
Iasi Municipality						
Powders	g/m ²	7.74	105.15	4.28	61.53	34.28
Pascani						
Powders	g/m ²	-	23.62	-	15.02	40.00
Neamt County						
Piatra Neamt Municipality						
Powders	g/m ²	-	30.93	-	15.57	41.66
Roman Municipality						
Suspended powders	mg /m ³	-	1.42	-	0.28	79.50
Suceava County						
Suceava Municipality						
Methyl-mercaptan	μgr. /m ³	-	7.12	-	0,50	52.60
Vaslui County						
Vaslui Municipality						
Depositing powders	g/m ²	26.70	29.00	21.13	23.53	86.10
Barlad Municipality						
Powders	g/m ²	28.80	33.40	23.26	27.59	96.70
Negresti						
Powders	g/m ²	21.50	23.40	18.96	19.18	79.20
Husi Municipality						
Powders	g/m ²	24.80	25.40	18.75	20.76	78.30

Source: Romania's Statistics Yearbook 2002

For a clearer image on the atmospheric pollution degree there are listed below the critical zones in terms of air pollution in 2001, according to the County Environment Reports at the end of the year.

Critical zones as concerning the air pollution

- Suceava Municipality – mercaptan
- Iasi Municipality – powders
- Bacau Municipality – sulphur dioxide and ammonia - SO₂ and NH₃

Vaslui, Neamt and Botosani counties had not such critical zones in 2001.

Air indicator - Conclusions

- The main areas affected by air pollution are the ones located in the close proximity of industrial sites, in the urban areas; thus the counties facing the highest frequencies of exceeding the air pollutants concentration are Bacau, Suceava and Iasi;
- The maximum concentration of the main air pollutants depends on the production cycle of the large enterprises as well as of the human negligence or incompetence (accidental pollutions);
- As a general aspect, there was a decrease of air pollution during the last years as a result of endowing the Environment Protection Inspectorates with high performance equipment, the correct application of the law at county level and because the companies considered as

being the “large pollutants” purchased and installed non-pollutant technologies and/or state-of-the-art filters.

WATER

As concerning the surface and ground waters the main responsible for pollution are the great industrial companies, similar as in the case of air pollution. But, in addition to them there are other factors as: human factor, which, in the case of water pollution can have a negative role greater than in the case of air pollution (in this case the human negligence, ignorance and wickedness – deliberate discharge of very dangerous chemical compounds as: poisons, pesticides, organic compounds or simple waste).

According to Statistical Yearbook of Romania, the evaluation of surface water quality consists in the measurements of the bacteriological, biological and physical-chemical parameters in order to assess how standard norms are observed. In each check point the water quality is verified in terms of content of organics, toxics and various germs. According to standard there are 4 quality categories: I, II, III and water that exceeds the limits of the 3rd category, taking into account its use:

- **Quality Category I** – represents the water used to feed the centralized units of breeding, food industry units as for other activities that need water of drinking water quality;
- **Quality Category II** – represents the water used for the reproduction and development of natural pisciculture fund in plain waters as the feed water for piscicultural farms, for some industrial technological processes and for other activities that require the 2nd category water;
- **Quality Category III** – represents the water used to feed the irrigation systems, the hydro-electric power stations, the cooling water systems, the washing systems as other units that require water of the 3rd category;
- **Water that exceeds the limits of the 3rd category** – is not useful for public consumption and is a threat for public health and environment.

Surface water quality level in North-East Region (km).

Year	SIRET					PRUT				
	Total	Cat.I	Cat.II	Cat.III	>Cat.III	Total	Cat.I	Cat.II	Cat.III	>Cat.III
1997	4135	2587	995	169	384	1586	214	736	302	334
1998	4135	2540	1119	77	399	1588	431	490	111	556
1999	4135	2377	1320	70	368	1588	550	371	313	354
2000	4135	2369	1235	199	332	1588	356	615	216	401
2001	4135	2551	1006	234	344	1588	757	181	302	348

Source: Romania's Statistics Yearbooks 1998,1999,2000, 2001, 2002

The analysis of the period 1998-2002 revealed that there were no significant alterations during the five years of water quality in Siret and Prut hydrographical basins. Thus, the Prut River registered an increase of 543 km and Siret River a decrease of 36 km for the 1st category. As concerning the ground water pollution, the water quality could be negatively influenced by both natural causes and human activities (due to the underground layers crossed by water and where radioactive or other type of contamination could occur)

CRITICAL AREAS IN TERMS OF SURFACE AND GROUND WATER POLLUTION

Suceava County

- Suceava River (3 km-long section) – pollution with organic compounds, sulphides, phenols, the colouring and foaming phenomenon being due to lignin and specific organic compounds;
- Neagra Sarului brook – pollution with heavy metals of an acid Ph due to the mining industry in Calimani Mountains;

- Suceava town – the ground water in the industrial area of Suceava municipality contains pollutants resulting from cellulose and paper industry.

Vaslui County

- The area starting from Vasluiet River, downstream the water treatment plant in Vaslui, up to the confluence with Barlad River is considered as being a depreciated area, presenting frequent exceeding of dissolved oxygen and CCO-Mn.

- Barlad River- exceeding of CCO-Mn, CBO5, NH_4^+ , NO_3^- , P, in the downstream area of Negresti and Barlad.

Judetul Iasi

- Bahlui River – critical situation within the depreciated section of Harlau - Jijia due to the drain of insufficient treated water from the water treatment plant in Iasi; there is high levels dissolved oxygen, CCOMn, ammonia, CBO5.

- Jijia River – in Andrieseni commune a section of the river is depreciated according to the indicators for oxygen content (CCOMn, CBO5) and the 2nd category of fixed waste, due to the polluting sources in Botosani County. After the confluence with Bahlui River the concentration of ammonia ions and organic compounds increases

Bacau County

- Siret River (pollutant: Southern industrial area of Bacau) – discharging of polluting agents specific to cellulose and paper industry, chemical fertilizers production processes and waste water.

-Trotus River (Borzesti – Onesti industrial zone) – polluting agents specific to rubber and pesticide industry; discharging of derivatives oil industry, waste water.

- Ground water in the area of RAFO Onesti (pollution with oil products in dissolved and pellicle form).

- Ground water in the area of CAROM SA Onesti (inside and outside the plant - pollution on the track of transport pipelines towards Jevreni water treatment plant).

- Pollution with phenols and organic compounds.

- Ground water in the area of Rafinaria SA Darmanesti - pollution wit oil compounds, danger for domestic water supply.

- Ground water in the area of Sofert SA Bacau – pollution with sulphates, ammonia and phosphates; danger for Bistrita River.

- Ground water in the area of S.N.P. Petrom S.A. - Moinesti Branch and Conpet S.A. - Moinesti Branch – danger of pollution with crude oil and gasoline.

Neamt County

- Ground water before the chemical industrial area of Savinesti, respectively Roznov, Zanesti, Podoleni and Costisa localities - pollution of the ground water with ammonium ions, ammonia, nitrates and organic compounds that modify the concentration (????!!!!) of water making it non-potable.

Botosani County

The critical areas in terms of surface and ground water pollution are the rivers sections downstream the discharge points of waste waters resulted from populated centres.

Water indicator - Conclusions

- The surface water quality remained constant in the last 4 years. There were small fluctuations on the three quality groups. However to be mentioned is the increase with approximately 67 km of 3rd category on Prut River (?!?!?).
- The water pollution is generated by the great industrial polluting complementary to the bad shape and reduced capacity of waste water treatment plants.
- The surface and ground water quality is negatively influenced by the great multitude of accidents that occurred in the major enterprises that are still in operation or disaffected. The damages are the main causes leading to destruction of biodiversity and natural balance.

- The North-East Region surface waters contain:
 - a) Organic compounds
 - b) Ammonium ions, ammonia, nitrates, nitrites, phenols, oil compounds, pesticides, copper, phosphorus, etc.
 - c) Some rivers have high heavy metals content and natural uranium due to the natural conditions in the area.

SOIL

CRITICAL AREA S IN TERMS OF SOIL POLLUTION

Suceava County

- Calimani area – Pollution that is the result of emissions exhausted in the atmosphere from sulphur-content rocks oxidation process, on a surface of over 240 ha and due to the presence of dumps and sedimentation basins (108 ha).
- Falticeni Municipality – area of heavy cyanide concentration

Main constraints in terms of soil quality in Suceava County:

- humidity excess– 21,264 ha
- humidity excess – 63,73 ha
- strongly acid lands – 12,815 ha
- surface erosion – 13,714 ha
- deep erosion – 1,080 ha
- active land slides – 5,006 ha
- heavy and medium acidity soils – 107,792 ha
- low and very low concentration of mobile phosphorus – 67,733 ha
- low concentration of mobile potassium - 81,117 ha
- low concentration of nitrogen - 58,393 ha
- low and very low concentration of humus - 28,598 ha

* Remark: The same area could be the subject to several constraints.

Areas affected by land slides and soil erosion phenomenon

Within the following localities:

- Ulma, Brodina, Straja, Vicovu de Sus
- Vadu Moldovei, Forasti, Draguseni, Boroaia
- Vulturesti, Todiresti, Graniceri.

Areas affected by other destructive factors:

Acidifying – Saru Dornei

Vaslui County

Vaslui County has the largest arable area affected by erosion – 232.630 ha.

- Areas that have to be ecologically rehabilitated:

- Within and around the premises of the following companies: GOSCOMLOC HUSI , RAGCL Birlad, Negresti Waste Management Company;
- industrial waste dump of SC RULMENTI SA Birlad;
- Waste dumps of SC AVICOM SA Vaslui.

Main constraints for the quality of the soil:

- degraded soils with moisture excess - 16.641 ha
- acidified soil (North-side of the county)- 2.127 ha (north of the county)
- salted soils 2723 ha

- sandy soils 11.930 ha
- soils affected by erosion 232.630 ha of which affected by:
 - Surface erosion = 203.987 ha;
 - Deep erosion = 28.643 ha.

The soils affected by landslides are totally amounted to 21.062 ha

*** Remark: The same surface could be the subject to several constraints**

Iasi County

- Tutora – Holboca - Tomesti triangle – major pollution resulting from Power Station II Iasi, Tomesti waste dump, Iasi waste water treatment plant, due proximity to the industrial area of Iasi city, the clay pit of SC CERAMICA SA and SC COMTOM SA Tomesti.

Main soil quality constraints:

1. strong and excessive surface erosion - 7855,5 ha
2. Deep erosion - 1927 ha
3. Active and semi-active earth glides - 26015 ha
4. Soils with moisture excess - 7038 ha
5. Salty soils - 7231 ha

*** Remark: The same surface could be the subject to several constraints.**

Main areas affected by landslide and erosion phenomenon:

- Pircovaci and Strunga communes

Bacau County

Critical areas in terms of soil pollution

- Magura Park (Tg.Ocna) - Uncontrolled dissolution of the salt ore in by the springs in the area led to landslides.
- Area of the Zemes oil drill – oil pollution
- S.N.P. Petrom - Moinesti Branch and S.C. Conpet S.A. – Moinesti Branch area – critical points (oil pollution) due to leaks/spillage from damaged oil pipes.

Main soil quality constraints:

- surface erosion soil - 200413 ha
- deep erosion soil - 10078 ha
- land affected by slides and break-down - 32728 ha
- acidified lands - 80419 ha out of which highly acidified lands - 31522 ha.
- land affected by slumping - 102815 ha
- land affected by swamping - 40998 ha
- land affected by floods- 13201 ha
- land with low and very low humus reserve - 141300 ha
- land with low and very low nitrogen supply - 233853 ha
- land with low and very low mobile phosphorus supply - 152321 ha
- salty lands - 4537 ha
- land affected by heavy pollution - 324 ha

*** Remark: The same surface could be the subject to several constraints**

Areas affected by land slides and erosion:

13 areas affected by landslides have been identified in the central and north side;

Areas affected by floods:

The hydrographical basins of Trotus, Siret, Tazlau, Bistrita, Zeletin Rivers;

Areas affected by other destructive factors:

Physical degradation: Zemes, Lucacesti, Buhusi, Podu Turcului, Livezi, Corbasca

Neamt County

In Neamt County there are no critical areas in terms of soil pollution.

Areas affected by landslides and erosion:

- In North of the county, close to Pipirig commune
- On both banks of Bicaz Lake (hydro-electrical dam)
- Northern of from Piatra Neamt municipality, within the premises Garcina commune
- In Faurei Commune

Areas affected by other destructive factors

- Soil alkalinity (Tasca-Bicaz, Neamt county);
- Soil acidity -Savinesti;

Botosani County

The critical areas in terms of soil pollution are the ones represented by the household and industrial waste dumps from urban areas (13 ha) as well as from rural and industrial areas.

Main constraints for soil quality:

1. soil erosion - 159.447 ha
2. heavy soil erosion - 8640 ha
3. landslides - 58909,2 ha
4. active landslide - 35738 ha
5. ground water-sourced moisture excess - 49483,7 ha
6. heavy-medium acidity soil -23170,9 ha
7. very poor nitrogen concentration soil - total surface of 98182 ha
8. low and very low mobile phosphorus concentration soil - total surface of 172800 ha
9. a good potassium supply for agriculture soil - 27490 ha

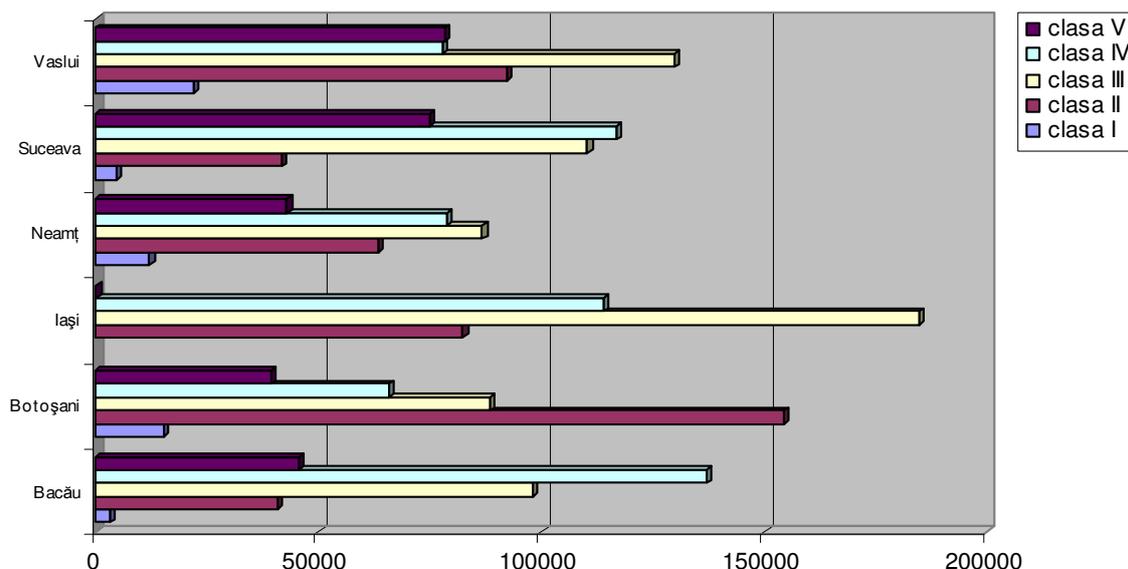
- **Remark: The same surface could be the subject to several constraint**

Areas affected by landslides and erosion phenomenon:

These areas are located in the Central and Southern side within the perimeter bordered by Ungureni, Trusesti, Flaminzi, Lunca, Albesti and Stefanesti commune;

As far as soil quality is concerned, from the standpoint of its usage in agriculture, the situation is presented in the chart below:

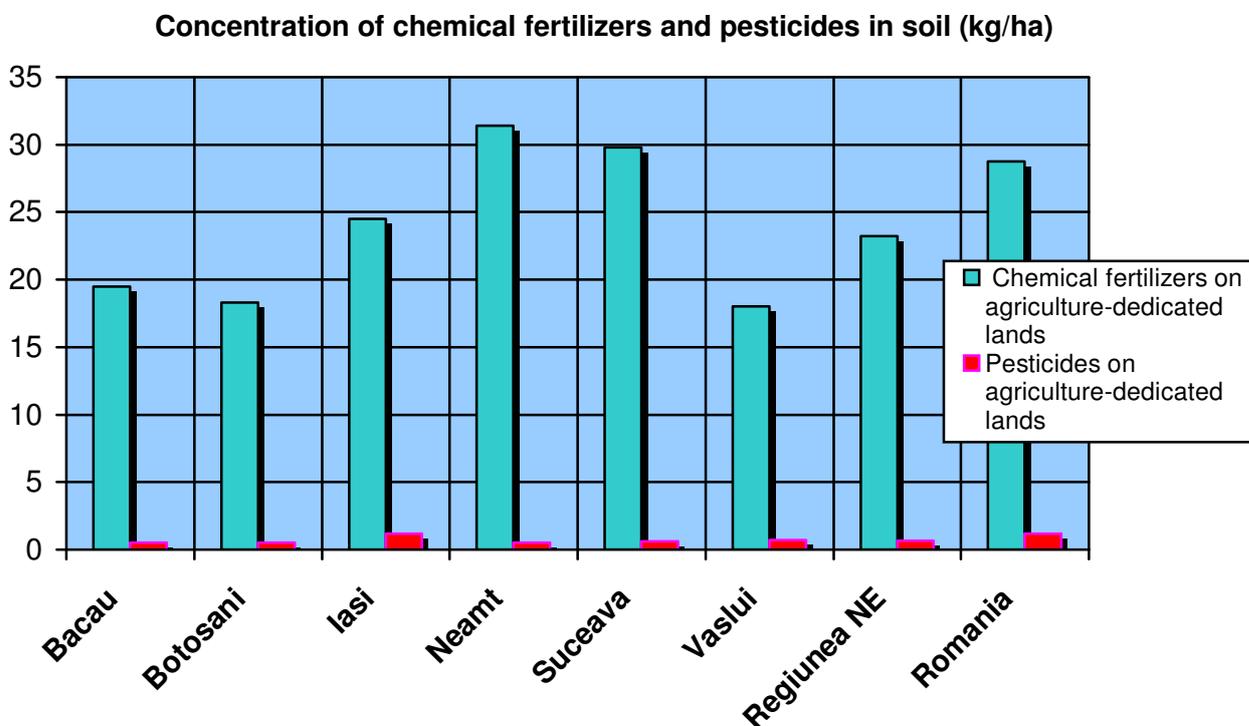
The land, structured on suitability classes:



Sursa: Anuarul statistic al României 1998 - 2001.

The chart above illustrates that the highest percentage is represented by the lands of the 3rd, 4th and 5th class. A special situation is in Vaslui County where the total surface affected by natural degradation phenomenon owns 70.5% of the total agricultural land of the county.

The concentration of fertilizers and pesticides in the soil in the North-East Region, its counties and in Romania is shown in the chart below:



It is to be mentioned that the North–East Region is situated below the country average as far as chemical fertilizers content is concerned, owing 50% of the national average in terms of pesticide content in soil.

Soil indicator - Conclusions

- In the North-East Region the soil is characterized by some factors that are specific to the type of area climate, with major differences of temperature between day and night as well as from one season to another. Thus, very large soil surfaces are affected by erosion, landslides, ground water-sourced moisture excess and acidity.
- Also there is a lack of essential elements of the soil on extended areas such as: nitrogen, mobile phosphorus, potassium etc.
- These two aspects corroborated with void or accidental pollution generated by human factor leads to a higher difficulty in exploiting the North-East Region's soil for agricultural purposes by comparison with the other regions.
- As far as the industrial pollution is concerned, there are the same determining causes, factors and main actors as in the case of atmosphere and water pollution. The main air and water pollutant is the industry. The old, low-sized existing equipment for processing and filtering the industrial waste generates highly toxic waste. Due to the lack of adequate destruction and recycling/storage facilities the industrial waste is stored on the river banks, drained into the surface river and lake waters or stored directly on the land in open spaces. (Metadet – Falticeni accident).
- It is worthy mentioning the fact that during the last 5 years, a great amount of works concerning regenerating large land surfaces has been carried out, especially in Vaslui County – which is affected by natural degradation on 71% of the total agricultural land. A good sign can be considered the endowment of the County Agriculture Directorates with high performance equipment for measuring the chemical features of the soil, which will lead to easier identification and solving of the future problems.
- North–East Region is below the country average as far as fertilisers are concerned, and 50% of the national average regarding pesticides.

Flora and fauna

At the level of North-East Region there are no serious effects on vegetation and fauna though, given the high level of pollution existing in some areas of the region, there was a reduction of the amount of species (?!? Which...flora or fauna ones?) (on water streams of Vasluiet and Barlad Rivers, Vaslui County) and of aqueous floristic associations (on Barlad Valley – Delea, Vaslui County), fauna extinction endangered species (swallow, sand-martin – Bacau County, wild goat, chamois, black vulture, mountain eagle, turs – Neamt County) as well as flora species (Papucul Doamnei, variegated tullip – Bacau County, edelweiss, yellow gentian, Sangele Voinicului, Bulbucii de Munte, Crucea Voinicului, spring adonis, pasque flower, angelica – Neamt County). In order to reflect the reality it must be mentioned the fact that the reduction in fauna species is also, to some extent, a direct result of poaching.

In the North-East Region there are four national parks: Ceahlau (17,391 ha), Bicz Gorge-Hasmas (6,026 ha), Rodna and Calimani as well as several natural reservations: floristic, forest, landscape, paleontological, geological, aquatic, faunistical, dendrological parks and monuments of nature.

The areas covered by forests affected by the drying phenomenon are quantified in the following table:

Forrest affected by drying phenomenon (%)

Territorial unit	Not affected	Light	Medium	Severely	Dried
Bacau	68,78	23,6	5,7	0,77	1,10
Botosani	76,37	19,2	4,1	0,05	0,16
Iasi	32,88	43,5	22,4	0,79	0,34
Neamt	53,47	24,7	19,4	1,88	0,45
Suceava	69,50	21,2	8,9	0,31	0,09
Vaslui	73,62	15,8	7,3	1,28	1,90
Total region	63,68	23,9	11,2	0,83	0,53
Romania	65,6	21,	11,	0,8	0,50

Source: Human Development National Report, 1998 (data refers to 1996).

In the Calimani Mountains (Suceava County), the presence of acid pollutants in the atmosphere caused young plants fading (chlorosis and necrosis of trees and scrubs), affecting the forest fund on an area of about 1,500 ha, with a yearly drying rate of 0.5-3%, at 1-2 km distance from the source and losses in trees growth ranging from 20% to 50% during the past 20 years.

4.3 Major sources of air, water and soil pollution, emissions, drains, contaminations

Air pollution

The mining excavations in Calimani affect a considerable area, with a direct negative impact, through the toxic emissions of sulphur dioxide, hydrogen sulphide, sulphuric acid and sulphate aerosols as well as by acid rainfalls in the Vatra Dornei-Calimani area.

Other major sources of air pollution are represented by the SC Chimcomplex SA Borzesti (hydrochloric acid and chlorine emissions), SC Sofert SA Bacau (ammonia and sulphuric acid), SC Rafo SA Onesti (hydrogen sulphide and sulphur dioxide), SC LETEA SA Bacau, the CET I (Power Plant) - Iasi, CET I-Holboca, SC Fortus SA Iasi, CET Botosani, SC Ambro SA Suceava and generally the industrial or town thermal power plants operating on liquid or solid fuel basis.

Water pollution

The wastewater produced by towns and communes, insufficiently or totally untreated, discharged into surface water or infiltrated into the ground water layer represents an important source of degradation of this environmental factor, characteristic for the overall region.

As concerning the industrial polluting sources, the following ones are to be mentioned: SC Chimcomplex SA Bacau (chlorines), SC Rafo SA Onesti (oil products), SC LETEA SA Bacau, SC SOFERT SA Bacau, SC Comtom SA, SC Fortus SA Iasi, SC Antibiotice SA Iasi, Tomesti - Razboieni farms (organics), Savinesti-Roznov chemical plant (ammonium ion), mining workings in Suceava County (Crucea, Ostra, Calimani, Lesu Ursului, Vatra Dornei – with acid pH emissions of heavy metals).

Soil pollution

The major soil pollution sources are represented by the oil fields (Zemes-Bacau), mining (Ostra, Crucea – radioactive attle dumps, Fundul Moldovei, Brosteni – copper attle dumps, Calimani mining site – sulphur, all mining sites in the Suceava county, CET II Holboca – ash, slag), SC FORTus SA Iasi (foundry sands), SC Antibiotice SA Iasi, SC Terom SA Iasi (mud dumps), the animal breeding farms in Razboieni – animal waste, SC Petrotub SA Romani (oil waste, foundry sands, oily sunder).

A special problem is represented by domestic and industrial waste resulting in highly increasing amounts, which are stored in the old town and commune landfills, but which affect also other areas because of the uncontrolled storage.

A particular problem is represented by different sawdust dumps that are characteristic to forest exploitations. Some of the resulting sawdust is already used, as is the case of the power unit of Tasca that provides hot water and heating by consuming approximately 18% of the total quantity of sawdust produced in Neamt County. Thus, of the total of 80.000 cubic meters of sawdust produced in Neamt County around 55% is used as fuel in power units, 5% of it is used as raw-material for briquettes (round or rectangular-shaped bricks made of pressed sawdust for heating purposes) and 20% is sold to different end-users (legal and natural persons).

Waste water treatment plants and waste landfills/dumps

As a regional feature, both the capacities of the waste water treatment plants and the capacities of the waste dumps are insufficient being unable to satisfy the requirements.

As concerning the existing equipment and the way it is exploited, only the urban localities and the main rural localities are equipped with a centralised water supply and sewerage system and the number of waste water treatment plants is even lower because many of them operate inappropriately as a consequence of:

- Insufficient capacity
- Unsatisfactory endowment
- Unsuitable operation.

Consequently, the insufficiently-treated or untreated waste water is discharged into surface water stream or is getting infiltrated in the underground water streams, thus affecting the latter's quality. In this respect it is worthy mentioning the counties of Vaslui, Botosani, Iasi and Neamt (????).

The waste management includes all the activities related to collection, treatment, recovery and elimination of waste. The waste generators bear the full responsibility for carrying out the corresponding waste management-related activities.

The data concerning waste management are divided on two main categories:

- Waste generated by municipalities and assimilated as such;
- Production waste, including mining waste and waste generated by energy production.

One of the main responsibilities of local public administrations is organizing the collection, transport and elimination of **municipality-generated waste**.

Into the category of municipality waste the following waste types are included:

- Household waste generated by population;
- Household-type waste generated by social-economic units;
- Waste resulting from commercial activities;
- Street and road waste;
- Parks and gardens waste;
- Sludge resulted from the treatment of waste water treatment plants;
- Waste resulted from civil constructions and demolitions.

The household waste is collected on non-selective basis (there is only one pilot unit in Piatra Neamt in this respect) and eliminated by storage (in landfills); it is estimated that only 5 % of total household waste is collected in view of recovery.

The generator bears the responsibility of organizing the **production waste** management-related activities. The economic units carry out these activities in their own specialized facilities or subcontract these services to other specialized companies. Presently, there are only few

companies operational in the waste management field and the services provided are rather limited as concerning the waste type and processing capacity.

In urban areas, the municipality-generated waste management activity is organized and carried out by specialized services of town halls or waste removing companies. The latter operate on contract basis concluded with individual waste generators but the existing system covers only 95% of the total municipality waste generators.

Approximately 40% of the components of municipality-generated waste are represented by recyclable materials out of which 20% could be recovered not being contaminated. As a result of the selective waste collection through the mentioned pilot facility only 2% of total recyclable materials are recovered. The rest is eliminated by storage losing high quantities of side raw materials and energetic resources.

The existing waste landfills are insufficient and most of them are not located and fitted according to the standards in the field situation that leads to a negative impact on all environmental factors and creates a discomfort for the population. In 2000 an ecologic waste landfill became operational in Piatra Neamt as result of a project co-financed by the Danish Environmental Protection Agency (DEPA). Moreover, through the project initiated by Piatra Neamt Municipality for household waste selective collection – ISPA contribution of 10,384,500 and total budget of 18,038,705 Euro – a new integrated waste management system will be created.

In the rural areas there are no services organized specifically for waste management, the waste transport and storage being made individually by each generator.

The North-East Region is facing also with problems as concerning the management of health care- (hospitals) generated waste. The hospitals either don't have own waste incinerators or they are not of international standards or, even if lacking incinerators, the hospital generated waste is stored in places that represent potential hazards for population.

4.4 Comparative evaluation of environmental protection against national trends. Conclusions

The North-East Region does not face very serious pollution phenomenon. In spite of that, some factors with negative impact on the environment can be listed:

At regional level, the main environment problems are related to:

- Bad management of industrial and domestic waste (non-selective collection, low degree of recapitalisation and/or treatment of waste, unsuitable storage as concerning location and fitting of waste dumps, existence of sawdust dumps on the banks of water streams, along railways)
- Former disaffected state-owned enterprises producing or using extremely toxic chemical agents as well as the choice of some unfitting technical solutions and low experience of the personnel involved led to environment pollution with extremely toxic substances (cyanides – the Falticeni incident).
- Deforestation, with implications on sharpening of landslides;
- Soil erosion phenomenon which mainly affects the Eastern part of the region
- Local or area pollution caused by:
 - Industrial activities with impact on air, water and soil
 - Mining workings (coal, radioactive ore, sulphur, copper, manganese), with impact on air, water, soil, vegetation;
 - Traffic (insufficient or inexistent road avoiding town areas) with impact on air and level of noise;
 - Urban agglomeration, with impact on air (thermal power plants on liquid fuel basis), water (waste water treatment plants of an insufficient capacity) and soil (waste);
 - Animal breeding farms, with impact on water and soil.

Still there are also some positive signals concerning the environment protection as following:

- There is a decrease in the activity of the great industrial pollutants and their gradual replacement with SMEs, much more flexible and with higher possibilities in approaching the sustainable development, according to the existing legislation especially the one concerning the environment protection.
- Existing financing programmes and the collaboration with EU Member States on environmental issues.
- Carrying out specific training classes in kindergarten and schools. The negative side of this initiative is that the target group is quite narrow and the topics to be introduced are not covering all the environment issues.

Some counties within the North-East Region were de beneficiaries of programmes and projects with external co-financing applicable to the environmental protection field.

Thus, projects in various stages of progress are implemented, aimed at updating the water supply systems (Iasi county), modernisation, revamping and development of town waste water treatment plants (Iasi, Suceava, Piatra Neamt, Roman), for selective collection of waste and establishment of an ecological waste dump (Piatra Neamt), reduction of the risks implied by industry (the Bacau-Onesti area and the Savinesti chemical platform – SC Fibrex SA), reduction of powder emissions (SC Moldocim SA Bicz – Tasca cement production facility), bio-diversity preservation and ecological reconstruction of the Ceahlau National Park, a demonstrative project related to utilisation of sawdust generated by wood logs cutting units (on Bicz and Damuc River Valleys), the CREDO programme concerned in cross-border co-operation for the monitoring of Prut and Siret Rivers (Botosani County).

Environmental key issues

- Insufficient capacity of waste water treatment plants (70% of the necessary) and of the solid waste dumps (60% of the necessary);
- Constant air pollution, especially in the large cities and in the proximity of industrial sites, with frequent exceeding of the maximum values of the specific environment monitoring indicators

• RURAL AREAS AND THEIR ACTIVITIES

5.1. General description of rural areas

Within the existing social-economic context, the North-East Region's rural area has elements that contribute to the definition of particularities of the territories of the 463 communes and 2,445 villages from the six counties: Bacau, Botosani, Iasi, Neamt, Suceava and Vaslui.

The *commune* is the basic administrative unit on whose territory the rural policy is implemented. In this regard, the communal authorities are partners of the county and regional authorities. In the rural area of the region there are 463 communes and 2,445 villages where 2,216,835 inhabitants live, meaning 59.23% of NE Region's total population. The rural population is distributed approximately equally on sexes. In Suceava and Botosani counties there is the highest percentage of rural inhabitants (over 60%).

The administrative composition of rural areas (2002)

Territorial units	Communes	Villages
North-East Region	463	2445
Bacau	79	490
Botosani	68	336
Iasi	85	420
Neamt	70	347
Suceava	90	396
Vaslui	71	456

Source: Romania's Statistics Yearbook 2003

Among the causes of ruralism we could include the historical ones (the withdrawal of the human communities in areas of difficult access of the invaders), the laic-religious ones (keeping on the traditions and popular beliefs) and the economical ones related to the low living standard of some social categories (rural migration).

From the point of view of prevalent forms of relief, the rural types of settlements and specific activities are as following:

- Plain areas – characterized by cluster-type houses, with economical functions of agriculture-cereal and fruit trees-vineyards character.
- Hill and hillock agricultural areas – characterized by scattered houses along the roads, with gardens and orchards, vineyards between houses groups. As economical function, the accent is on trees-vineyards and animal breeding. There are also more complex economic activities such as primary and high-end wood processing and even mining;
- Mountain area – characterized by houses scattered up in the mountains, with isolated farmsteads or small groups of houses largely spread of which the majority don't have public utilities connection: electricity, gas and water supply network.

The basic economic rural activities are: agriculture (cereal crops, potatoes and white beet crops – in almost all counties, vineyards – in Vaslui, Bacau and Iasi counties, fruit growing - Iasi, Suceava and Neamt counties), wood exploitation and processing – Suceava, Neamt, Bacau counties - and rural tourism –in Suceava and Neamt counties.

5.2 Key sectors

5.2.1. Agriculture

In 2002 the total cultivated area of the region was of approx. 3,684.9 thousands hectares (15.45% of total national surface) of which 2,131 thousand ha represented the agriculture-dedicated land (14.36% of total Romania's agriculture land) divided on use categories. The agriculture land in private property represented 2,092 thousand hectares (98.14% of region's agriculture surface).

The agriculture private sector was born as result of the implementation of the Land Administration Law. The thinking behind the law, its implementation as well as the delay in its implementation generated a series of disturbing factors such as:

- Division of agricultural exploitation;
- Lack of correlation between the application of the Land Administration Law and nascence of the land market (the latter appearing with a big delay in 1998 – Law 54/1998 concerning legal circulation of the land);
- Not providing the appropriate means for agricultural works together with the land property rights.

Total land area by use, on December 31st, 2002

- Ha-

County	Bacau	Botosani	Iasi	Neamt	Suceava	Vaslui	NE
Total surface	662052	498569	547558	589614	855350	531840	3684983
Agriculture-dedicated surface	323468	392905	380997	283789	349131	401131	2131421
Of which: Private sector	320308	388469	370233	276684	340299	395847	2091840
Arable	184628	298477	253491	170473	179859	288080	1375008
Pastures	87528	75146	88109	69394	91108	87349	498634
Hayfields	40247	14769	19651	40108	74819	7664	197258
Vineyards	7614	1847	11706	1111	-	15027	37305
Orchards	3451	2666	8040	2703	3345	3011	23216
Forests	279001	57187	99022	261330	456394	79182	1232116
Waters	14765	13849	12589	10374	13630	8156	73363
Other surfaces	44818	34628	54950	34121	36195	43371	248083

Source: Romania's Statistics Yearbook 2003

It can be noticed that there is a great agriculture potential in the Region by comparison with the percentage of rural population and demographical density.

In 2002 the value of agriculture goods and services production represented 19.52% of national agriculture production.

This leadership position registered in terms of agriculture vegetal production is one of conjuncture, the situation being worst in those years when the climate (rainlessness and frostiness) and the difficulties faced in harvesting (insufficient mechanized park, lack of funds) affected some of the country regions in which vegetal agricultural production is based on cereal crops.

The tables below present the situation of the cultivated surfaces in the region, vegetal agricultural production and average production per hectare for the main crops.

Evolution of vegetal agriculture production at regional/national level, 1998-2001

Category	Production 1998 (tons)		1999/1998 (%)		2000/1999 (%)		2001/2000 (%)
	Romania	North-East Region	Romania	North-East Region	Romania	North-East Region	North-East Region
Cereals grains	15452719	2295326	10,25	-0,01	-38,50	-37,66	67,64
Wheat and rye	5207911	512618	-10,08	-31,60	-4,83	-17,69	135,96
Barley and two-row barley	1238001	94678	-17,72	-9,81	-14,88	-27,45	67,44
Oats	362137	71291	7,57	8,28	-37,41	-36,34	38,14
Maize grains	8623370	1613866	26,80	10,40	-55,21	-42,15	49,90
Leguminous crops for beans	72497	21788	5,87	5,46	-51,89	-52,09	89,45
Peas	24382	3528	10,78	-12,78	-47,58	-33,83	33,40
Bean	46856	18213	1,79	8,97	-54,29	-54,83	101,71
Flax fiber	735	230	-6,12	-65,22	27,68	68,75	-
Hemp fiber	11137	363	-34,06	-80,72	-80,96	-7,14	56,92
Sun flower	1073316	83894	21,20	29,92	-44,59	-36,33	32,14

Soybeans	20082	9652	-8,67	-0,90	-62,12	-34,22	10,20
Sugar beet	2361359	694161	-40,07	-42,51	-52,87	-19,86	-3,19
Potatoes	3319150	827032	19,22	20,06	-12,31	-5,22	5,65
Autumn potatoes	2952839	785313	19,14	19,21	-10,98	-3,65	4,27
Vegetables	2819134	438976	8,16	12,80	-17,10	-12,63	15,18
Tomatoes	677517	72091	4,59	19,71	-11,28	-8,96	9,88
Dry onion	365162	72367	9,82	12,48	-26,12	-20,66	31,26
Cabbage	837824	136513	5,67	3,49	-17,34	-10,41	16,27
Water melons and melons	68962	45049	23,72	34,13	-37,75	-34,59	-
Old and new perennials	12331426	2937102	9,55	9,17	-31,81	-21,27	20,51
Annuals for hay and green fodder	3773666	609122	14,86	33,95	-34,47	-20,00	-1,43
Plants used for silage	1145649	176902	-10,26	-6,90	-53,62	-48,56	-5,84
Fodder tubers	1119479	385634	4,92	15,76	-31,84	-28,11	7,91

Source: Romania's Statistics Yearbooks 1999/2002

As it was presented in the agriculture sub-chapter, in 2000 there was a negative trend of agriculture production in respect to the great majority of crops because of climate factors existing in that period. In change, in 2001 the production knew a re-launch.

The evolution of average production/ha of the main crops (kg/ha)

Category	Average production/ha, in 2002	Production 1998 (tons)		1999/1998 (%)		2000/1999 (%)		2001/2000 (%)
		Romania	North-East Region	Romania	North-East Region	Romania	North-East Region	North-East Region
Wheat and rye	2680	2.561	2.578	8,40	-3,65	-17,87	-29,19	63,33
Barley and two-row barley	2109	2.394	1.919	2,38	4,01	-14,12	-27,76	78,85
Oats	1578	1.588	1.691	-1,13	-2,01	-33,12	-34,22	48,62
Maize grains	3175	2.756	2.839	31,60	11,03	-55,80	-43,34	55,71
Peas	1580	1.737	1.751	-0,40	-19,02	-37,46	-17,56	45,85
Bean	1029	1.046	1.160	1,72	0,69	-45,49	-39,81	61,59
Hemp fiber	2357	3.600	4.714	62,14	-42,89	-55,41	60,96	
Sunflower	1619	1.115	1.115	11,48	22,51	-33,95	-31,70	32,80
Soybeans	1861	1.364	1.062	34,75	36,63	-67,68	-37,08	57,28
Sugar beet	20311	20.045	16.736	7,80	10,95	-36,19	-21,52	23,95
Potatoes	14661	12.642	13.145	14,17	12,90	-15,14	-6,84	1,14
Autumn potatoes	14891	12.837	13.371	14,86	12,88	-13,97	-6,25	0,81
Tomatoes	13657	13.801	12.120	5,75	12,05	-12,19	-9,40	4,40
Dry onion	9995	10.036	9.485	7,20	8,41	-25,74	-23,29	28,17
Cabbage	20793	18.905	21.097	4,12	-3,27	-15,87	-6,38	5,54

Water melons and melons	17035	15.510	16.821	9,84	22,83	-32,57	-34,86	-
Lucerne	23789	20.900	23.284	10,08	3,67	-31,23	-21,04	12,70
Clover	20202	18.551	21.203	10,11	4,55	-28,24	-21,34	-1,03

Source: Romania's Statistics Yearbooks 1999-2003

Annual variation of the cultivated surface on the main crops (%)

Category	Production 1998 (tone)		1999/1998 (%)		2000/1999 (%)		2001/2000 (%)
	Romania	North-East Region	Romania	North-East Region	Romania	North-East Region	North-East Region
Cereal grains	5.920.583	860.302	-9,29	-7,58	5,30	4,11	7,71
Wheat and rye	2.033.401	198.869	-17,04	-29,04	15,85	16,26	44,15
Barley and two-row barley	517.213	49.329	-19,66	-13,29	-0,88	0,45	-3,99
Oats	228.068	42.162	8,82	10,47	-6,40	-3,21	-64,02
Maize grains	3.128.915	568.525	-3,69	-0,73	1,19	1,99	-0,43
Leguminous crops for beans	44.739	9.527	3,07	3,33	-10,34	-2,44	-0,44
Peas	14.033	2.015	11,29	7,69	-16,21	-19,72	-16,76
Bean	29.159	7.465	-3,62	0,99	-6,74	3,29	3,65
Flax fiber	3.408	137	-53,35	-62,77	-42,96	66,67	-65,88
Hemp fiber	1.156.097	87.971	7,63	5,24	-14,22	-7,66	7,57
Sunflower	962.150	75.231	8,40	4,07	-15,94	-5,04	11,55
Soybeans	147.267	9.088	-32,23	-27,49	17,20	4,55	-26,81
Sugar beet	136.345	42.723	-39,51	-46,74	-21,28	1,80	-22,11
Potatoes	117.800	41.478	-44,41	-48,18	-26,13	2,12	-22,11
Autumn potatoes	261.344	62.916	4,74	6,10	3,27	1,82	-1,47
Vegetables	229.026	58.732	4,12	5,60	3,37	2,67	-2,20
Tomatoes	223.185	36.987	4,42	10,60	0,41	0,37	0,99
Dry onion	47.687	5.772	-0,31	8,77	0,19	0,51	3,38
Cabbage	36.387	7.630	2,45	3,75	-0,52	3,42	-0,04
Water melons and melons	37.402	6.214	3,74	6,15	1,93	-1,70	7,79
Old and new perennials	44.425	2.677	11,31	9,04	-6,59	0,27	-10,35
Annuals for hay and green fodder	1.128.687	209.093	2,59	11,04	-6,45	-2,43	-4,52
Plants used for silage	693.622	142.841	2,06	6,40	-3,64	-1,05	1,98
Fodder tubers	302.601	42.408	15,15	37,23	-10,88	-0,34	-18,29

Source: Romania's Statistics Yearbooks 1999-2001

From the above-illustrated data it results that the NE Region's contribution to the agricultural production is proportional with its surface and its population, and its production / hectare is higher than the national average.

At regional level, the main agricultural crops are: cereals crops for grains (maize, wheat and ryes), potato crops, white beet crops and perennial herbs (lucerne and clover).

The values registered for vegetal crops could reach higher levels if not affected by a series of factors such as:

- Quality of the land, which is significantly diversified, showing an alternation of soil categories and fragmentation compared to other land units: Romanian Plain, West Plain or Transylvanian Plateau;
- Land fragmentation into small pieces on different individual owners, bringing them – most of the times - into situation of impossibility to honor the payments for agriculture works;
- Unfavorable climate conditions;
- Reduced use of fertilizers;
- Low level of mechanization of agriculture works because land owners find it more profitable to work the land manually or using their farmsteads animals because the mechanized land processing of 1 hectare costs 4 Euro in average.

Livestock growing and breeding sector

In 2002 the livestock growing and breeding sector was situated on a very important place, the value of animal production being of 270,714 tons live weight, 16.87% of total national livestock growing and breeding sector. In the given circumstances early 2003 the animal census revealed the following regional situation:

- 678 thou bovines
- 709 thou pigs
- 1,402 thou sheep
- 12,995 thou egg laying and adult fowls

It must be mentioned that in the Region there are just a few livestock growing and breeding farms and the animals are bred mostly in individual farmsteads and used for providing a minimum decent living. After 1989, the livestock has decreased this trend being showed globally at the level of entire country.

The descending trend of the livestock (bovines, sheep and goats) was caused by the massive slaughtering generated by shutdown and destruction of Agriculture Production Cooperatives, inexistence of growing and breeding units and animals bad health conditions (infestation with tuberculosis and leucosis). The reduction of swine number was due to the restraining of the economic activity of large swine growing and breeding complexes, which – because of the lack of financial support – were de-capitalized and collapsed.

Another important issue that needs to be taken into consideration concerns the average productions obtained in livestock growing and breeding sector that are far from genetic and technological progress registered into the Western countries. Comparing with the EU Member States, the average efficiency is lower for all species and categories of animals.

Another problem is the insufficient available capacity of the Region to process the raw materials resulted from agriculture sector, promote and sell them by using specific marketing techniques in order to gain some stable market shares and enlarge the market penetration level. If we make reference to processing capacity of vegetal, fruit growing, vineyards and livestock growing and breeding sector production, the Region actually has an almost sufficient potential (that could be additionally increased by accessing SAPARD programme) but as concerning the promotion and implementation of marketing strategies for selling products this activity is lagging behind if taking into account the massive import of foodstuff from abroad and from other Romanian regions.

5.2.2. Silviculture

The silviculture sector represents both a tradition activity and a major source of incomes, most of the products obtained from the high-end wood processing being exported.

In spite of the fact that since early 1990 there was an uncontrolled export of both logs and timber, the silviculture sector registered in the last two years an accentuated trend of getting in line with the legal framework (stimulated also by intensified controls) and conversion from wood primary exploitation to secondary and even high-end processing. Thus in the NE Region there are hundreds of firms whose main activity is wood exploitation and processing, the great majority is producing furniture, toys, stratified parquet and wood jointing. Wood and wood-products exports are generally directed to West – European countries (their attractiveness comes from the low prices due to the cheap labour force) such as: Germany, Austria, Italia, Netherlands and Sweden.

The North-East Region supplies the highest volume of wood mass; as demonstrated by national statistics, in 2002 the region introduced into the economic circuit 5,380.6 thou cubic meters of timber, representing 32.83% of the total wood mass at national level (an increase of 53% comparing with previous year).

The counties showing the highest development of the silviculture sector are Suceava, Neamt and Bacau. These counties provided and introduced into the economic circuit the highest volume of wood mass at the level of the region and have the highest number of workers employed in this sector comparing to the total employed population.

Of the total wood mass introduced into the economic circuit the highest percentage is owned by resinous species (3,789.9 thou cubic meters - 70.42%) followed by beech (824 thou cubic meters - 21.74% of the total wooden mass). At lower percentages is situated the oak (3.2%) and other hard and soft trees species.

5.2.3. Rural tourism

The two characteristics that define the rural tourism are:

- Production and capitalization of the products through agri-tourism activities;
- Promotion of traditional values.

Actually this kind of tourism is only in an incipient/ organizational phase. Hilly and mountain areas present the best potential because of the quality of the air and water and a rare landscape.

Due to climate conditions and the nature of the relief forms, the hilly and mountain areas face frequent difficulties in agriculture-vegetal cropping; the development of rural tourism in these areas, together with livestock growing and breeding sector, could represent an important step for their economic development.

The major problems this activity sector is facing with are not the facilities provided for investors but the bad infrastructure conditions that are not facilitating the capitalization of the areas' potential. Thus, many localities located in the hilly and mountain areas are not facing with only large infrastructure problems (difficult access in some zones). The major key issue is the lack of utility infrastructure (no natural gas, electricity and sewerage and water supply systems).

There are still some factors that could provide an optimistic development of this activity sector such as:

- Increased population density and increased number of existing farmsteads comparing with other hilly and mountain areas;

- The beauty landscapes and air quality
- Rich flora and fauna, with a lot of species endangered of extinction; two natural parks in place.
- Historical monuments of national and international value
- Good quality of the ecological products provided in the area.

In the North-East Region there are 53 agri-tourism-oriented boarding houses, which rank the region on the third place at national level.

5.3. Population and labor force

In 2002 in the rural area were living 2,216,835 inhabitants (59.23% of the total region's population) of which 1,102,020 women, the structure on age of rural population being characterized by a relative misbalance due to an obvious demographic ageing.

Structure of population on sexes and average in the rural areas, in 2002 (*persons*)

Territorial unit	Both sexes		Of which females
	Absolute	%	
North-East	2.216.835	100.00	1.102.020
Bacau	385.372	17.38	190.445
Botosani	291.522	13.15	146.688
Iasi	433.172	19.54	213.415
Neamt	358.859	16.19	179.298
Suceava	469.467	21.18	234.581
Vaslui	278.443	12.56	137.593

Source: Romania's Statistics Yearbook 2003

The most of rural population is concentrated in Suceava, Iasi and Bacau counties, and the smallest number of inhabitants living in rural areas being registered in Botosani and Vaslui counties.

Structure of population in the rural areas of the region, active (employed-unemployed) and inactive persons in 2002

Age groups	Total population	Active persons			Inactive persons
		Total	Employed	Unemployed	
Total	100,0	51.0	48.5	2.5	49.0
Under 15 yrs.old	100,0	-	-	-	100.0
15 - 24 yrs.old	100,0	55.8	49.4	6.4	44.2
25 - 34 yrs.old	100,0	79.5	74.0	5.5	20.5
35 - 49 yrs.old	100,0	85.7	82.5	3.2	14.3
50 - 64 yrs.old	100,0	69.2	68.5	0.7	30.8
65 yrs.old and over	100,0	39.6	39.6	-	60.4

Source: Romania's Statistics Yearbook -2003

At regional level, in the rural area there is more than 51.12% of the employed labor force of the Region of which the majority is active in agriculture and silviculture sectors. This high rate of rural area activity is the result of the fact that agriculture is a predominant branch which faces, in change, with a low technological level.

Even if, by comparison with the economic activities developed within the rural areas, the labor force is quantitatively sufficient, it has the disadvantage of being an unqualified one. On one side, this is due to deficient professional and educational training system and, on the other side, because of the fact that a large part of rural population doesn't attend such schools.

If studying the employed structure on ages and on preponderant activities (assimilated to the rural area economy), there is great number of people over 50 years old. This aging process appeared as the number of adult population decreased due to massive population migration phenomenon occurred in the past 3 decades and accentuated during the last 8-9 years because of decreased birth rate level.

The low incomes existing in agriculture sector and the lack of other non-agriculture activities didn't stimulate young persons to remain in the rural areas, so the oldest had to work their lands by themselves. That is the reason why more than one third of the people are over 50 years old and almost half of the people aged over 64 are still working the land, the labour force market including a high number of elder people.

Structure of employed population on age groups and activities of national economy (2001 and 2002 (%))

Region	Total employed population	15-24 years old	25-34 years old	35-49 years old	50-64 years old	65 years old and over
2001						
Agriculture (%)	100	13.0	17.8	16.8	19.4	14.2
Silviculture (%)	100	6.4	43.0	36.3	14.3	-
2002						
Agriculture, hunting and silviculture (%)	100	13.4	27.4	31.3	18.8	9.1

Source: Romania's Statistics Yearbooks 2002-2003

If in the silviculture sector 79.30% of the total population employed in the sector was situated within the 25-49 years old age group, in the agriculture were active on the same age group only 34.60% (year 2001). At the level of 2002, 58.7% of the total employed population in agriculture and silviculture were aged 25-49 while 27.9% were over 50 years old.

5.4 Infrastructure and public services

The main problem that leads to the involution of rural areas economic development is not represented by these characteristics specific to rural areas economy. The real reasons are bad infrastructure and, in some places, even the lack of it. This state of fact leads to several immediate consequences with a decisive role in social-economic development of the rural areas, respectively:

- impossibility of attracting investors;
- impossibility of capitalizing natural resources and existing cultural-historical establishments through development of some activity sectors as rural tourism is;
- decreased quality of life

All these key issues finally lead to an involution of economic development within rural areas and appearance of some socio-economic problematic areas within the region.

5.4.1. Infrastructure

The status of transport and utilities physical infrastructure in the rural areas is rather bad being physically worn out. Besides, there are many rural localities where it is hard to talk about any existing infrastructure. Taking into account the fact that infrastructure is the basis for economic activities we could draw the conclusion that the investments in infrastructure are the first priority in remedying the misbalances and stimulating the sustainable development of the Region. In this respect, it is very important for rural areas to have access to SAPARD programs which aim to both infrastructure rehabilitation and diversification of existing agriculture vegetal and animal collection and processing capacities.

Road transport infrastructure

Rural area transport infrastructure is inadequate being registered as of 3rd and 4th class of exploitation.

At regional level, the length of the county and communal modernized roads is extremely low (approximately 6.5% of the total roads length).

Vaslui and Suceava include the longest part of total modernized county and communal roads with a percentage of 13.16% respectively 11.78%. At the opposite pole there are Botosani (1.82%) and Neamt (4.11%) counties.

The Roads conditions become worst because of the lack of funds, low quality rehabilitation works, non-observance of transport laws and bad climate conditions (the winters reach in precipitations and low temperatures damaging the roads).

Public roads, on December 31st, 2002

County	Total	National Road	County and communal roads	of which: Modernized	Light asphalt pavement
Regiunea NE	13388	2606	10782	811	2263
Bacau	2454	431	2023	173	483
Botosani	2117	416	1701	31	317
Iasi	2382	344	2038	99	394
Neamt	1815	407	1408	58	442
Suceava	2479	629	1850	218	465
Vaslui	2141	379	1762	232	162

Source: Romania's Statistics Yearbook 2003

Utility infrastructure

Also the utility infrastructure is in bad shape. Most of the human settlements located in the mountain areas are not connected to gas, electricity and drinking water networks, mostly because the related works are pretty difficult to be carried out in these areas, involve high costs and the settlements are wide spread.

In most of these small mountain villages there is practically no telecommunication infrastructure. The existing statistic data referring to utility infrastructure in rural areas (water and gas supply, sewerage systems) are not relevant because of the inconsistency of administrative structures of localities mentioned in statistics.

As concerning the connection of rural areas to power supply network, according to statistics, the percentage of rural population that is not benefiting of electricity supply (4%) is double than the national average value (4%) mainly because of the mountainous location.

Drinking water network

According to data analyzed in the present document at Chapter 2, results that only 343 communes and villages out of the total of 2908 (11.79%) are connected to drinking water networks.

It is also important to mention that the public drinking water distribution network is far of being capable to satisfy the needs of rural population in terms of both beneficiaries and as proportion of total localities serviced.

In this respect the rural population provides itself the necessary drinking water needs from different other sources (fountains, springs, etc) that are not certified as providing good quality drinking water, creating health problems to population and leading to a high level of mortality due to infectious and parasite diseases.

Public sewerage network

According to statistics analyzed in the present document at Chapter 2, it results that only 98 communes out of the total 2908 (3.37%) are connected to sewerage systems.

The public sewerage networks show a pretty high degradation level and together with the water supply network that is in the same bad shape constitute factors favouring occurrence of pest holes.

In Bacau, Suceava and Botosani counties there is the highest percentage of localities connected to public sewerage networks. An opposite situation is in Vaslui and Iasi counties.

Thermal energy distribution network

These networks are low developed in rural areas excepting the very large and developed communes of the region.

Natural gas network

Within the Region, most of the localities connected to the network are in generally towns and rural localities located in the close proximity or along the main gas pipelines. In Vaslui and Suceava counties there are works in progress for erection of these pipelines and expanding the natural gas supply also to other localities.

According to data provided on Chapter 2, only 40 communes and villages out of total 2908 (1.37%) are connected to natural gas pipelines.

5.4.2. Public services

Educational system

The most important factor in the national economy development, as well as of a specific region economic development, is the human capital. Even if it is pretty difficult to quantify it being itself a controversial concept, the human capital could include human resources with a specific educational level.

Statistic analysis shows a delay in educational system between the rural and the urban areas of the Region. Thus:

- a. almost 7% of population doesn't attended school;
- b. only 37% of rural population has a primary school degree;
- c. only 35% of rural population has a gymnasium degree;
- d. only 8% of rural population has a high school degree;
- e. only 0,7% of rural population has attended a vocational school.

The actual critical situation is due to some intern and extern rural factors such as:

- people's mentality (using children in agriculture works prejudicing their school education could be easily highlighted by the presence of population aged 15-24 in agriculture (14,3%) and silviculture (12,1%);
- lack of high schools in rural areas
- substitution of missing teachers with „surrogate –teachers”
- lack of family pecuniary means for supporting their children in schools;
- insufficient governmental funds allocated for education and insufficient subventions for rural areas families with small incomes (the budgetary allocation for underage is 4 Euro/month, the equivalent amount to be paid for 6-7 notebooks);
- bad educational infrastructure conditions and the lack of a proper endowment.

This last factor listed is facing firstly a quantitative insufficiency. Schools are insufficient in the region, the most critical situations being showed by Botosani, Vaslui and Suceava counties. Concerning this subject there is also to be mentioned the lack of the libraries in rural areas that have a decisive role in the educational process.

From quality point of view the physical educational infrastructure is worn out, having an important repercussion on teaching-learning process and quality of life by depriving the individuals involved in this process of the elementary conditions of security and comfort.

Some of the factors that severely prejudice the educational process are listed below:

- Impossibility of using drinking water because of the high degree of impurities (determinant factor in triggering pest holes)
- Unheated classrooms;
- Low resistance structure of the school –buildings;
- Insalubrious toilets.

Another negative factor is the low percentage represented by the agriculture education at regional level. The number of agriculture education profile graduates is very low as percentage of total number of graduates. The agriculture education is undersized in comparison with the importance of agriculture in the North-East Region's economy.

Health care system

As far as sanitary services in rural areas are concerned, they are of low quality and worst than services available in rural areas. In most of the communes there are only primary sanitary services provided.

The range of medical services provided by the qualified personnel is rather reduced; the number of physicians is relatively small in comparison with the number of inhabitants (2.021 inhabitants/physician, comparing with the average value of 5-6% lower in terms of number of inhabitants, in the urban area).

The number of commune medical dispensaries is very low. A special case is represented by Suceava County which has only 7 commune-level medical dispensaries. In case of specialized medical services required, the rural population have to apply to medical units located in towns and cities, the distance to the first town being long in some cases (10-25km and even 32km, in Vaslui and Botosani, and in the mountain area of Suceava County over 35km), the urgent intervention of ambulances being impossible.

The quality of medical services in rural areas is relatively low mainly due to bad or inexistent medical equipment and buildings. Because of these reasons the life expectancy of rural inhabitants is 2 years lower than the ones living in urban areas.

Infant mortality rate reaches very high levels in the rural areas exceeding with almost 30% the level of rural areas. Almost all rural areas within North-East region show an extremely high infant mortality rate that exceeds the regional average value of 22.2‰. The highest values registered in this respect are 24.5‰ in Botosani County and 24.2 ‰ in Vaslui County.

5.5. Cultural and architectural patrimony

In the rural areas of North-East Region there are many churches, monasteries (Varatec, Putna, Voronet, Agapia, Moldovita, Sucevita, etc.), museums, memorial houses, manors, inns and princely courts. Most of them are unique in the entire world.

The rural areas preserve the traditions, trades and ancient customs, the talent, skills and beauty attraction materializes in real pieces of work – ceramics, manual woven carpets, sheepskin coats, textures, popular instruments and masks.

The North-East Region's counties are holders of a rich treasure of cultural and folklore traditions that consist of memorial houses, churches, monasteries, written documents, a lot of ethno-folk themes, live –traditions which are visible during fairs, markets, etc.

Popular traditional festivities along the year remind people the genuine and alive spirit of Moldavia by popular costumes, songs and dances, ancient customs – plastic art festivals, the folk and traditional ones.

5.6. Equal opportunity in rural areas

Equal opportunity does not seem to be a very known and observed concept in the rural areas. This is the result of the ancient conceptions and mentality which persist in the rural areas and the low attention paid by post-December '89 governments to this subject. Thus, in rural areas the woman is seen just as the carrier of family inheritors, the one who gives birth and educates them, without having the real opportunity of having her own career in life, to be an active factor in village's development.

Because the existent statistics are not approaching this subject, in order to illustrate these affirmations we will take a look to women representation in the local public administration. In the NE Region, at the level of rural local administrations women are represented in a percentage of only 2%. This state of fact becomes worrying, is the result of weak promotion of equal opportunities concept and emphasizes two striking aspects:

1. Women exclusion from decision-making positions;
2. Acceptance of this situation by women and renouncing to this international right of equal opportunities.

Key issues in rural development:

- High percentage of population living in rural areas (59.23%) in 2002;
- High percentage of population employed in agriculture representing 51.12% of the total employed population – year 2002.
- Small-sized agricultural exploitations of 1-3 ha.
- Low association level (8% in lands and 3% in livestock growing and breeding sector).
- The transport, utility and communication infrastructure is deficient both as quantity and quality.
- High infant mortality rate in rural areas.

6. Tourism

Due to its favorable conditions, the landscapes, the purity of the air and water, the mountain areas of Bacau, Neamt and Suceava counties, as well as the inestimable cultural and religious existing

patrimony, the North-East Region owns a high tourism potential which can be compared with other tourism areas in the country or abroad. Besides the picturesque, the region reveals its well known hospitality, popular customs and the Moldavian gastronomy, the traditional wines of Cotnari and Husi vineyards giving local color and attraction to tourists.

The table below illustrates the situation of economic indicators characterizing this sector.

The capacity and activity of accommodation units during 2000-2002

Region	Accommodation capacity		Arrivals (thou)	Overnight staying (thou)	Accommodated tourists (thou)	Index of operational accommodation capacity use (%)	Average staying (nights/tourist)
	Existing (places)	Operational (thou places-days)					
2000							
Total Romania	280005	50197	4920	17647	4920	35,2	3.59
North-East	17745	4624	543	1468	543	31,7	2.70
2001							
Total Romania	277047	51882	4875	18122	*	34.90	*
North-East	16971	4651	535	1406		30.20	
2002							
Total Romania	272596	50752	4847	17277	*	34.0	*
North-East	17269	4615	535	1332		28.9	
2003							
Total Romania	273614	51632	5056	17844	*		*
North-East	17965	4963	553	1450			

Source: Romania's Statistics Yearbooks 2001/2002/2003

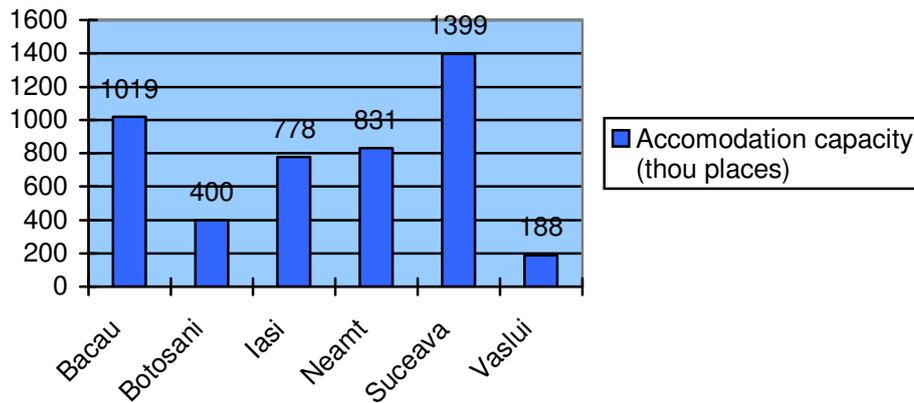
* Note: for the years 2001, 2002 and 2003 data referring to the number of tourists have not been included into Romania's Statistic Yearbook.

It can be noticed that in the North-East Region the index of operational accommodation capacity use decreased from 31.7% in 2000 to 30.2% in 2001 and 28.90% in 2002. This is due to the decreasing number of the overnight accommodations (from 1468 thou in 2000 to 1406 thou in 2001 to 1332 thou in 2002).

The average staying/tourist was 2,70 nights/tourist in 2000, but the values are inferior to the regional/national ones, excepting Bucharest-Ilfov Region which has the lowest value of only 1,83 nights/tourist.

Even though the modernization of accommodation units that are now in private property in a proportion over 90% the capitalization of the tourism potential areas and treatment resorts through an adequate promotion and increased quality services provided to tourists was not as estimated or expected and led to an average staying inferior to the other regions and a very low index of operational accommodation capacity use.

In the graphic below the situation of the accommodation capacity (thou places) in the NE Region, on counties in 2002 is presented.



It could be noticed that the county having the highest accommodation capacity is Suceava, a very normal situation if considering the outstanding relief favorable for tourism as well as the very well developed entrepreneurial spirit of the county's inhabitants. The lowest accommodation capacity is available in Botosani and Vaslui counties.

Structure of tourism accommodation units in 2000-2002

	Territorial unit	Total	Hotels	Inns	Huts	Camping	Vilas	Student camps	Boarding houses	Agri-tourism boarding houses
2002	Total	3121	943	23	161	140	1066	172	361	240
	North-East	250	81	2	13	17	38	21	46	28
2001	Total	3266	968	18	158	132	1016	168	437	343
	North-East	262	81	2	13	16	38	21	52	32
2002	Total	3338	974	16	140	129	928	168	492	461
	North-East	295	81	1	13	16	35	21	65	53

Source: Romania's Statistics Yearbooks 2001-2003

It's obvious that, for almost all types of tourism units, the NE Region is situated a little under the national average value; at a more in-depth analysis and if excepting the South-East Region (because of its littoral area which covers the highest percentage of the accommodation capacity), it results the NE Region is situated around the national average value and a little over it.

During 2000-2002 there was an increase of tourism and agri-tourism boarding units while the other types of tourism structures showed a steady trend.

The tourism activities could be structured as following:

- **Cultural tourism**, of knowing and informing supported by historical values and architecture. This sub-sector could include:
 - museum tourism supported by several museums (art, history, ethnography, folklore, technique, etc.), memorial houses owned by significant culture, art and science people, fortresses, princely court, etc;

The most important are:

- Rosseti-Tescanu House (Bacău County) built in 1898 by Tescanu family where the great musician George Enescu lived (in this building the Oedipus opera was conceived).

- „Mihai Eminescu” Memorial house from Ipotesti, converted in museum since 1950; here there are furniture and others old objects owned by the family
- „George Enescu” Memorial museum from Dorohoi where are exposed the personal objects of the artist;
- Cultural Palace of Iasi built in 1906-1925 - situated on the old ruins of the medieval princely court. The Palace consists of four museums: Moldavia History museum, Moldavia Ethnography Museum, Art Museum and Science and Technique Museum.
- Roznovanu Palace built in Wiener neoclassic style where nowadays the Town Hall is hosted.
- „Vasile Alecsandri” National Theater - built during 1894-1896 is fully ornamented in baroque style and has one of the most beautiful performance halls in entire country with a capacity over 1000 places.
- The old University of Iasi is an old palace that was a princely court and served as a first wine tasting establishment of the country.
- The University from Copou is well known because of the monumental hall of marble known as “Lost Steps Hall” decorated with paintings in fresco by Sabin Balasa;
- The Central Library of Iasi University is a building with Doric columns and cupola.
- The Princely Inn is one of the oldest civil building of Suceava city where are the ethnographic and popular art sections of the County Museum of Suceava.
- The Suceava Princely Court was built during Petru I Musatinul. It neighbors with Bucovina Village Museum that contains a valuable collection of traditional buildings from XVII-XX centuries.
- „Ion Creanga” Memorial House from of Humulesti village (Neamt County) includes a series of personal objects of the great teller.
- The Neamt Fortress that was built by Petru I Musatinul during 1674-1391 and resisted to the Austro-Hungarian and Polish sieges.
- “Ciprian Porumbescu” Museum Complex of Stupca (Suceava County) where there are three tourism objectives: the grave of the great musician, the Memorial House and Ciprian Porumbescu Museum
- „Emil Racovita” Memorial Museum of Suranesti (Vaslui County) is the house where the great explorer was born and includes his school documents as well as his correspondence with different personalities.
- “Dimitrie Cantemir” History Museum - archeological collections of pieces from paleolithic to medieval period, ethnographic collection, plastic art collection: Gheorghe Tatarescu, Dan Hatmanu, Octavian Angheluta.
- Vasile Parvan Museum of Barlad located in the former Prefecture and built by Italian architects in 1899 in neo-classic style. The museum has three exhibiting sections: art, natural sciences and history.
- “Stephan the Great” County Museum of Vaslui consists in exhibiting sections of archeology, contemporary and middle-age history, ethnography, plastic art as well as “Constantin Tanase” hall of humor called this way in the memory of the founder of Romanian variety theatre
- “Tacuta” Village Museum, set up in 1986 – has exhibiting sections of archeology, ethnography, folk art and large plastic art collections, rare objects and 400 books with autographs of the authors. Some of them are unique in the country.
- The Village Museum of Vetrisoaia – includes ethnographic and historical exponents.
 - Ethnographic tourism through folk art exhibitions (“The Rose of Moldavia” International festival of folklore - Strunga (Iasi); “Winter traditional customs” Festival (Iasi); popular handicrafts fairs (“Cucuteni 5000”- Iasi); “Ceahlau” International festival of folklore (Neamt); “Arcanul” International festival of folklore (Suceava); “Old ages hora” International festival (Vaslui);
 - Artistic tourism (festivals, theatres seasons and tours, varnishing days, etc.) - Tescani International festival of plastic art (Bacau); The Humor Festival of Vaslui.

- **Clerical tourism** – The great number of churches and monasteries within the Region contributes to the development of the clerical tourism offering the possibility of pilgrimages creating tourism routes along the existing cultural and spiritual locations.

The most important are:

- Bacau County: The Churches and the Princely Court (1491) in Bacau, Rachitoasa Monastery, Borzesti - church well known due to its arcades and pendants system specific to Moldavian style (built by Stephan the Great), Casin Monastery church, Tazlau monastery (“The born of the Virgin”) built in 1496 by Stephan the Great.
- Botosani County: St. Nicolas Church founded by Stephan the Great in 1497 (with combination of Gothic and Byzantine elements), St. George and Uspenia churches, the Vorona monastery complex with three churches which constitute an important folk area, Cosula Monastery well known due to its internal and external oil paintings.
- Iasi and its surroundings (monasteries: Galata, Cetatuiia, Frumoasa, Golia, Barnova, Piatra Sfanta, Hlincea, Dobrovat, Hadambu; churches: Three Hierarchs, Metropolitan Cathedral, Barnovschi);
- Neamt County: Neamt Monastery known as “ The God’s raise” built in 1497 (by Stephan the Great - was a recognized cultural place, Agapia Monastery was painted in 1858 by Nicolae Grigorescu and includes a museum of religious art pieces dated XVI-XIX centuries, Varatec monastery, built in 1785 by nun Olimpiada, traditionally in the past many noble young females became nuns here, Secu monastery where the grave of Nestor Ureche can be found, Sihastria monastery – an old place of monks, Sihla – a small convent, Horaita monastery’s church with a strange form and 8 towers roof, Bistrita monastery where the grave of Alexandru cel Bun – the ruler is.
- Suceava County: Voronet monastery founded by Stephan the Great in 1488 with paintings dating from that time. It’s fame is known worldwide due to its inimitable blue background exterior painting known as “Voronet’ blue”, Humor church (“ Jesus’ mother asleep”) with it’s famous painting “Post Judgement Day”, Moldovita monastery with it’s walls of 6 meters high - built by Petru Rares after 1532 with famous exterior painting, Sucevita monastery – with the most remarkable defence system from the Moldavian monasteries and the most complex painting themes with 7 overleapt registers - being the “will” of the exterior Moldavian painting; Dragomirna monastery with an exaggerate height comparing with its width, in fact there are two churches separated by a torsioned belt. In Putna monastery the grave of the ruler Stefan the Great is located, was built during 1466- 1470 and intended to become the dynasty’s necropolis. The church was included in the UNESCO’s monuments list.
- Vaslui County: the Saint John’s church built in 1490 during Stephan the Great, is an edifice false stone faade, “Saints Peter and Pavel” Episcopal church with interior paintings realized by Gheorghe Tatarascu; Moreni Monastery located at 10 km away from Vaslui – it hosts the remaining of saints Tarahie, Prov and Andronic that were brought from Jerusalem in 1996; Floresti Monastery, built in 1590 – one of the most important monarchical settlement in the county, Wooden Church of Parvesti, Costesti commune – built in XVII Century and painted in Byzantine style; St. Nicholas Church – Golgofta of Ivanesti – built of oak tree on stone foundation; Sf. Voievozi Church of Malinesti-Garceni, with its slim and elegant tower, located in an area that knew after 1999 a monarchical life retirement, other several brand-new churches being built also here.
- **Scientific tourism** by participation to scientific communication sessions, international courses (especially in Iasi, Bacau and Suceava) is stimulated also by the presence of natural and archaeological reservations: flower reservations of Stanca-Stefanesti and Ripiceni, yew reservation of Tudora;
- Balneal-therapeutic tourism – the mineral springs of Slanic Moldova and Targu Ocna (Bacau), balneal - climate (health) resorts of Campulung Moldovenesc and Vatra Dornei (Suceava), salt mine of Targu Ocna (Bacau);

- **Amusement tourism** – sustained by a generous relief:
 - ✓ Bacau County: Trotus Valley with a succession of gorges and depression basins, Uzului valley and gorge, Accumulation Lake of Uzului Glade, Bistrita Valley with its successive accumulation lakes. There are also natural reservations such as: Runc-Racova secular forest, White River forest reservation.
 - ✓ Botosani County: Stanca Costesti geological and flower reservation and Dealu Mare – Tutora yew natural reservation.
 - ✓ Iasi County: Dealu Repedea palaeontology reservation, Valea Lunga botanic reservation where the white acacia is protected, “Fanatele de la Valea lui David” flower and fauna reservation;
 - ✓ Neamt County: Bicaz Gorge, Izvorul Muntelui hydro-electrical dam, Ceahlau mountain, “Copper Forest” reservation, the “Silver Forest”, Gruzamesti’ dendrology park, Vanatori Neamt turs reservation, Duruitoarea Fall, the palaeontology reservations from the surroundings of Piatra Neamt;
 - ✓ Suceava County: Calimani mountain relief with it’s corresponding volcanic complex, the “12th apostles” ruin-like rocks, the national park of 15,300 ha, the Rarau mountain with it’s carst and residual relief, Giupalau secular forest, the Golden Bistrita Gorge, Moldova superior valley, natural reservation of Radauti, the palaeontology reservation and spruce fir’s secular forest of Pojorata;
 - ✓ Vaslui County: forest reservations of Balteni, Badeana, Seaca Movileni; the palaeontology reservation of Manzati and Nisiparia Hulubat fossil reservation.

Transit tourism (work, business or personal interest tourism) stimulated to some extent also by the persons travelling to and from Republic of Moldova;

Agri-tourism – rural development tourism, especially agri-tourism, shows many development opportunities because rural areas provide an unpolluted existing picturesque landscape and multiple other choices of recreation and cultural and historical potential.

Tourism key issues:

- Low index of operational accommodation capacity use (28.90%) comparing with other regions and national level (34.00%) – in 2002;
- The lowest average staying of tourists of all regions (2.7 nights/tourist), inferior to national level (3.59 nights/tourist).

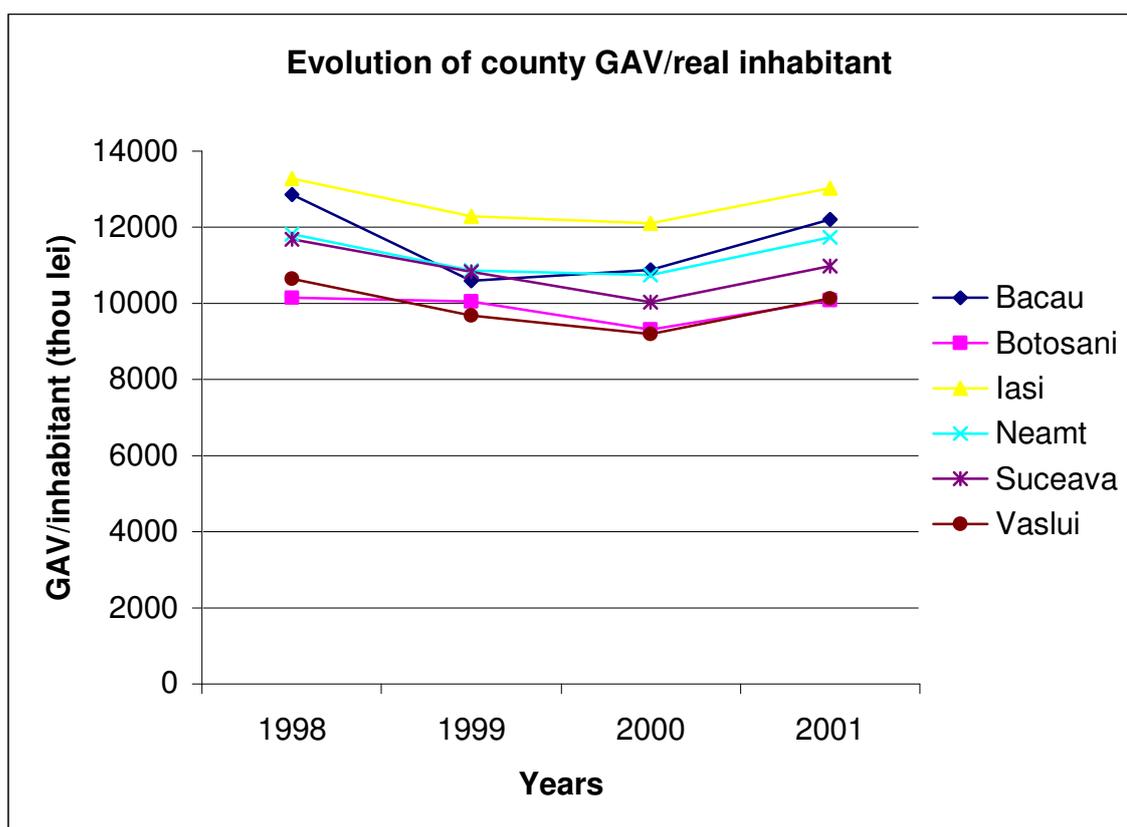
7. Intraregional disparities

The North-East Region is situated on the last place in the country as concerning the regional gross domestic product RGDP / inhabitant (71.72% of the national average value in 2001) being the lowest developed region in the country.

Approximate estimate of real gross added value at county level (billion lei prices)

	Bacau	Botosani	Iasi	Neamt	Suceava	Vaslui
1998						
Agriculture	1700.9	1448.7	1775.1	1240.1	2364.3	1219.9
Industry	5793.3	839.5	2341.8	1838.8	1650.3	1112
Services	4808.2	2044.8	6036.5	3411.1	4089.7	1815.4
County GDP	13500.3	4813.4	11280.5	7205.4	8972.3	4613.5
GDP/capita (thou lei)	18027.0	10421.1	13616.0	12321.1	12570.1	9942.2
GDP/capita–index of disparity	108.5	62.7	82.0	74.2	75.7	59.9
1999						
Agriculture	1937.2	1722.3	2106.4	1562.6	2714.5	1400.6
Industry	3705.3	1074.3	3356.3	2274.4	2241.8	1248.8
Services	6085.6	2605.2	7902.8	4123.2	5052.3	2302.1
County GDP	13128.2	6033.5	14964.6	8910.4	11140.3	5521.7
GDP/capita (thou lei)	17486.1	13032.1	17956.4	15212.1	15575.8	11874.4
GDP/capita–index of disparity	82.6	61.6	84.8	71.9	73.6	56.1
2000						
Agriculture	2118.7	2071.7	2253.6	1877.5	3177.0	1046.5
Industry	5163.2	1199.4	5018.1	3125.7	3250.7	1716.3
Services	7381.6	3050.6	9531.0	5098.6	5907.4	2676.1
County GDP	16407.1	7048.8	18800.8	11296.8	13724.1	6078.9
GDP/capita (thou lei)	21795.9	15197.7	22468.8	19270.2	19135.0	13024.8
GDP/capita–index of disparity	79.9	55.7	82.4	70.6	70.2	47.8
2001						
Agriculture	2994.4	2809.5	3612.4	2600.6	3687.9	2248.2
Industry	8049.6	1766.1	6398.8	4537.3	4373.4	2279.3
Services	9264.3	3473.2	11871.8	6085.0	7745.1	3321.7
County GDP	22405.0	8856.8	24136.9	14577.3	17381.1	8631.9
GDP/capita (thou lei)	29683.9	19028.9	28661.8	24814.6	24169.5	18448.2
GDP/capita–index of disparity	85.1	54.6	82.2	71.1	69.3	52.9

Source: Romania's Statistics Yearbooks 1999-2003



As a result of the estimated and systematized calculations illustrated into the above-presented table it could be noticed that the highest real gross added value (RGAV) per capita of year 2001 was in Iasi County (specifically 13,029 thou lei/capita) followed by Bacau County (12204 thou lei/capita).

Situated at a certain distance but registering values relatively close are Neamt and Suceava counties, on the last places being Vaslui County (10,127 thou lei/capita and Botosani County with 10,089 thou lei/capita).

The evolution of RGAV/capita during the analyzed period shows the same trend as regional GDP/capita, with a descendent tendency during 1998-2000 and slight increase in 2001.

**MAIN INDICATORS USED FOR CHARACTERIZING
THE NORTH-EAST REGION COUNTIES' ECONOMY**

INDICATORS	Year	Counties					
		Bacau	Botosani	Iasi	Neamt	Suceava	Vaslui
I. GENERAL DEMOGRAPHIC CHARACTERISTICS							
I.1. Percentage of total county population in the total regional population on 1 st of July (%)	1999	19.6	12.1	21.8	15.3	18.7	12.1
	2000	19.7	12.1	21.9	15.3	18.8	12.2
	2001	20	12.1	22	15.3	19	12.2
	2002	19.4	12.4	21.5	15.4	18.9	12.4
I.2. Percentage of total urban population in total population on 1 st of July (%)	1999	50.2	39.7	50.3	40.6	35.6	43.2
	2000	49.8	39.3	49.9	40.3	35.3	42.7
	2001	49.6	39.2	50.1	40.2	35.1	42.6
	2002	47.0	37.0	46.2	37.7	33.6	40.1
I.3. Infantile mortality rate (per 1,000 live-births)	1999	22	20.3	21.6	21.5	15.7	25.3

	2000	28.3	26.8	22.5	23.9	16.7	21.2
	2001	21.9	27.4	25.5	23.3	17.4	21.8
	2002	20.4	21.7	21.3	20.8	17.3	23.2
I.4. Average life expectancy during 1998-2001 (years)		70.58	70.45	71.33	71.11	72.26	71.13
Average life expectancy during 2000-2002 (years)		70.35	70.33	71.4	71.18	72.55	71.05
II. HUMAN RESOURCES AND EMPLOYMENT							
II.1. Average of civil active population in total population at the end of the year (%)	1999	32	37.8	37.1	37.3	38.2	35.8
	2000	33.2	37.8	38	38.3	38.1	35.9
	2001	33.5	36.9	37.6	38	37.7	35.4
	2002	32.3	34.7	37.6	35.8	36.0	32.0
II.2. Number of employees per 1,000 inhabitants	1999	320	378	371	373	382	358
	2000	332	378	380	383	381	359
	2001	335	369	376	380	377	354
	2002	323	347	376	358	360	320
II.3. Share of population employed in agriculture and silviculture of total employees of the economy (%)	1999	39.4	60.1	42.9	53.3	55.2	57.7
	2000	39	62.2	43	53.8	57.7	59.5
	2001	37.6	61.8	42.6	53.1	56.7	52.4
	2002	34.9	56.8	38.1	49.5	52.0	56.5
II.4. Percentage of population employed in industry of total employees of the economy (%)	1999	27.9	15.8	20.7	20.1	17.2	20.5
	2000	26.4	14.1	20.7	18.3	15.4	17.8
	2001	28	15.2	20.3	20.3	15.8	18.2
	2002	28.4	17.2	23.5	21.6	18.4	20.2
II.5. Percentage of population employed in constructions of total employees of the economy (%)	1999	5	1.5	3.9	2.6	2.5	1.9
	2000	4.8	2.2	4.1	3.2	3	1.8
	2001	5.3	1.5	4	2.9	2.2	1.5
	2002	6.2	2.0	4.4	3.2	2.3	1.8
II.6. Percentage of population employed in services sector of total employees of the economy (%)	1999	27.7	22.6	32.5	24	25.1	19.9
	2000	29.8	21.5	32.2	24.7	23.9	20.9
	2001	29.1	21.5	33.1	23.7	25.3	27.9
	2002	28.4	22.4	31.9	24.7	25.7	20.4
II.7. The number of persons employed in research & development sector / 1,000 inhabitants *	1999	87.6	17.5	233.1	61.1	35.9	37.2
III. UNEMPLOYMENT							
III.1. Unemployment rate on December 31 st (%)	1999	13.2	17.7	12.3	17.8	13.5	17.5
	2000	9.5	16.7	10.9	16.6	12.2	15.4
	2001	8.2	11.8	9.4	14.1	8.6	13.3
	2002	9.4	11.0	9.7	10.7	10.3	15.9
III.2. Female unemployment rate on December 31 st (%)	1999	12.7	15.3	11.7	17.4	14.3	14.9
	2000	8.4	14.1	10.1	16.9	12.4	12.8
	2001	7.9	8.9	9.2	13.5	8.4	10
	2002	8.7	8.6	9.7	10.1	9.8	11.4
III.3. Percentage of unpaid unemployed of total unemployed, on December 31 st (%)	1999	7.3	34.6	31.4	40	36.6	16.2
	2000	12.7	42.1	32.5	50.2	36.1	12.2
	2001	20.1	29.1	39.7	42.1	28.2	11
	2002	60.3	68.8	67.3	62.1	70.7	56.9
IV MEDICAL ASSISTANCE*							
IV.1. Number of inhabitants / physician	1999	845	824	291	846	1240	1047
IV.2. Number of inhabitants / medical aid	1999	252	216	151	219	309	214

IV.3. Number of hospital beds/1,000 inhabitants	1999	5.1	7.9	9.7	5.6	6.2	6.8
IV.4. Number of medical investigations/ inhabitant	1999	1.8	0.6	2.6	2.2	2.6	1.2
V. INFRASTRUCTURE							
V.1. Public roads density/100 square meters of territory, on December 31 st (%)	1999	34.8	39.2	42.7	30.6	27.2	39.5
	2000	37.1	42.3	43.2	30.7	28.8	40.3
	2001	37.1	42.4	43.3	30.7	28.8	40.3
	2002	37.1	42.5	43.5	30.8	29.0	40.3
V.2. Percentage of modernized public roads of total public roads, on December 31 st (%)	1999	21.5	17.9	17.7	24.9	28.9	16.1
	2000	21.3	18.1	17.3	25	28.3	25.8
	2001	23.1	17.9	17.5	25	29	25.8
	2002	23.8	16.8	17.4	24.9	29.9	26.3
V.3. Percentage of localities that have drinking water supply network (%) Note: localities = towns, municipalities, communes	1999	32.2	91.6	29.2	100.0	46.9	100.0
	2000	62.1	91.6	31.5	100.0	45.9	93.3
	2001	68.9	91.6	31.5	100.0	46.9	97.3
	2002	70.1	94.4	43.8	100.0	47.5	98.6
V.4. percentage of localities having sewerage systems on December 31 st (%) Note: localities = towns, municipalities, communes	1999	29.9	26.4	13.5	17.6	28.6	16
	2000	52.9	26.4	13.5	17.6	28.6	15
	2001	55.2	26.4	13.5	17.6	28.6	15
	2002	55.2	25.0	13.5	17.6	27.7	14.7
VI. CULTURE AND COMMUNICATIONS*							
VI.1. No. of radio subscriptions/1000 inhabitants	2000	142.9	74.1	123.1	87.9	66.2	60.6
VI.2. No. of TV subscriptions TV/1000 inhabitants	2000	96.5	101.7	110.4	119.6	92.3	126.6
VI.3. No. of subscribed readers in public libraries /1000 inhabitants	1999	241.1	224.6	334.8	230.5	257.3	266.7
VI.4. Number of books lend from public libraries /1000 inhabitants	1999	2,975.6	4,298.3	7,048.3	3,610.3	3,501.0	3,997.8
V. SMALL-MEDIUM ENTERPRISES							
VI.1 Number of SMEs / 1000 inhabitants, in 2000		13.1	8.7	14.8	12.7	11.4	8.4
VI.2. Percentage of SMEs that submitted the balance sheets of total SMEs per economy sectors in 2000, of which:							
VI.2.1. Industry (%)		10.5	11.5	9.3	21.8	14.7	10.5
VI.2.2. Agriculture (%)		1.4	4.4	1	1.4	1.5	3.3
VI.2.3. Construction (%)		2.3	2.8	2.2	2.8	2.1	2.6
VI.2.4. Trade (%)		71.1	68.9	70.8	61.2	67.9	71.4
VI.2.5. Services (%)		14.7	12.4	16.7	12.7	13.7	12.2
VI.3. . Percentage of SMEs that submitted the balance sheets of total SMEs, on size classes in 2000, of which:							
VI.3.1. Micro-enterprises (0-9 employees) (%)		92.6	90.9	92.4	90.2	92.2	90.2
VI.3.2. Small enterprises (10-49 employees) (%)		5.9	7.5	6.4	8.2	6.5	8.1
VI.3.3. Medium enterprises (50-249 employees) (%)		1.5	1.6	1.2	1.7	1.2	1.7
VI.4. Percentage of private-capital SMEs with gross profit of total SMEs, in 2000 (%)		2.3	0.9	3	1.6	2.1	0.8
VI.5. Distribution of private-capital SMEs' total incomes, in 2000 (%)		2.6	1	2.6	1.6	1.8	0.8
VI.6 Distribution of private-capital SMEs' exports incomes, in 2000 (%)		2.1	0.4	2	1	1.4	0.3

Source: Romania's Statistics Yearbooks

* Data taken from National Report on Human Development 2001-2002

- **Demographic features**

It can be noticed that Iasi is the most populated county while Vaslui and Botosani counties have the lowest population in the region, the main cause being population migration from the poor-developed areas to the more developed ones. As evolution, Bacau, Iasi and Suceava counties showed an increase of population while the other counties maintained at a constant level.

The region has a high percentage of rural population (59.2%) in comparison with the national average (46.7%). All the North-East Region's counties share the same situation. In Suceava County, the percentage of rural population is about 66.40%, at the opposite pole being situated Bacau County (53.0%) and Iasi County (53.8%). If in Bacau County the urban population is concentrated mostly in Bacau municipality and the other 7 towns, in Iasi County the population is mainly concentrated in the county capital (39.3% of the total population). As an alarming evolution is the increase of rural population during 1999-2001, in all 6 counties, in the detriment of the urban one, fact that is highlighting the migration from urban to rural that occurred in the last period.

In spite of economic development, the level of children mortality in Bacau County is surprisingly high (28.3/1000 inhabitants in 2000 being higher than region's average and also national average). In terms of evolution, it can be observed that there is a decrease of infantile mortality rate except for Vaslui County, which showed in 2002 the highest value ever - 23.2‰. The average life expectancy is of 71.19 years at regional level, close to the national average (71.18 years).

- **Labor force and employment**

In terms of evolution, the percentage of employed population registered a contradictory trend, ascendant up to year 2000 than descendent until 2002.

Predominant is the percentage of population employed in the agriculture and forestry at regional level (46.4%), higher than the national average. At county level, the highest level for this indicator was owned by Botosani County (agriculture, 56.8%) and Suceava (silviculture). If for Suceava County this could be a positive thing, for Botosani County this is a negative thing being also a cause of low level economic development.

At the opposite pole, the lowest population employment rate in agriculture and silviculture sectors was in Bacau County (34.9%). Evolutively, only in Bacau County there was a decrease of employed population in the agriculture sector while in the other counties there was an oscillant evolution.

In the industry sector, the highest percentage of employed population was registered in Bacau County (28.4%) and Iasi County (23.5%).

As far as the construction sector is concerned, Bacau County is to be highlighted with a percentage of employed population of 6.2% while – at the opposite pole – is situated Botosani County with only 2.0%.

In the services sector, only Iasi County (31.9%) is situated at the same rate with the national one, the other counties registering values under the national employment rate.

As concerning the research & development sector, as expected, the leader is Iasi County with 233 employed persons/thou inhabitants.

- **Unemployment**

Generally, the unemployment is registering values superior to the national average (8.4%). Only Bacau County has a value closer to the national one (9.4%) while Botosani and Vaslui counties

show alarmingly high values 11.0% and 15.9%). In 2002 there was an increase of the unemployment rate in bacau, iasi, Suceava and Vaslui counties. The female unemployment rate in the region is lower than shown by the general trend.

- **Infrastructure**

In terms of infrastructure, the disparities are becoming deeper, both between the region's counties but also between some of the counties and the national average. While Bacau, Vaslui and Botosani counties have the highest percentage of localities with drinking water supply (close to the national level) the same counties register the lowest percentage of localities with own sewerage systems. Bacau County is to be mentioned in this respect with 55.2% of total localities already connected to sewerage systems.

With the exception of Bacau County that registered an increasing number of localities with sewerage networks during 1999-2001, in the other counties this number remained constant. Regarding the percentage of modernised public roads, Vaslui and Suceava counties have the highest values (26.3% respectively 29.9%) while Botosani and Iasi are situated at the lowest levels (16.8% and 17.4%). Anyway, all these values are lower than the national average.

- **Small-Medium Enterprises (SMEs) Sector**

As concerning the number of the SMEs for 1000 inhabitants, all the region's counties have registered at 31st of December 2002 values inferior to the national average (17.5/1000). Botosani and Vaslui counties have the lowest values, respectively 8.7/1000 and 8.4/1000.

Regarding the SMEs distribution on sectors, in all the region's counties predominant are the firms operational in the trade sector, with higher rates than the national average (65.7%), with the exception of Neamt County. At the opposite pole is the services sector, with lower rates than the national average (18.4%) and closer values among counties. In the agriculture sector the percentage of SMEs is very tight between counties and between counties and national level (1.7%) with two exceptions, Botosani and Vaslui counties that are predominantly rural and consequently having higher rates. In the construction sector there are neither intra-regional nor county-national disparities.

In terms of private-owned capital SMEs, the contribution to the total incomes and export incomes of the region was by far provided by Bacau and Iasi counties and in a smaller part by Botosani and Vaslui counties.

In the North - East Region there are target – communities which could constitute the objective of some programmes of reducing intra-regional social-economic disparities, going down up to commune level.

- Areas of industrial decline and high unemployment rate including localities as Roman, Suceava, Falticeni, Radauti, Vaslui, Negresti, Husi, Buhusi, Darmanesti, Moinesti, Comanesti, Pascani, Harlau, Targu Frumos, Targu Neamt, Botosani and Dorohoi, together with the adjacent industrial platforms;

- a) *Area of rural isolated zones with low developed infrastructure within different counties as following:*

- Rural area that covers the confluence area between Bacau, Vaslui, Iasi and Neamt counties and which is continued with the Western part of Vaslui county;
- The area adjacent to the common border of Botosani and Iasi counties;
- The area located in the extreme South-East of Iasi County, which is continued in the North-East of Vaslui County, on the right bank of Prut River;
- Areas covering isolated groups of localities from Suceava County;

- Izvoarele Sucevei, Brodina, Ulma;
- Sarul Dornei, Panaci, Poiana Stampei;
- Dolhasca, Dolhesti, Manolea, Forasti;
- Gramesti, Samostea, Zvoristea.

b) The area of the zones with landslides and erosion phenomenon:

- in Botosani County these areas are located in the central side and South- South-East, in the perimeter delimited by the Ungureni, Trusesti, Flaminzi, Lunca, Albesti and Stefanesti communes;
- in Neamt County:
 - in the North of the county, next to Pipirig commune;
 - on both banks of Bicaz Lake;
 - in the North of Piatra Neamt municipality, on the territory of Gircina commune;
 - on the territory of Faurei commune.
- in Iasi County, on the territory of Pircovaci and Strunga communes;
- in Vaslui County, in the basin of the effluents of Birlad River and the basin of Elan River, the South-East area of the county;
- in Bacau County have been identified 13 areas, exposed to the landslides, located in the central and North side;
- in Suceava County, on the territory of localities:
 - Ulma, Brodina, Straja, Vicovu de Sus;
 - Vadu Moldovei, Forasti, Draguseni, Boroaia.

c) The area of the zones affected by floods, in the basin of Bistrita River – next to Borca, Costisa, Podoleni localities, in the Jijia meadow, in Prut River's meadow – downstream Stinca-Costesti Lake, also in Bacau County, in the basins of Trotus, Siret, Tazlau, Bistrita, Zeletin rivers;

d) The area of the zones with deficit of water supply (regarding the specific infrastructure and the water's supply sources – water's quantity and quality) includes Bacau and Iasi municipalities. From this point of view, it is to be mentioned that almost all of rural localities don't have centralised potable water supply networks.

8. Equal opportunities

Promotion of equal opportunities promotion into the social life for both genders is an essential requirement for the Romanian society, being considered as a basic component for the observance of fundamental human rights. Thus, the equal stimulation of men and women contribution to sustainable development and society progress became an issue of increased importance in Romania.

To ensure a real equality and a partnership between women and men in the Romanian society it is necessary to adopt:

- Policies of priority on the equal distribution of the authority and responsibilities in work and society, in the family life, also a more equitable participation in decision-making process in the economical, political and social life;
- The necessary intervention tools and action programmes in order to allow women to provide their existence means and economical resources needed for day to day living, the equitable distribution of the familial responsibilities specific to women and men and also to eliminate the obstacles of legal, political or mentality nature regarding the ensuring of a real equality chances and an adequate participation of the women to the public life and the decision-making process.

These requirements could be also found in the “Report of Plenary Committee of the 21st Extraordinary Session of UNO General Meeting1999”.

„The governments must ensure the respect, protection and the promotion of the fundamental women rights, by elaborating and implementing specific policies and legislation to this field. It is necessary to coordinate and harmonize the measures that are regarding the promotion and the provision of equality and equity between men and women, in a systematic way and in all the fields”.

The available information coming from different sectors is insufficient to offer a large overall image of the actual situation of the women and men in Romania as well as in each development region. But, beside these things, in the North – East Region some milestones could be delimited:

- The life expectancy of men is lower than women’s (the situation is the same at the country level, according to the Publication “Women and men in Romania”, edited by the National Commission of Statistics and UNDP- United Nations Development Programme in 2000).
- The life expectancy in the rural area is lower than in the urban area.
- The rate of school integration at all levels is different for the rural area and urban area, this indicator depending on the poverty level for sub-regions and the presence of the cultural areas (for example, Iasi County is above the national average, whereas the other counties are below).

It is interesting to remark that the indicator is highlighting a higher interest of women to study comparing to men in the urban area and sensibly lower in the rural area.

According to the above mentioned publication results that the percentage of the people with University degree of the total women had increased during 1992-1999 from 70.2% to 75.9%, and of the total men had increased from 80.9% to 85%, the balance of 10 percents being in the favour of men. This reflects an increase of school education level as well as a diminishing of the educational gap between genders in terms of University graduates.

The table below with the population structure on genders is highlighting the majority proportion of women population at the regional level (50.5% women against 49.5% men), at county level, but in the rural area there is a decrease of women number comparing to men number, with the exception of the next counties: Botosani (50.31% women against 49.69% men), Suceava and Neamt (49.96% women against 50.04% men).

There is a phenomenon of women migration from rural to urban areas due to:

- Low living standard;
- Reduced access to education;
- Accentuated discrimination mentalities.

In the rural area, women aged over 60 represent already more than 27% of total female population. In 2000, in the rural area for each 100 young females aged under 15 there were 120 women aged over 60 whilst for each 100 young male aged under 15 there were only 86 elderly men.

As concerning the unemployment-related indicators, the number of unemployed women at region level is lower than the number of unemployed men, as illustrated by the table below:

Unemployment on sexes						
Year	Number of unemployed persons					
	Total		Male		Female	
	Number	Percentage	Number	Percentage	Number	Percentage
2000	213608	100	116439	54,51	97169	45,49
2001	166303	100	92503	55.62	73800	44.38

2002	158816	100	89241	56.2	69575	43.8
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Source: Romania's Statistics Yearbooks 2001, 2002, 2003

This state of fact is due to the following reasons:

- High number of entrepreneurs employing females in apparel manufacturing sector;
- Higher number of female personnel employed in medical field having high and medium qualification than the number of male personnel;
- The enterprises that were absorbing the preponderant male labor force (i.e. metallurgical and mechanical enterprises) ceased their activity and reduced the staff thus generating a high number of unemployed males.

As concerning distribution of university graduates on education profiles it was noticed that:

- In academic, medical-pharmacy, economic, legal and artistic fields of activity the percentage of females represented is higher than the percentage of males;
- Males are higher represented in agriculture and technical fields than females.

Female staff employed in didactic activities is represented, as percentage, as following:

- Pre-school education - 99,8%
- Primary school – gymnasium - 75,3%;
- High school education - 62,4%;
- Vocational education - 50,9%;
- University level education - 39,02%.

In terms of offences there is a slight increase of the percentage of females involved in criminal actions and convicted. Nevertheless, the proportion keeps on maintaining at the following levels: under 14% females and 86% males.

The statistics show that out of total convicted persons imprisoned in state penitentiaries 3,4% are females and 96,6% male. Even though the legislative framework statutes and guarantees females' right to job positions in accordance with their skills and experience, their presence in Parliament was proved to be rather reduced after 1989 with a very slight increase. This increase is mostly occurring at the level of local and county councils.

There is an affirmation trend of females involved in entrepreneurial field, lots of successful businesses being run by female managers. The feminine presence at execution level of Romanian non-governmental organizations is significantly higher the one of males, emphasizing the high level of females involvement. In spite of this situation, only 11.8% of the total females work in management (president) positions while job positions like coordinator, vice-president, director are taken by 32,9% of total females working in NGOs.

As far as audio-visual and written media is concerned, there is a real absence of females in management and decision-making job positions.

(Data was obtained from „Women and Men in Romania”, publication edited by National Statistics Commission and PNUD).