

## **Analysis of the socio-economic development trends of the coastal territorial units in the Bays of Varna and Bourgas within the period 1998-2006**

### **INTRODUCTION**

The analysis and assessment object of this report is the socio-economic development of the coastal territories in the Bays of Varna and Bourgas area. In territorial aspect this includes administrative-territorial units, big and small cities and villages and resorts as follows:

- Municipality of Varna – Varna, village of Kazashko, village of Konstantinovo, “Golden sands” resort, “Saint Constantine and Elena” resort;
- Municipality of Beloslav and city of Beloslav;
- Municipality of Devnya and city of Devnya;
- Municipality of Bourgas and city of Bourgas;
- Municipality of Nessebar – city of Nessebar, village of Saint Vlas, „Sunny beach” resort;
- Municipality of Pomorie and city of Pomorie;
- Municipality of Sredets – city of Sredets and village of Debelts;
- Municipality of Sozopol and city of Sozopol.

In order to determine the stage and the trends of the socio-economic development was used available data and information for the sectors population, industry, energy, tourism, port activities and navigation.

The main sources of information are the National Statistical Institute (NSI), the District development strategies for Varna and Bourgas districts, the Municipal development plans of the municipalities included in this study, other development plans and strategies of the territories, Internet, data from interviews and expert assessments.

The analysis of the socio-economic development of the coastal territories includes the period from 1998 to 2006, however it has to be noted that for certain periods and for several small territorial units there is no official data and sources of information. In cases of differences between the official and the unofficial data available the official information is taken into consideration. In cases of an absence of sufficiently accurate and secure information for certain municipalities, cities and settlements the data for the relevant district is used, due to the more significant presentation of the municipalities examined in the statistical data for the districts.

## **1. Basic information about the coast and the municipalities situated at the Bays of Varna and Bourgas**

The Bays of Bourgas and Varna are the largest bays of the Bulgarian Black sea coast.

**The Bay of Varna** is situated in the Northern part of the Bulgarian Black sea coast, between the Galata and Sant Georgi capes. In its widest part it is 3,5 sea miles. Its maximum depth is 18,5 meters. It is the second largest bay after the Bay of Bourgas in the Black sea coast. At its Western part it is artificially connected through a channel to the Lake of Varna which affects a lot the bio-diversity of both basins. The lake provides opportunities for realization of production activities with imported and local materials due to the cheap maritime transport. The municipalities of Varna, Devnya and Beloslav have territorial outlet at the bay and the lake. These municipalities form a single territorial-industrial complex.

**The Bay of Bourgas** is situated at the Southern part of the Black sea coast. It is 10 – 12,5 km wide and 10 – 12 meters deep. Close to the sea shore are located Bourgasko, Atanasovsko and Mandrensko firth lakes. The municipalities of Bourgas, Nessebar, Pomorie, Sredets and Sozopol have coastal territories towards the bay and the lakes. The industry has a key role in the municipal economy of Bourgas and Sredets. The main occupation of the population in the municipalities of Nessebar, Pomorie and Sozopol is the tourism.

The coastal Black sea territories around the Bays of Varna and Bourgas have certain advantages compared to the interior regions of the country because they provide better conditions for the development of certain production capacities and sectors which rely on imported materials; they also provide natural and climate conditions for the development of tourism, port activities and navigation. Due to their favourable natural and commercial conditions significant parts of the population and the economic potential of Varna and Bourgas districts are located at the coastal areas.

## **2. Demographic development and economic activity of the population in the area of the Bays of Varna and Bourgas**

When analyzing the available data on the population for the period 1999-2006 it has to be considered that in 2001 in the country was conducted a census and the data for that year includes also the corrections made in the accumulated current mechanical variance between two census.

**Varna district** occupies the third place in the country by population number. According to the official data of the national statistics the total number of the population in Varna district for the period 1999-2006 had increased from 440 563 in the first year to 456 915 inhabitants in the last year of the period (table 1). In 2006 the population of the three municipalities examined represents 74,36 % of the whole district population, the population of city of Varna alone representing 68,17%. In the beginning of the period – year 1999 the three municipalities form

about  $\frac{3}{4}$  of the district population (73,45 %) and the inhabitants of Varna represent 67,23 %. Thereby in terms of structure there is no change in the population distribution of the three municipalities examined compared to the other district municipalities.

For the whole period examined 1999-2006 the population of the three municipalities increased with 16 185 persons, i.e. with exactly 5, 00 %. Compared to Varna district population it increased to a greater extent (3, 71 % for the district). This increase is due basically to Municipality of Varna whose inhabitants increase for the period examined with 17 377 (5, 75%), as the population of city of Varna alone increases with 15 261 inhabitants (5, 15 %). The reasons for this are the better living conditions, the relatively higher employment of the big city and the opportunities for receiving higher income and education. In the meantime the population of Municipality of Beloslav decreases with 8, 06 % due to decrease in the population living in the neighbouring villages. In the Municipality of Devnya the population decreases with 2, 26 %, same as the population of city of Devnya but with higher percentage - 5, 60 %.

**The natural increase** of a certain territory is formed by the difference between the levels of the birth rate and the death rate indicators. The natural movement is one of the main indicators which influence the dynamics of the population and its age structure. The natural increase for the municipalities of Beloslav and Devnya is negative for the period 1999-2006, and the natural increase for Municipality of Varna is negative only for the period 1999-2004 (table 2).

**The mechanical increase for the municipalities of Beloslav, Varna and Devnya** for the period has changing lines (table 3). The total mechanical increase for the whole period examined is positive only for the Municipality of Beloslav.

The dynamics in the population number is related to its age structure. According to official statistics the proportion of the age groups of 0 to14 years compared to the 15 to 64 years group for the Municipality of Varna stays within the 18 % limit for the past two years (table 4). For Municipality of Beloslav the structure of the young population is better than the one for Municipality of Varna as for the last two years it stays within the 23 % limit. Municipality of Devnya has the youngest population among the three municipalities examined however here also the trend is for a constant decrease of the young population share in the age structure of the population.

According to the district strategy of Varna district the age distribution of the district population is more favourable than the average values of the indicator for the country. The proportion among the three main age groups (0 to14 years; 15 to 64 years; 65+ years) is 14, 4:70, 9:14, 7% (2003). A specific feature is the relatively high share of the population in the 15 to 64 years group which mainly forms the labor potential. Municipality of Varna, respectively city of Varna is characterized with high ratio of the 15 to 64 years population which determines the degree of economic activity in the municipality and the city. According to the district strategy the municipalities of Devnya, Beloslav and Varna are among the municipalities with most favorable age structure in the district.

The population of the **Municipality of Varna** in 1999 was 302 118 inhabitants, and the population of city of Varna was 296 204 inhabitants. At the end of 2006 the population of the municipality increased to 319 495 inhabitants, and the population of the city increased to 311 465 inhabitants. The natural increase of the city of Varna within the period 1999-2004 is negative but in 2005 and 2006 this trend changed and the births exceed the deaths with 205 for the first year and with 486 for the second. There is a trend of mechanical exodus of the population from the city and the municipality after 2002. This can be explained with the transition of a part of the population with relatively higher income from the city towards the villages which is related to the purchasing and building of new houses in the peri-urban areas and territories.

For the period examined 1999-2006 the population of the **Municipality of Beloslav** decreases from 12 199 in 1999 to 11 216 at the end of 2006 (with 983 inhabitants). The largest decrease in population of the municipality was registered in 2000 - 9, 43 %. In the following years the population number of the municipality was stabilized. The population of city of Beloslav decreases insignificantly. In 1999 it had 8 035 inhabitants, and at the end of 2006 - 7 946 inhabitants. The natural increase of the municipality and city population within the whole period is negative. The largest negative values for the municipality were reported in 2000 (135 persons), mainly at the expense of the increased death rate in the villages. The mechanical increase of the municipality during the years after 2003 was positive and in 2005 there were 136 persons more settled in the municipality compared to the persons departed. For the city of Beloslav the trend forms a transition from an increase in one year towards a decrease in the following year.

**Municipality of Devnya** consists mainly of the population of the city of Devnya. In 1999 the municipality had 9 264 inhabitants, from which 8 678 represented the inhabitants of city of Devnya. In 2000 the village of Padina, former part of the Municipality of Avren was included into the Municipality of Devnya. At the end of 2006 the population of the municipality was 9 055 inhabitants, and the population of the city was 8 192 inhabitants. The data for the last two years of the period - 2005 and 2006 shows stabilization and a slight increase in the municipal and city population. This is due to the prevailing mechanical increase above the negative natural increase in the municipality and the city. In the municipality of Devnya there was a mechanical increase of 100 inhabitants at a negative natural increase of minus 51, and for the city of Devnya the mechanical increase was 82 at a natural increase of minus 28 inhabitants. For 2006 the values were in favor of the mechanical increase of the population compared to the decrease of its natural movement.

The population of Bourgas district decreased from 427 152 inhabitants in 1999 to 417,810 inhabitants at the end of 2006 (table 1). The municipalities examined represent 68, 31 % of the population of the district (31.12.2006). The population decrease trend is constant in the largest and most industrially developed municipality. This decrease was due to the negative natural increase within the whole period and to the negative mechanical increase after year 2003. During the

recent years the population of the Southern Black sea coast municipalities of the district – Nessebar, Pomorie and Sozopol has an increasing trend. This trend is permanent and is mostly expressed in the municipality of Nessebar. Of course, this is related to the development of the tourist business and the new building activities.

The natural increase for all municipalities within the period 1999-2006 was negative (table 2). Only the cities of Bourgas, Nessebar and Sozopol had a higher number of births compared to deaths for year 2006.

The mechanical increase of the population in Bourgas district for the period 2004-2006 was determined by the mechanical increase in the municipalities of Sredets, Nessebar, Pomorie and Sozopol (table 3). The rapid construction activities and the development of the tourism in these municipalities attract new inhabitants recently.

At the end of 2006 **the Municipality of Bourgas** had 205 691 inhabitants and the city of Bourgas had 188 887 inhabitants. This represented 91,83 % of the inhabitants of the municipal territory. The district population is concentrated on the territory of the city where are located the main production and transport-logistic structures, socio-cultural institutes and tourist-entertainment areas. Compared to 1999 the municipal population has decreased with 6 376 inhabitants or 3, 01 %. Within the whole period the city of Bourgas had a naturally decreasing population in exception to 2006 when for the first time a natural increase of 43 inhabitants was reported. The key factor for the decrease in municipal and city population is the negative mechanical increase. In 1999 and 2000 the mechanical increase of the population was negative, respectively there was a decrease of 365 and 464 inhabitants. The most significant emigrational exodus from city of Bourgas was reported in 2003 - 1829 persons. In the following years the immigrational trend also prevailed including in 2006 which represents a negative mechanical increase for the city of Bourgas.

The population of the **Municipality of Sredets** within the period 1999-2006 decreased. At the end of 2006 the municipal population was 16 745 inhabitants (18329 in 1999), 56,27 % of which lived in the city of Sredets, i.e. 9 422 inhabitants. A specific feature for the municipality is the fact that the negative natural increase during the last years (mainly in the villages) is compensated by a positive mechanical migration to the same settlements. The whole mechanical movement towards the municipal territory is thanks to the factory in the village of Debelt.

After year 2003 the **municipality of Nessebar and the city of Nessebar** represent a constant growth trend of the population number compared to the previous year. This are the city and the municipality with the most significant increase in population for the period 1999-2006 – 3 686 persons or 60, 29 % for the city and 5 608 persons or 34, 98 % for the municipality. The total number of the municipal population for 2006 was 21 642 inhabitants, 9 800 of which lived in the city of Nessebar. After 2003 the birth indicator for the city of Nessebar constantly prevails on the death indicator which represents a positive natural increase of its population. For the same period the mechanical increase of the municipal and city

population is also positive which explains the overall growth of the population. As a result of the powerful development of summer tourism and the transformation of “Sunny beach” resort in a permanent residential place, it is expected that this trend for population growth will be continued.

At the end of 2006 the population of the **municipality of Pomorie** was 27 342 inhabitants, 13 578 persons or 49, 66 % of which lived in the city of Pomorie. There is a trend of a slight increase in the municipal and city population number after 2004. For this period the natural increase of the municipal and city population was negative. However it was compensated by exceeding values of the mechanical increase in the municipality and the city. The population flow is directed to a greater extent into the settlements of the municipality than into the city of Pomorie.

At the end of 2006 the **municipality of Sozopol** had 13 997 inhabitants and the city of Sozopol had 4640 inhabitants. For the period 1999-2006 the city of Sozopol occupied the second place after the city of Nessebar in terms of population growth rate - 25, 44 %. The distribution of the population between the center of the municipality and the other settlements did not change. Here also the trend for negative natural and positive mechanical increase of the municipal population is identical to the one in the municipality of Pomorie.

In terms of population structure into the age groups 0-14/15-64 years (table 4), which determine the possibility for natural reproduction in the following years and which provides employment contingent the municipalities that show the best indicators in Bourgas district are Sredets and Pomorie. Their population structure for the groups of 0 to14 and 15 to 64 is above the average district values in spite of the fact that they follow the general deterioration trend.

The economic activity ratio (table 5), the employment ratio (table 6) and the unemployment ratio (table 7) are the indicators of the economic activities of the population.

According to the NSI data **the economic activity ratio** of the population for **Varna district** fluctuates between 54% for 2001 and 2002 and 56 % for 2003-2005. Within the years the employment ratio of the economic active population grows from 43 % to 51 %. According to expert assessment and interviews the economic activity of the population in the municipalities of Varna, Beloslav and Devnya follows the same growth trend. The unemployment of the population in Varna district permanently decreases and **the unemployment ratio** of NSI decreases sharply from 21 % in 2001 to 15 % in 2004 and reaches 10 % in 2005.

The data for **unemployed persons registered** who testify the official unemployment level and its growth rate for **Varna district** and the district municipalities for the period 1998-2006 are provided by the Regional employment agency – Varna (table 8). Thanks to the adequate accountancy we dispose of data for the whole period examined 1998-2006. For the municipalities of Beloslav, Varna and Devnya the number of unemployed persons decreased with 3 477 persons or with 37, 09%. The period of unemployment growth for the three municipalities was till 2000 and after that year there is a constant decrease trend in

number of unemployed persons. It is obvious that the unemployment coincides with the improvement of the business climate and the increase of the economic situation for the district and the country. It has to be noted that this data concerns only the officially registered at the Labor bureau unemployed persons. Municipality of Devnya reports the largest decrease of the unemployed persons registered for the whole period (55, 61 %), followed by the municipality of Beloslav (50, 78 %). Municipality of Varna registers the largest absolute volume decrease as the number of unemployed persons for the period decreased with 3 477 unemployed persons.

**The average unemployment level** in the municipalities of Beloslav, Varna and Devnya during the period is illustrated in table 9. It is particularly specific for the period that after 2001 there is a constant decrease of the average unemployment rate for the three municipalities – Beloslav, Varna and Devnya. During the past years the municipality of Varna has the lowest average unemployment level – 4,12 % (2005) and 3,37 % (2006). The average unemployment level is higher in the municipality of Beloslav - 6, 38 % and 4, 67 % respectively for 2005 and 2006.

The changes in the economic activity of the population are related to the business climate and the economic context. The positive changes of these factors influence directly the improvement of the activity, the employment and the unemployment.

**The economic activity ratio** for the population of **Bourgas district** fluctuates within 48 -51 % (table 5). The value of this ratio starts from 48 % in 2001, increases to 51 % in 2002 and decreases to 49 % in 2005.

**The employment ratio** of the population in **Bourgas district** is lower than the one for Varna district (table 6). It was 38, 00 % in 2001 (43 % for Varna district), reached 43, 00 % in 2003 (46 % for Varna district) and at the end of the period in 2005 it was 46 % (51 % for Varna district).

In **Bourgas district** the unemployment ratio started at 22 % in 2001 and developed a very strong decrease trend in the following years (table 7). In 2005 the unemployment reached lower levels than the ones of Varna district and decreased to 6 %.

According to the information of the National Employment agency for **Bourgas district** there is only available data for the average annual **unemployed persons** registered is for the period 1998-2003 (table 10). For the municipalities of Bourgas, Sredets and Sozopol this number grows till year 2000, for the municipality of Nessebar it grows till year 2001, and for municipality of Pomorie - till year 2002. For the last year of the period examined the decrease ratio of this indicator is the highest for municipality of Nessebar (53,99 %), municipality of Pomorie (35,55 %) and municipality of Bourgas (33,07 %).

### **Conclusions and summaries:**

**The general conclusion for the municipalities of the Bays of Varna and Bourgas is that both regions in recent years have some positive trends compared to other regions of the country in terms of demography due to their favorable geographic location and economic development. Thanks to the concentration of economic potential and the rapid development of the tourist industry mainly in the city of Varna and the small municipalities, situated in**

the Southern region of Bourgas, they form a migration destination for the population from the interior parts of the country. However in the meantime there is a trend of transition of the population of the cities towards the city-surrounding areas and the nearby regions situated in the Western parts of the coast which are characterized by more mountain-like relief and climate. Within the period 1999-2006 the population of city of Varna increases and the population of city of Bourgas decreases.

Due to absences in the registration system, particularly for the big cities – Varna and Bourgas there is a doubt that the officially reported data on population number obtained through statistical means is strongly decreased.

**For the Bay of Varna region:**

1. Within the period 1999-2006 the total population number in the municipality of Varna and the city of Varna increases and in the municipalities of Beloslav and Devnya it decreases.
2. The natural increase of the population for the municipalities of Beloslav and Devnya is negative and for the city of Varna and respectively for the municipality of Varna for the past two years it is positive. The mechanical increase according to official statistical data is negative for the three municipalities.
3. According to the available data the age structure of the population in the municipalities of Beloslav, Varna and Devnya is better than the one of the country. However in spite of its improvement it is not enough for future reproduction of the population and for the increase of economic activity ratio.
4. For the three municipalities the economic activities indicators for economic activities and employment are high and the number of unemployed persons registered and the unemployment percentage decrease.

**For the Bay of Bourgas region:**

1. According to official data for the period 1999-2006 the total number of population in the municipalities of Bourgas and Sredets decreases and in the municipalities of Nessebar, Pomorie and Sozopol increases.
2. The natural increase of the population in the municipalities of Bourgas, Sredets, Nessebar, Pomorie and Sozopol is negative and only the city of Nessebar after 2003 and the cities of Bourgas and Pomorie in 2006 have a positive natural increase of the population.
3. According to official data for the period 1999-2005 the municipality of Bourgas and the city of Sredets have a negative mechanical increase of the population and all tourist municipalities like Nessebar, Pomorie and Sozopol have a positive mechanical increase.
4. The age structure of the population is characterized by deteriorating indicators according to the general studies of the district strategy and the municipal development plans.
5. The economic activity of the population of the region is high and the unemployment is very low. The average annual number of registered unemployed persons for the municipalities with developed tourism during the past few years decreases fast with very high rates.



### 3. Analysis of the industrial development of the municipalities of Bays of Varna and Bourgas

The gross domestic product (GDP), the gross domestic product per capita (GDP per capita) and the gross value added (GVA) are the most representative indicators for assessing the socio-economic development of a certain territory. In Bulgaria NSI observes these indicators at district level. However in case of districts with strong concentration of population and production capacities around big core-cities in industrial-territorial agglomerations such as the economic areas and municipalities around the cities of Varna and Bourgas the district indicators can be used to represent the economic development dynamics of these territories.

In the beginning of the period examined year 1999, the **GDP of Varna district** was 1,266,864 thousand leva, a smaller value than the GDP for **Bourgas district** which was 1,464,592 thousand leva (table 12). In the next few years Varna district shows a faster and more intensive development. The GDP in Varna district grew with an average annual percentage of 13, 66 and outdistanced the development of Bourgas district in rates (9, 89 %). The GDP produced in Varna district during 2005 was 2,690,352 thousand leva, and it outdistanced Bourgas district where the GDP produced was 2,468,374 thousand leva. The more artificial indicator – **GDP per capita** (table 13) shows similarity of the data for both districts for the end of the period. In 1999 for **Bourgas district** it was 3,417 leva. In **Varna district** during the same year 2,860 leva GDP per capita was produced. During 2005 the data for the two districts is almost equal: for Bourgas district it is 5,893 leva and for Varna district it is 5,872 leva. The average annual percentage of growth for Varna district (13, 08 %) is higher than the one for Bourgas district (10, 30 %).

The highest annual percentage of GDP per capita growth in **Varna district** was reported in 2000 - 30, 19 %.

The indicator **gross value added (GVA)** shows the vitality of the economy. For Varna district after a decrease of the annual rate of growth during the period 2001-2002 the indicator changed with different percentage values however it kept its trend to grow in absolute volume (table 14). In 2005 it reached 2 214 042 thousand leva.

**The GDP for Bourgas district** for the period 1999-2005 shows a different trend of annual value dynamics (table 12). Within the period 1999-2001 it represented a sharp decrease by reaching negative values and then it restored and till the end of the period it fluctuates in a changing value dynamics. The explanation for the changing dynamics is due to the condition of the big enterprises in the district, the situation of the human and natural resources, the immigration of the population and other socio-economic and resource factors. During 2005 the growth rate was 21, 58 % and it outdistanced the one of Varna district (8, 80 %). This is due to the increase in oil product prices and the development of the tourism with faster rates

**GDP per capita for Bourgas district** (table 13) is characterized by sharply changing annual rates. This economic fact leads to a change in the income of the population and to some socio-economic problems.

The decrease in GVA in 2001 according to the analysis in the district development strategy for Bourgas district was a result of the sharp decrease of GVA in the industrial and agricultural sectors. Within the period 1999-2001 the rate of GVA in the service sector increased but this could not compensate the decrease in the sectors of industry and agriculture. The high value of the indicator is due mainly to the development of tourist services in the region.

**The municipalities of Varna, Devnya and Beloslav** produce more than 90% of the industrial production of the district (table 15). For the past two years 2005-2006 the enterprises in these municipalities manufactured 92 % of the industrial production of the district which statistically includes the value of the production manufactured in the mining and processing industries. The industrial production manufactured at the three municipalities has a permanent increasing trend from 675 440 thousand leva in 1999 to 1 570541 thousand leva or 2, 33 times increase for 2006. During the past two years of the period examined the enterprises of the mining and processing industries on the territory of the three municipalities employed 87-88 % of the industry workers (table 16) and these enterprises formed 91% of the net sale income in the district (table 17). The labor productivity in value per capita constantly increases and it is as follows: 1999-23,477 thousand leva, 2000-35,519 thousand leva, 2001 - 41,550 thousand leva, 2002 - 41,748 thousand leva, 2003 - 39,438 thousand leva, 2004 - 46,090 thousand leva, 2005 - 54,244 thousand leva and 2006 -58,899 thousand leva. For the period in question the labor productivity per capita increased 2, 56 times and it outdistanced the increase rate of the value of the industry production in the three municipalities for the same time period (see above).

**The municipality of Varna** and respectively the **city of Varna** have the largest concentration of production facilities. According to the district development strategy and the municipal plan data 49 % of the industrial production of the district is being produced in the municipality, here work over 70 % of the persons employed in the industry sector and here is produced 51 % of the net sale income of the same sectors. The municipality of Varna has a significant economic potential and its infrastructure is very well developed. The economy has a strongly diversified structure. There are two most developed clusters – maritime and tourist industry. The maritime industry cluster includes Varna shipyard (more than 800 ships were built for the past 90 years), Institute for ship hydro- and aero dynamics, Odessos ship repair yard S.A. (the largest and best equipped ship repair yard in Bulgaria, convenient for dry dock for ships with up to 35 000 dwt and floating repair of ships with up to 150 000 dwt, employed staff of 1000 persons), Navigation Maritime Bulgare – the largest national maritime transporter (possesses tankers, container carriers, ships for mass and general cargo, ferries with total tonnage of 1 810 000 dwt, provides about 90% of the transport sector income in the region and produces 20% of the import and export of Bulgaria, Ship Machine building J.S. Co which produces ship equipment. On the territory of the municipality there are also

enterprises which operate in the sectors of metallurgy and machinery construction, food industry, tailoring industry, electrical engineering, and shoe industry, production of construction materials and building, furniture industry.

Within the period 1999-2006 the dynamics of the indicator **industrial production manufactured on the territory of the municipality of Varna** was characterized by different rates of increase (tables 11 and 15): 10, 11 % in 2001, following a decrease in annual growth to 1, 18 % in 2002 and a sharp increase in 2004 to 33, 86 %. In 2006 the dynamics was only 18, 01 %. For the whole period examined the industrial production manufactured in value increased 2, 5 times.

**The persons employed in industry in 2006** in the enterprises of the **Municipality of Varna** were 21 951, in 1999 they were 21 058 workers and employees (table 16). The largest employment decrease was reported in 2000 and it was related to the closure of Varna shipyard. Through the years one employed person had manufactured the following industrial production in thousand leva: 1999 -15,465 thousand leva, 2000 -19,010 thousand leva, 2001 - 20,901 thousand leva, 2002 -21,326 thousand leva, 2003 -22,039 thousand leva, 2004 - 28,039 thousand leva, 2005 - 34,064 thousand leva and 2006 -3 7,885 thousand leva. It is observed that the productivity of one employed person in the industrial sector of the municipality of Varna is significantly lower than the total for the three municipalities.

**The net sales income in the industrial sector in the municipality of Varna** does not follow the same dynamics as the manufactured industrial production (table 17). This is explained with the market determination of the sale prices which are being formed by the demand and the supply and not only by the volume of the production manufactured.

The sector that has a key significance within the economic structure of the **municipality of Devnya** is the processing industry and particularly the chemical industry. Over 80% of the gross production manufactured in the municipality is provided by the processing industry. On the territory of the municipality of Devnya are located several of the largest chemical plants of the country - "Solvey Sodi" JSC, "Agropolychim" JSC, "Polimeri" JSC. "Solvey Sodi" JSC owns the suppliers of strategic materials needed for the production of calcinated soda: brine producer „Provadsol” JSC, thermo plant “Deven” JSC and the limestone-pit “Devnya limestone” JSC (joint ownership with “Devnya Cement” JSC).

The production of construction materials is realized by “Devnya Cement” JSC. In the processing industry operate the pits for inert materials ceded on a concession to “Eskana” JSC, registered in Varna and the limestone-pit “Devnya limestone” JSC. “Devnya limestone” JSC is a concessionaire of the limestone bed of Chernevo, municipality of Suvorovo. The availability of local sources of quality and sufficient output material needed for the production of the key enterprises for the local economy is of paramount importance.

**The industrial production manufactured in the municipality of Devnya** for the period 1999-2006 (table 15) increased 2, 06 times which was below the average level of increase for the same period for the three municipalities (2, 33 times). **The number of persons employed** had a significant decrease trend provided that the industrial production manufactured increased which was gained

by an increase in labor productivity of one employed person. At the end of the period in 2006 the industrial sectors on the territory of the municipality provided work for 3 381 persons out of 5 940 employed in 1999 (table 16). The decrease is with 56, 91 % for the whole period and the most significant decrease compared to previous years was reported in 2000 – 31, 60 %, 2003 - 13, 48 % and in 2005 - 10,63 %. These decreases of the personnel employed are related to the limitation of the activities of “Agropolychim” JSC and “Polimeri” JSC within the period before and during their privatization; also it is related to the optimization of the personnel employed in “Solvey Sodi” JSC. In 2006 the number of personnel employed in industry within the municipality grows which most probably will continue to exist as a trend during the following years due to extension of the chemical plants production. The annual productivity of labor of one person employed in industry for the municipality of Devnya in thousand leva increased 3,62 times for the period 1999-2006 (table 18). In terms of years it is as follows: for 1999 -56,429 thousand leva, for 2000 -117,810 thousand leva, for 2001-129,515 thousand leva, for 2002 - 132,620 thousand leva, for 2003-138,208 thousand leva, for 2004 -157,024 thousand leva, for 2005 -192,613 thousand leva and for 2006 - 204,367 thousand leva. This productivity in 2006 was 5, 39 times higher than the productivity of one person employed in the municipality of Varna and 5, 67 times higher than the productivity of municipality of Beloslav. This is due to the high degree of automatization and mechanisation of the chemical production activities.

The industry has a key significance also for the economy of the **municipality of Beloslav**. “Maritime technical group – Varna” JSC is an enterprise dealing with ship repair activities with 675 employed persons and 17-18 mlns of leva annual income volume of basic activities. The pottery industry and the glass industry is represented by the Ceramic enterprise of the village of Razdelna (21 employed and 5, 2 mln. of leva realized production) which produces bricks for the construction and “Inhom”Ltd – Beloslav which deals specifically with manufacture of glass products (110 employed and 1, 5 mlns of leva sales volume).

The mining industry has a limited significance for the local economy. Clay is being extracted at the bed near to the village of Razdelna which supplies materials for the productions of bricks by the Ceramic enterprise. The future development perspectives of the sector are related to the exploitation of the existing stone-pits and examination of the phosphade mining capacity near to the city of Beloslav.

The industrial enterprises in the municipality are characterized by an old technological base and significant usage of energy which makes them relatively noncompetitive at the market. The main production capacities were introduced into exploitation before 1989 and they were renovated during the 90`s.

In spite of all this **the industrial production manufactured** in the **municipality of Beloslav** for the period 1999-2006 increased 3,29 times which makes it the highest increase rate of the industrial production of the three municipalities for the period in question.

**The productivity of labor of one employed** person in the industry in the **municipality of Beloslav** in thousand leva by years increases with highest rates for the three municipalities – it was 4,37 for the period 1999-2006 (table 18). However

it was the lowest for the three municipalities due to the old production capacities. In 1999 one employed person manufactured production for 8,234 thousand leva, in 2000 – for 9,188 thousand leva, in 2001 –for 9,381 thousand leva, in 2002 – for 13,788 thousand leva, and in the following years – for 12,929 thousand leva (2003), 18,825 thousand leva (2004), 24,411 thousand leva (2005) and 35,982 thousand leva (2006). During the last years of the period 2004-2006 a significant increase in the productivity was noticed although in 2006 the number of employed persons also increased. This is due to the introduction of new contemporary capacities in the exploitation of the glass industry.

The industry of the coastal municipalities in the **Bay of Bourgas region is developed in a different degree**, and the subsectors of the industry prevail – such as machinery construction and metal processing industry, chemical, mining and the tourist industry for Nessebar, Pomorie and Sozopol.

The key sector for the **municipality of Bourgas** is the industry; it provides more than 83 % of the production and over 50% of the persons employed in the material production. The funds built in the material production are distributed as follows: industry - 78.10%, transport - 12.92%, construction - 3.44%, commerce - 3.21%, agriculture - 2.18%, other - 0, 15%. The measuring indexes of the activity income for the different sectors in the municipality of Bourgas for a period longer than 10 years confirm the positive growth trend of the chemical and oil-processing industries, transport, communication and services and have a negative growth trend for the sectors of machinery building, metal processing, wood processing, construction, production of construction materials, textile and tailoring industries.

**The municipality of Bourgas** distinguishes with a high degree of industrialization. The industry in the municipality is concentrated in **the city of Bourgas** which is the main industrial, commercial, transport and tourist center of the South Black sea coast. The key sectors that define the economic structure are the food industry, electrical and electronic engineering, machinery construction and metal processing and chemical industry. In the food industry branch are included enterprises which operate in the flour mills, wine industry, brewery, milk industry and fish canning industry (here is situated the only fish canning enterprise of the country). Well developed is the production of cables and wires, wagons, ventilators, construction materials. The main representatives of the machinery construction and metal processing sector are „Bourgas shipyard” JSC и „Ship repair yard” JSC. The furniture enterprises are „Kronoshpan” JSC, „Detelina” Ltd and „Dograma” Ltd. The coal-mining industry and the metallurgy decrease their share in the municipal economy. The production of salt is represented by one of the oldest enterprises in the country – „Black sea salt-mines” JSC.

On the territory of the municipality of Bourgas is located the largest oil refinery of the Balkan peninsula – „Lukoil Neftochim Bourgas” JSC. This is also the largest enterprise of the country which is part of the „Lukoil” group in Bulgaria. The company is managed by “LUKOIL Europe Holding” B.V. Amsterdam, the Netherlands. Its main production is the processing of raw oil and the manufacture of a wide range of products – different types of fuels and oil-products, polymers and plastics. According to the financial report of the company for 2005 it realized oil-product sale income of 3 077 452 thousand leva and 384 913 thousand leva goods

sales income. The average number of employees by 31.12.2005 was 4 750, and for 2004 it was more – 6 023.

The largest relative share of the industry in the **municipality of Sredets** have the foundry industry, the metal processing industry, the manufacture of machinery and the chemical industry (production of plastic goods) which represent more than 83 % of the whole industrial production. Food industry is also well developed. In the sub-sector “Foundry, metal processing and machinery construction industry” operate 4 enterprises with total number of employees about 900 persons. The largest enterprise is “Promet steel” JSC of the village of Debelt which has its headquarters in the city of Bourgas. The plant was introduced into exploitation in 1988. It is the largest manufacturer of hot-milled metal of black metals and processes steel and iron alloys. It also manufactures a great variety of reinforced pole steel – periodic profile, round bars, flat bars /tire/, and shaped steel. The number of employed persons in “Promet steel” JSC by 01.03.2005 was 825.

In the machinery construction sector operates only one enterprise - “Briz” JSC. It manufactures mainly small-size equipment needed for the agricultural and forest sector and waste gathering equipment. The production of the company is mainly distributed at the foreign market - 70 %. Within the production of plastic goods sector operate 3 enterprises with total number of employees of 650 persons. Two of these enterprises are located on the territory of the city of Sredets and one is located on the territory of the village of Debelt. The main representative of this sub-sector is “Plastic goods” JSC - city of Sredets. The enterprise processes polyethylene, polypropylene, polystyrol and foamed polystyren. The average number of persons employed in “Plastic goods” JSC - city of Sredets is about 400 persons.

In the food industry sector operate 12 small private companies. The production of clothing and other tailoring goods is represented by one constantly operating enterprise (“Lecheva” S Ltd) which employs 36 persons by permanent labor contract. It manufactures male, female and uniform clothing. In the sub-sector of wood processing and furniture industry operate 2 enterprises which employ about 28 persons.

The usage of production capacities in all enterprises is significantly smaller than their real capacity.

**In the municipality of Pomorie**, well developed sub-sectors of the industry are: food industry (“Black sea gold” JSC Pomorie – it produces broached and bottled wine, brandy and rakia and has workshops in Pomorie and Kableshkovo, “Black sea salt-mines” S Ltd - Pomorie, “Great Bulgarian mills” Ltd which has a workshop in the city of Pomorie etc.); machinery construction and metal processing industry (“Pomorie” Ltd – ex-instrument construction plant); electronic and electrical engineering industry (“Technical coals” S Ltd - Kableshkovo); tailoring industry etc.

The presence of the small business companies is typical for the municipal economy and they provide good results even in crisis situations. The defect is that this business is mainly concentrated in the services and commercial sectors.

The industrial sector in the municipality of Nessebar is not strongly represented and plays an additional role for the tourist sector.

A key and traditional sector of the industry in the municipality of Sozopol is the industrial fishing and the processing of fish and fish products. Here operates SC “Ribex” which deals with processing of rapanas, fish processing plant “Atlanik” Ltd - Bourgas, workshop Sozopol.

**Conclusions and summaries on the industrial development of the territories in the region of Bays of Varna and Bourgas (based on the data available for the districts and the municipalities in Varna district):**

- 1. The industrial development within the period 1999-2005 for both districts grows. Bourgas District has a relatively more developed industry than the Varna district in terms of the volume of industrial production manufactured in thousand leva however the development of Varna district has a higher average annual growth – it is 1,96 times at 1,69 times for the Bourgas district. At the end of the period the production manufactured of Varna district represents 58, 19 % of the one of Bourgas district.**
- 2. The GDP in 1999-2005 of both districts grows - 13, 66 average annual rate for Varna district and 9, 89 for Bourgas district. In terms of GDP produced Varna district develops with faster average annual rates. At the beginning of the period the GDP produced of Varna district represents 86,80 % of the GDP of Bourgas district, and in 2005 it is already higher - 108,99 %.**
- 3. In terms of GDP per capita indicator both districts are equal in 2005.**
- 4. Municipality of Bourgas is the most industrialized municipality in the Bay of Bourgas region, followed by municipality of Sredets. Their fast development is mainly related to „Lukoil Neftochym Bourgas” JSC and “Promet steel”JSC – village of Debelt.**
- 5. Municipality of Varna is the fastest developing municipality in Varna district and has an industrial production growth of 2,16 rate for the period 1999-2005 followed by municipality of Devnya - 1,8 rate. Municipality of Beloslav shows a slight decrease of the production manufactured for the period with 0,07 %.**
- 6. Among all municipalities examined on the territory of Varna district the municipality of Devnya represents the highest productivity of labor of one employed person (for 2006 it is 5,39 times higher than the one of the municipality of Varna and 5,67 times higher than the municipality of Beloslav). The reason for this is the high degree of automatization and mechanization of the chemical production activities in the municipality.**

#### 4. Development of the energy sector in the area of Bays of Varna and Burgas

The national statistics measure the production of electricity, gas and water altogether. For the region of the municipalities situated at the Bay of Varna data is available for **district of Varna** and for **the municipality of Varna** for the period 2000-2006 and for the municipality of Beloslav only for year 2000.

The indicators in thousand leva to a great extent show the production material prices and the sale prices of electricity, gas and water (table 19). This fact puts in question the commensurability of the data through the years. According to the data available it is obvious the increase in the **production of the municipality of Varna** which is over 3 times higher for the period 2000-2006. The annual dynamics was highest in 2001 (52, 23 %), followed by 2003 (24, 85 %) and 2002 (20, 59 %). The average annual growth of the indicator is 21, 85 %. The production of the municipality of Varna represents between 30, 63 % (2001) and 42, 15 % (2006) of the whole production of the district.

**The persons employed in the production and distribution of electricity, gas and water** in the **municipality of Varna** increased with 1 538 persons or 1, 9 times for the period from 2000 to 2006 (table 20). The share of the persons employed in the sub-sector in the municipality of Varna is higher than the share of the production in the municipality; it is between 51, 53 % (2000) and 76, 48 % (2005) compared to the district data.

**The productivity of one person employed in the municipality of Varna** changed irregularly and even decreased with minus 39,33 % in 2002 compared to 2001 (table 21); then it started to increase. There is no compliance between the change in the number of employed persons dynamics and the productivity of one employed person (tables 19 and 21). For example, provided that there is almost double increase of employed persons in 2002 compared to 2001, the productivity of labor does not decrease proportionally.

The electricity network of high voltage in **Varna district** is well developed as on its territory are located three system electrical subfeeders with total transformation capacity installed of 3350 MW and 377 km of transmission power cables with 750, 400 и 220 kW of voltage. The regional network with 110 kW voltage is 385 km long and the regional subfeeders of 110/20 kW of voltage are 11 with total transformation capacity installed of 567 MW. This well developed high voltage network guarantees good power supply possibilities for electrical supply however a major part of the facilities are physically and morally old and with insatisfactory reliability degree.

Through the district territory passes the national gas transmission network and the transit gas conductors of "Bulgargas" JSC. The first production of natural gas was made by "Petreko Bulgaria" Ltd in the Black sea continental shelf which through a 88.00 km of transmission gas-conductors provides to the national gas transmitting network a quantity of over 1 900 000m<sup>3</sup>/daily (gas compressing station of "Krivnya"-Provadia). The preliminary reserves of "Galata-III" block are calculated to 1 700 000 000 m<sup>3</sup>.



At the moment 2 gas-distributing companies and 17 direct clients of Bulgargas SJSC are connected to the transmission system of Bulgargas SJSC and consummate gas.

The preliminary forecasts on the gas consumption in Varna district show a 400 mln.m<sup>3</sup> annual consumption till 2015. The existing transmission system has a transmitting capacity for such quantity volumes. Three companies have been licensed for building gas-distribution networks on the territory of Varna district - "Varna gas" JSC and "Primagas" JSC for the Municipality of Varna and "Black sea technological company" JSC for the municipality of Beloslav. The license of "Primagas" JSC is for operations on the territory of the following residential regions: "Vladislav Varnenchik", "Mladost", "Asparuhovo", and for the rest of the territory the company licensed for operation is "Varnagas" JSC for a 10 year period till 2013. It is planned for the gas-transmitting network of the city to be 309 km long and to be worth 20.8 mlns of euros in 2013. The domestic clients will be 40 000, and the industrial ones will be 30.

On the territory of the **Municipality of Varna** there are no sources of electricity production so the voltage is being processed through transformers of 110 kV / 20 kV and 10 kV - (10 subfeeders: Varna East, Varna South, Varna West, Varna North, Varna center, Chayka, Maksuda, Lazur, Asparuhovo and Golden sands). The subfeeders are powered by 110 kV voltage from TPP Varna and Dobrudja subfeeder. Their total capacity installed is 495 MVA, and the top voltage consumed by the Municipality of Varna is 418 MVA. The transmission network of 110 kV is dense and successfully fulfills its duties.

According to the development trends and the growing construction activities the existing subfeeders on the territory of the Municipality of Varna will become insufficient to cope with the growing consumption of electricity. That is why the master plan of Municipality of Varna offers the construction of new subfeeders.

The heat supply infrastructure on the territory of the **municipality of Varna** is owned by "Toplofikatsia" JSC. Compared to other cities of the country the city of Varna is not very well heat and power supplied – the central heat supply of the domestic sector in the city is only about 12 %. The centralized heat supply system is built in the residential areas of "Mladost" (1 and 2 micro-regions), "Troshevo" (partially), "Vazrajdana" (1 micro-region) and "Vladislav Varnenchik" (micro-region "Kaisieva gradina"). Additionally there are 13 schools and kindergartens with heat supply and 6 autonomous economic subjects. The number of the buildings with heat supply is 453, and the number of the subscribers connected is 426. The length of the heat supply network is 28 km.

At the Technical university were constructed heat supply facilities with total capacity of 20 Gcal/h, which have 2 boilers KM-12 and 1 EKM-12 (it supplies heat for the buildings of the university and its hostels and also for the building of Multi-profile hospital for active treatment "Saint Marina"; Heat supply facility "Pochivka" with 14.4 Gcal/h capacity (it uses mazut as fuel and has 2 boilers KM-12 (7.5 MW) and supplies heat to the school complexes, the TV station and 3 residential buildings in the region); Heat supply facility at the Palace of culture and sports with boiler capacity of 6 Gcal/h (supplies heat also to few residential

buildings located nearby); Heat supply facility at the “Nikola Vaptsarov” Naval Academy (equipped with 2 boilers KM 12 and 1 PKM-1.6, which is very damaged) and also about 250 boiler installations more with small and medium capacity which supply heat to cultural and domestic buildings.

The industry of the city of Varna receives heat in an individual manner. The two industrial zones of Varna – Western and Southern have 30 boiler installations with total heat capacity of 250 Gcal/h. The main heat sources are high pressure steam boilers with mazut fuel. The largest heat sources are located in "Domestic building engineering" SJSC - 36 Gcal/h, Odessos ship repair yard S.A - 31.12 Gcal/h, “Galatex” EDV – 21.6 Gcal/h, "Varna brewery" SJSC - 18.35 Gcal/h, "ELCOM" SJSC - 14.4 Gcal/h, "Toplostroy" SJSC - 14.4 Gcal/h, "Yavor" SJSC - 12.6 Gcal/h.

In the **municipality of Devnya** the “Electrical and thermo energy, gas fuels and water supply” sector is represented by TPP “Deven” JSC which produces thermoenergy needed for the enterprises of the Deven industrial complex and also electrical energy for the national energy system.

In the municipality of Beloslav, at the village of Ezerovo at the North shore of the Lake of Varna is situated “TPP Varna” SJSC. This facility is 100 % owned by CEZ Group and provides 600 working places. It operates mainly in the production of electricity and heat energy, transmission and distribution of heat energy. It works with imported high-calorie anthracite coal which is delivered through an own port. It has 3 ship spaces: 2 of them have a bearing capacity up to 12 thousand tons, and the third has a bearing capacity of 55 thousand tons.

The facility is of condensation type, with total capacity installed of 1260 MW – 6 blocks of 210 MW each. This voltage provides to the company the leading role among the electricity producers from coal in the region – it occupies the second place in Bulgaria and the Balkan Peninsula.

In terms of electricity **Bourgas district** falls into the range of the electro-transmission region of Bourgas.

The main electricity source for the district is the national electrical system which on the territory of Bourgas district is handled by the “National electrical company” SJSC, the “Networks of high voltage” enterprise - Bourgas electro-transmission region, and on the territory in questions is also located one of the main hubs of the transmission system - “Bourgas” subfeeder which has a voltage transmission capacity of 220/110 kV. The electrical distribution activity is mainly concentrated on the transmission and the distribution of electricity with 220V voltage and is handled by “Electrical distribution” SJSC Stara Zagora, branch Bourgas.

Through the territory of the **district of Bourgas** passes the South branch of the national gas-transmitting system of Bulgaria and its Bourgas and Develt village branches. The highway gas-pipe has a diameter of 700 mm. Through the territory of the district also passes the transit gas-pipe from Russia towards Turkey.

There are no water-power plants on the territory of the district.

In the **municipality of Bourgas** on the territory of „Lukoil Neftochym Bourgas” JSC operates one industrial thermo-power plant - TPP “Lukoil” which has a local purpose. According to the financial report of „Lukoil Neftochym Bourgas” JSC for 2005 was registered electricity and thermo power income from sales to private clients for 7 159 thousand leva and for 2004 - for 6 047 thousand leva.

**City of Bourgas** is the only settlement in the district Bourgas which has a centralized heat system which is handled by “Toplofikatsia” SJSC, Bourgas. The heat source of the company has a 372 KW capacity and the thermo-transmission network has a total length of 118 km. The heat is distributed to the consumer installations through 877 subscriber subfeeders.

**Constatations and summaries for the energy sector development of the regions of Bays of Varna and Bourgas:**

1. **Due to the presence of limited public data on the electricity, gas and water sub-sector and for the different municipalities the conclusions are not valid for constatations and assessment.**
2. **On the territory of the municipalities examined in Varna district are located the largest production TPPs of the Balkan peninsula – “TPP Varna” SJSC (municipality of Beloslav), „TPP Deven” – mostly with local purpose (municipality of Devnya), „Toplofikatsia Varna” SJSC. Starts the exploitation of natural gas from the Black sea continental shelf by “Petreko Bulgaria”Ltd. Fastly developing gasification of the city of Varna is under completion by "Varnagas" JSC and и "Primagas" JSC.**
3. **On the territory of the municipalities located in the region of the Bay of Bourgas there is no production of electricity. „Lukoil Neftochym Bourgas” JSC possesses one industrial electrical facility with local purposes. City of Bourgas is thermo-supplied.**
4. **According to the data available for the municipality of Varna it is obvious that there is an increase in the production in the electricity, gas and water sub-sector of over 3 times for the period 2000-2006 and the number of employed persons for the same period increased 1,9 times.**

## **5. Tourism – basic branch of the economy of the municipalities of the Bays of Varna and Burgas regions**

**Within the recent years the tourism is fastest developing sector of the regions around the Bays of Varna and Bourgas, the most developed of all being the maritime tourism.** Due to the strong competition of the physical basis and touroperating structures the data for the districts of Bourgas and Varna can be considered representative for the sectoral development in the coastal municipalities.

After 2002 the highest increase in construction and the development of tourist business is reported in the resorts located near the cities of Bourgas/Nessebar and Varna - „Sunny beach”, „Golden sands” и „Saint Constantine and Elena”. It

should be noted that the tourist business is in its major part private – both the ownership of the basis and its management.

**Bourgas District** has a leading role in the country in terms of bed numbers, employment and overnight income. For the period 1998-2006 the number of beds in the district increased 2, 67 times, and the overnights income increased 9, 75 times (table 22). For the same period the number of beds in **district Varna** increased 1, 56 times and the overnights income –3, 53 times. After a period of a constant decrease in bed numbers in Bourgas district during the years till 2001, in 2002 and 2003 their number significantly increased and afterwards their annual increase constantly stayed at 26-28 %. For Varna district during the same period, after a decrease in 2001, years of a percentage growth followed. In 2006 a 15, 42 % growth was reported.

**The bed usability percentage** in Bourgas district is higher than the one of Varna district (table 22). For 2003 the usability of beds for Bourgas district showed a peak value for the whole period - 52, 4 %, afterwards during the following years it decreased. The usability of beds in **Varna district** during the same period fluctuated between 49, 8 % in 2003, kept a relative stability in 2004-2005 of 47,5% and 47,2 % and decreased to 42,0 % in 2006. **For both districts the trend is to decrease the creation/offer of new beds rate and to decrease the lodgings, camp sites, hostels and hotels usability.**

In terms of the **income** the trend of their growth is clearly represented. Bourgas district has a higher average growth rate of the overnight income for the period 1999-2006 (56,19%) at 22,48 % for Varna district (table 22). However the one bed income in Varna district is 2 387 leva, and in Bourgas it is 1 943 leva (2006).

**A key obstacle in the tourist development in both districts is the fastly growing building which in some cases violates the related legislation and fails to consider the sanitary-environmental norms; it is realized without the construction of new purification facilities or the expansion of the old ones and without resolving the water-supply and drainage problems and without the construction of the relevant road- and communication infrastructure.**

In terms of tourist development the leading role in Varna district has **most of all the coastal area situated on the North from Varna with "Golden sands" resort, "Saint Constantine and Elena" resort, "Riviera" vacation resort, „Sunny day"**. Within this region is already present the excessive overloading of the coastal area with physical tourist and entertainment facilities. On the South of Varna are located the less developed resort areas of "Varna-South" and "Chernomorets" with future exploitation potential. Here lays the question about the priority construction of the relevant road, water-supply and contemporary communication infrastructure.

According to NSI official data all indicators which characterize the tourist business in the **municipality of Varna** show growth trends. According to NSI data for the period 2002-2005 the lodgings, camp sites, hostels and hotels on the municipal territory increased almost twice, from 159 in 2002 to 301 in 2005 (table 24). The number of beds in lodgings, camp sites, hostels and hotels for the same period increased with 18 148 which represents 48,62 % (table 27), the overnights made increased with 66,93 % (table 26) at 82,26% growth of the overnigheters in

lodgings, camp sites, hostels and hotels (table 25). The bed usability in municipal lodgings, camp sites, hostels and hotels for 24 hours also shows growth trend (table 28). After 2003 the annual growth rate of the overnighters decreased (table 26).

According to the data available for the period 2004-2006 (table 23) in the resorts located on the North of Varna - „**Golden sands**” and „**Saint Constantine and Elena**” as a result of the new construction the number of beds in „Golden sands” increased with 6 665, while the number of beds in „Saint Constantine and Elena” stayed relatively the same. The percentage of bed usability in „Golden sands” shows a decrease trend in a higher degree than the one of „Saint Constantine and Elena”. The results of the development of both resorts show that a trend of decrease in new construction activities, bed usability and activity income is being formed.

In the **municipality of Devnya** there are no conditions for resort tourism development but there is a certain opportunity for development of rural tourism.

In the **municipality of Beloslav** there are no suitable natural and climate conditions for tourist development.

The insufficiently mastered tourist resources in the coastal regions of Varna are the mineral springs which allow the combination of climate and balneological cure and the extension of the tourist season and also the numerous valueable sites – natural and cultural heritage monuments. The natural and anthropogenic facts and resources also create additional development options for a year-round polyvalent tourist product – balneological, cultural, congress, environmental and rural.

The physical and technical basis of the tourism in the **Bay of Bourgas** is concentrated in the Black sea municipalities: Bourgas, Nessebar, Pomorie, Sozopol.

Within the municipalities examined the maritime recreational tourism is developed – coastal areas, favourable climate, sea water; balneotherapy - Bourgas Mineral baths; climatotherapy – through the whole year beside the Black sea, „Rosenets” park, Bourgas mineral baths; mud cure – Pomorie; ornitological tourism – Environmental center “Poda”, Bird observation shelter “Atanasovsko ezero”, Environmental center “Ropotamo”; ecotourism - Bourgas wet areas, “Rosenets” park, eco-route city of Sredets- Yazovira - Bojhura; East Balkan.

The location of the **city of Bourgas** determines the development of the territory as a main distributor of the tourist turnover in the district in North and South directions towards the surrounding resorts. The largest tourist service supply is outside the municipality of Bourgas. Within the municipality are located the following resort sites – Sarafovo, Kraimorie, Otmanli – “Rosenets” park and Bourgas mineral baths - village of Vetren.

According to the statistical data for the period 2002-2005 on the territory of the **municipality of Bourgas** the number of lodgings, camp sites, hostels and hotels increased with 7 (table 24), and the number of beds stayed the same (table 27). The overnights made at lodgings, camp sites, hostels and hotels increased with 13, 13% (table 26), and the number of overnighters stayed the same (table 25). The bed

usability for 24 hours in lodgings, camp sites, hostels and hotels decreased (table 28).

The **municipality of Nessebar** coast possesses the typical for all Black sea region conditions and resources and also has specific features that give it an exotic character and an additional attractiveness – spacious beaches, forest parks, and protected areas. Besides the natural resources the municipality possesses a very rich cultural-historical heritage, concentrated in “Old Nessebar”. The tourism represents over 90 % of the municipal income and provides over 60 % of the employment of the population. The bed basis is concentrated in Sunny beach resort, city of Nessebar, city of Obzor, city of Saint Vlas, Ravda and “Elenite” resort.

The advantage of the municipality of Nessebar in terms of tourist development rates compared to other municipalities of the Bay is significant. For the period 2002-2005 in the municipality of Nessebar 109 new lodgings, camp sites, hostels and hotels were built (table 24). The number of the overnights and the overnights made in lodgings, camp sites, hostels and hotels in 2006 was respectively 503 348 (table 25) and 4 191 695 (table 26), which represents a huge increase of 4,19 and 3,72 times compared to 2002. The number of beds for the same period (table 27) increased with 40 493 beds or over three times compared to the same year 2002. The bed usability for 24 hours also increased over three times (table 28).

„**Sunny beach**” resort offers over the half of the whole bed basis for the municipality of Nessebar. On its territory a fastly growing construction develops which expands towards the nearby forest parks and recreational forests deteriorating them from extinction. A heavy pollution with solid domestic and construction waste was detected in the regions nearby the intense construction works. The new construction activities led to an increase in bed numbers with 43, 82 % in 2005 compared to 2004. However in 2006 the number of beds decreased (table 23). This is the natural result of the decrease in bed usability and with fewer beds and usability the same income was realized in the resort.

“**Elenite**” resort possesses 220 two- and three-floor comfortable villas located at the sea shore. The tourist service is of “all inclusive” type.

**Saint Vlas** offers the unique combination of mountain and maritime climate. Within the years 2004-2006 the number of beds increased almost 3,3 times and at the end of 2006 it reached 2 171. A marina was also built.

The lodgings, camp sites, hostels and hotels in **Obzor** are concentrated in comfortable private lodgings.

The statistical data on the tourists stayed and the overnights made during the period 2002-2005 **in the municipality of Pomorie** show that their number in 2005 grew with 4 724 (table 25), and respectively with 22 909 compared to 2002 (table 26). This represents in the first case - 184, 17 % (the trend for increasing of annual rates compared to the other municipalities in the region of Bay of Bourgas continues), and in the second with 78, 07 % compared to 2002. For the same period the number of beds increased with 299 or 61, 65 % (table 27) while the bed usability for 24 hours for the same period increased with 48 225 or with 60, 49%.

Tourism is the main component of the economy of the **municipality of Sozopol**. The contribution of the tourism (hotels and restaurants) to the municipal economy is 34, 4% of the income and this sector provides work to over 30, 6% of the municipal population.

The main tourist centers on the territory of the municipality of Sozopol are the city of Sozopol and the village of Chernomorets. The typical lodgings, camp sites, hostels and hotels there are mainly the private lodgings and hotels. Near Sozopol is located the “Dunes” summer-houses zone with total capacity of 1 140 beds.

The lodgings, camp sites, hostels and hotels for the period 2002-2005 increased with 14 (table 24). In 2005 the overnighters there were 52 824 (19 219 more than 2002 or 57.19%) – table 25, and the overnights made were 467,775 or 56, 13 % more than 2002 (table 26). For the period 2002-2005 the beds in the lodgings, camp sites, hostels and hotels were almost doubled (table 27), and in the meantime the bed usability for 24 hours increased with only 33,84 % (table 28). It is obvious that the bed usability is not very high.

**The Municipality of Sredets** does not develop tourism actively.

**Constatations and summaries for the development of the tourist sector in the municipalities of the Bays of Varna and Bourgas:**

- 1. Tourism is the fastest developing sector within the past few years for the regions around the Bays of Varna and Bourgas and mostly developed is the maritime tourism.**
- 2. The big cities as Varna and Bourgas develop tourism in the peri-urban areas and are often a destination for one-day tourist visits with cultural-historical or study goals. The tourism forms the major part of the income for the municipalities of Nessebar, Pomorie and Sozopol. The sector is not represented in the municipalities of Beloslav, Devnya and Sredets.**
- 3. Following the growth in both regions the usability of lodgings, camp sites, hostels and hotels till 2003, during the next years starts a trend for decrease in the creation/offer of new beds rate and a decrease in the employment of the lodgings, camp sites, hostels and hotels.**
- 4. The fastly growing resort building, which in some cases violates the related legislation and fails to consider the sanitary-environmental norms; it is realized without the construction of new purification facilities and the expansion of the old ones and without resolving the water-supply and drainage questions and the construction of the relevant road- and communication infrastructure. Significant investments are needed in order to prevent the exodus of tourists and the decrease of the income of the population, the municipalities and the state.**
- 5. The conclusions of the present study on the tourist development were made based on the official statistical data. There is a significant difference in the data on the indicators measuring the development of the tourist sector, reported by the national statistics**

**and the municipal administrations. The latter is an obstacle to the elaboration of a precise analysis and to the undertaking of the adequate decisions by the competent managing authorities.**

- 6. The extensive development potential of the tourism in the bay regions is already limited. There is a need for a policy directed towards quality development and maximization of the tourist product. The revealings of the negative results of the excessive building of the coastal territory and the need of significant investments in public works and recovery of the natural resources from the damages done are forthcoming.**

## **6. Port activities and navigation in the areas of the Bays of Varna and Bourgas**

**In the regions of the Bays of Varna and Bourgas are located the largest maritime ports of Bulgaria (with exception to the port of Balchic). In Varna and Bourgas are situated the headquarters of the “Port administration - Varna” directorate and „Port administration - Bourgas” – units of the Executive agency „Port administration”. Their main goal is to control the ports and the port activities, with the aim of guaranteeing the safety, exploitation fitness and security and to monitor the implementation of the programmes for maintainance and development of the public transport ports and the status of the public state property.**

**For the period 2001-2006 according to Executive agency „Port administration” data through the maritime ports (table 29) passed the following cargo turnovers in tons: 20 203 476 tons (2001), 20 411 458 tons (2002 ), 21 366 091 tons (2003 ), 23 508 581 tons (2004), 25 036 176 tons (2005 ), 27 741 590 tons (2006). The growth compared to previous year in % is: 1, 03 % (2002/2001), 4, 68% (2003/2002), 10, 03% (2004/2003), 6, 50 % (2005/2004) and 10, 81 % (2006/2005). In 2006 compared to 2003 37, 31 % more cargo was processed. The largest increase is the one of the cargo processed with containers (134, 98 %), liquid (51, 14 %) and general cargo (28, 67 %). Only the Ro-Ro cargo decrease with 10,05 %. Within the structure of the cargo the largest relative share have the broached and bulk cargo which represent between 78 and 83 % of the cargo transported during the different years.**

**According to the data on the creation of value added by the touroperators (table 30) and the share of each district is obvious that Varna district companies create about twice more value added calculated on basic prices than the ones of Bourgas district, respectively: 26,93 % and 13,61 % for 2004, 24,74% and 10,01 % for 2005 and 21,25 % and 12,27 % for 2006. As a result of the dynamics the difference between the two districts decreases.**

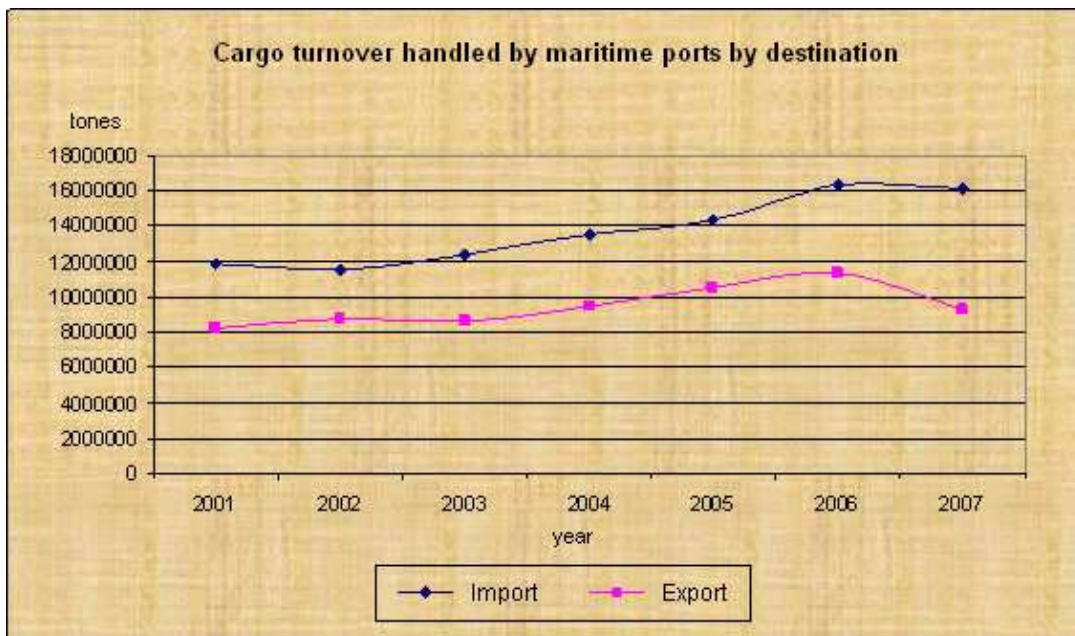
**In 2006 compared to 1998 were transported 3 584 thousand tons less (21,79 %) and was accomplished work for 4 654 mlns t.km or 6,82 % less (table 31). After 2000 the cargo transported decreases each year which constitutes a constast trend of decrease in the volume of transported cargo by the maritime**



transport. The same trend is observed in terms of works accomplished in millions of t.km after year 2000.

**The indicators for passengers transported** are insignificant - 5-6 thousand persons annually (2006-2005) **and for works done** - 0,1 millions of p.km for 2005 and 2006.

**According to Executive agency „Port administration” data the cargo turnover by years and directions – import/export, indicated in the following diagram** (table 32) increases. Through the period 2001-2006 prevails the import cargo (unloaded) in maritime ports which represents between 56,89 % (2002) and 59,44 % (2003) of the total cargo flow in the maritime ports. In 2006 was loaded and unshipped almost the same volume more cargo from import and export – 36,25% more unshipped and 36,26 % more loaded compared to 2001.



Source: Executive agency "Port administration"

**Within the region of the Bays of Varna and the lake of Varna the nationally significant ports are:** Varna-East, Varna-West, TPP Varna, Petrol, Lesport and Ferry complex - Varna. All kinds of cargo is being handled: liquid, bulk, countable including containerized and Ro-Ro; the main techniques for combined transportation are being successfully implemented: by containers, Ro-Ro and railway ferry transportations; they dispose of free admission capacity; they are perfectly linked to the national railway network and are well connected to the national road network. They dispose of effective communicational means and qualified labor resources. Through the port are being handled the main quantities of cement, clinker, fertilizers, calcinated soda and cereals. The "Oiltanking Bulgaria" terminal provides the handling of liquid chemical cargo.

**Port of Varna** has a key position and is the main logistic and distribution link center for the Common European transport corridors № 7, № 8, № 9 and TRASEKA. Port of Varna is a basic hub of the logistical chain of VIII Paneuropean transport corridor which goes from Italy through Albania and FYR Macedonia to Middle Asia.

**The port of Varna** has: 34 quay places; the total quay length is 5 765 m, the indoor storage space is 77400 m<sup>2</sup> and the open storage space is 240100 m<sup>2</sup>; it has 10 terminals. The cargo turnover of the port of Varna compared to year 2000 increased with 33% (2000 - 5 560 000 tons, 2004 -7 395 000 tons), and the largest growth has the processed container cargo – over twice (2000 - 37 255 TEU, 2004 - 78599 TEU). Varna – East is a port which deals with handling of general and bulk cargo, containers, passengers; its operator is „Port of Varna Varna” SJSC. Varna - West is a port which deals with handling of general, liquid, bulk, Ro-Ro cargo and containers; its operator is „Port of Varna Varna” SJSC.

**TPP Varna** is specialized port in processing of coal for "TPP Varna".

**Petrol** is a specialized port in processing of oil products – its operators are „Port of Varna Varna” SJSC and „Naftex Petrol” S Ltd.

**Lesport** is a port for handling of general, bulk, Ro-Ro, vegetation liquid cargo and 20 foot empty containers of/to stiff – its operator is „Port of Lesport” JSC.

**Ferry complex - Varna** deals with handling of ships, ferries carrying wagons, Ro-Ro cargo and passengers.

**The public transport ports of regional importance are:** „Odessos PBM” JSC Varna (for handling of general and bulk cargo and containers), PChMV - Varna (for general cargo, containers, petrol liquid and bulk cargo). Ports with special purposes are: MTB of „STF” JSC (for settlement and repair and recovery works of dradging, hoisting crane, towing and diving equipment), Bulyard port (ship construction and ship repair activities), MTG – „Dolphin” JSC (ship repair), Quay of „PChMV” JSC (environmental care, cleaning the sea of petrol and other types of pollution, placement of protection enclosures, receiving and treating liquid and solid waste), Port of ship repair yard „Odessos” JSC (construction and repair of floating equipment), Marianopol (ship construction and ship repair activities and cutting ships and other sailing vessels to scrap), port of „Terem-ship repair yard Fleet arsenal” (ship repair).

**The marinas** are the port of “Golden sands” resort and Hydrodynamics (South coast of the lake of Varna).

Within the region of the Bay of Varna and the lake of Varna **there are no fish ports.**

The ports of **national significance for the region of the Bay of Bourgas** are: port Bourgas terminal East and terminal West, port of Nessebar, port of Pomorie and port of Sozopol.

**The port of Bourgas** has the largest cargo turnover in Bulgaria. The port district "Bourgas" handles 60% of the maritime cargo. The reason for its greatest economic importance for the country is the oil port of "Rosenets", which handles 33% of the maritime cargo turnover and also the scope of the Bay of Bourgas. The

major part of the cargo turnover is undiversified, including iron-stone and scrap intended for Kremikovtsi. Terminal East is used to process of general, bulk, liquid and Ro-Ro cargo and containers – its operator is „Port of Bourgas” JSC (table...). Terminal West is used to process of general, bulk, liquid and Ro-Ro cargo and containers – its operator is „Port of Bourgas” JSC (table...).

**The ports of Nessebar, Pomorie and Sozopol** are used to handle passengers. Their operator is „Port of Bourgas” JSC. The characteristics of the ports are provided in the attachment.

**The public transport ports of regional importance are:** „Fish port – Bourgas” (handling of general and safe liquid cargo), Port “Bulgarian shipyard south quay – L” (general cargo and scrap), Port KRZ Port – Bourgas (for safe general and liquid cargo, bulk cargo with nutritive origin), Port Transstroy – Bourgas (general cargo, liquid alimentary cargo and mail).

**A specialized port** is the one of Bourgas shipyard. **Fish ports** are the ports of Black sea fishing - Bourgas and Black sea fishing Nessebar. The **marina** ports are located in Sozopol, Nessebar, Diuni and “Marina Dinevi”.

The characteristics of the ports of national significance in the regions of the Bays of Varna and Bourgas are provided in the attachment.

**The navigation** in the regions is represented by the largest Bulgarian enterprise in the field of maritime transport - Navigation Maritime Bulgare JSC Varna. According to the financial report of the company by 31.12.2006 the available fleet has 78 ships (44 for bulk cargo, 3 for general cargo, 4 for multiple purposes, 4 chemical transporters, 1 bunker, 1 for oil product transport, 1 tanker for transportation of raw petrol, 12 ships for container transportation, 2 ferries, 1 ship for coastal navigation, 1 sailing boats and 3 tugboats). The income of the company for 2006 was 400 004 thousand leva (403 709 thousand leva for 2005) and it comes from transportation of bulk cargo – 213 887 thousand leva (215 323 thousand leva for 2005), of container transportation -109 484 thousand leva (112 309 thousand leva for 2005) and of brockage and agency service - 7 887 thousand leva (8 943 thousand leva). The average number of employees for 2006 was 4 636 persons, including also 3 308 crews, and for 2005 – 4 758 persons including 3 405 crews.

**For the purposes of the entertainment activities and coastal tourism in the municipalities near Varna and Bourgas several small coastal ships and yachts are used.**

**Constatations and summaries on the development of the port activities and the navigation in the regions of the Bays of Varna and Bourgas:**

- 1. In the regions of the Bays of Varna and Bourgas are located the largest Bulgarian maritime ports of national significance: Port of Varna (Varna-East and Varna-West), TPP Varna, Petrol, Lesport and Ferry complex-Varna, Port of Bourgas (terminal East and Terminal West), ports of Nessebar, Pomorie and Sozopol.**
- 2. In Varna and Bourgas are located the headquarters of of the “Port administration - Varna” directorate and „Port administration - Bourgas” – units of the Executive agency „Port administration”.**

3. **The cargo handled in the maritime ports in 2006 compared to 2001 increases with 37,31 %. The largest increase is the one of the cargo handled with containers (134,98 %), liquid cargo (51,14 %) and general cargo (28,67 %).**
4. **After 2000 starts a permanent trend for decrease of the volume of the transported cargo and the works accomplished by the maritime transport. Compared to 1998 in 2006 were transported 3 584 thousand tons less cargo (21,79%) and the work done is 4 654 millions t.km less (6,82 % less). The indicators of transported passengers and works done on passenger transportation are insignificant: 5-6 thousand passengers transported annually and work done at 0,1 million p.km for 2005 and 2006 .**
5. **Within the period 2001-2006 in the cargo turnover structure of the maritime ports prevails the imported cargo (unshipped) which represents between 56,89% (2002) and 59,44% (2003). In 2006 the unshipped cargo represents 59,06% of the total cargo handled.**
6. **The navigation in the region is represented by the largest Bulgarian enterprise in the field of the maritime transport navigation maritime Bulgare JSC Varna and small coastal ships and yachts. Starts a trend of development of yacht-port activities.**

## **CONCLUSION**

**Within the period in question the municipalities of the region of Bay of Varna and Bay of Bourgas have been developing with fast economic rates in the context of diminishing natural and growing mechanical increase of the population.**