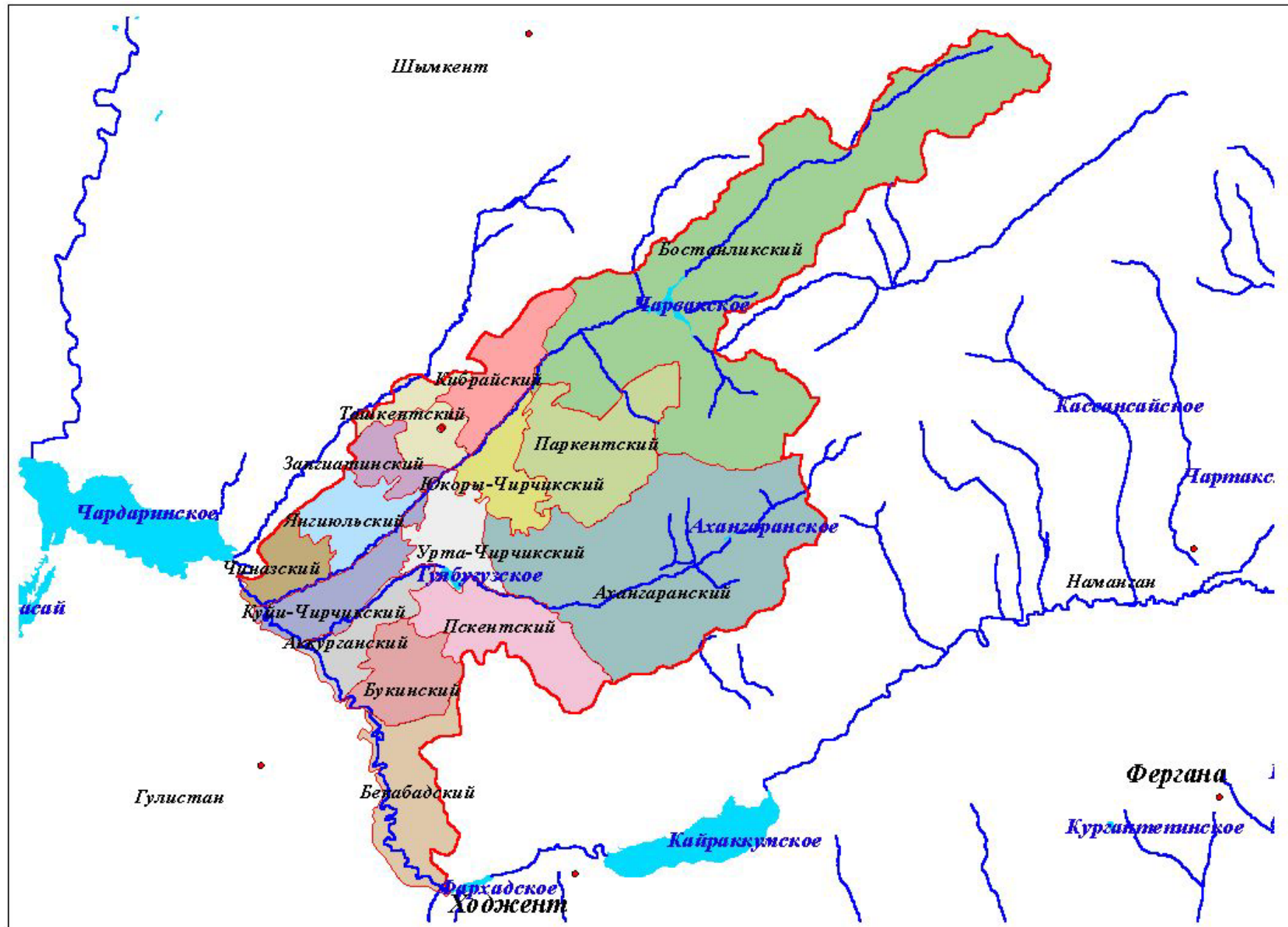




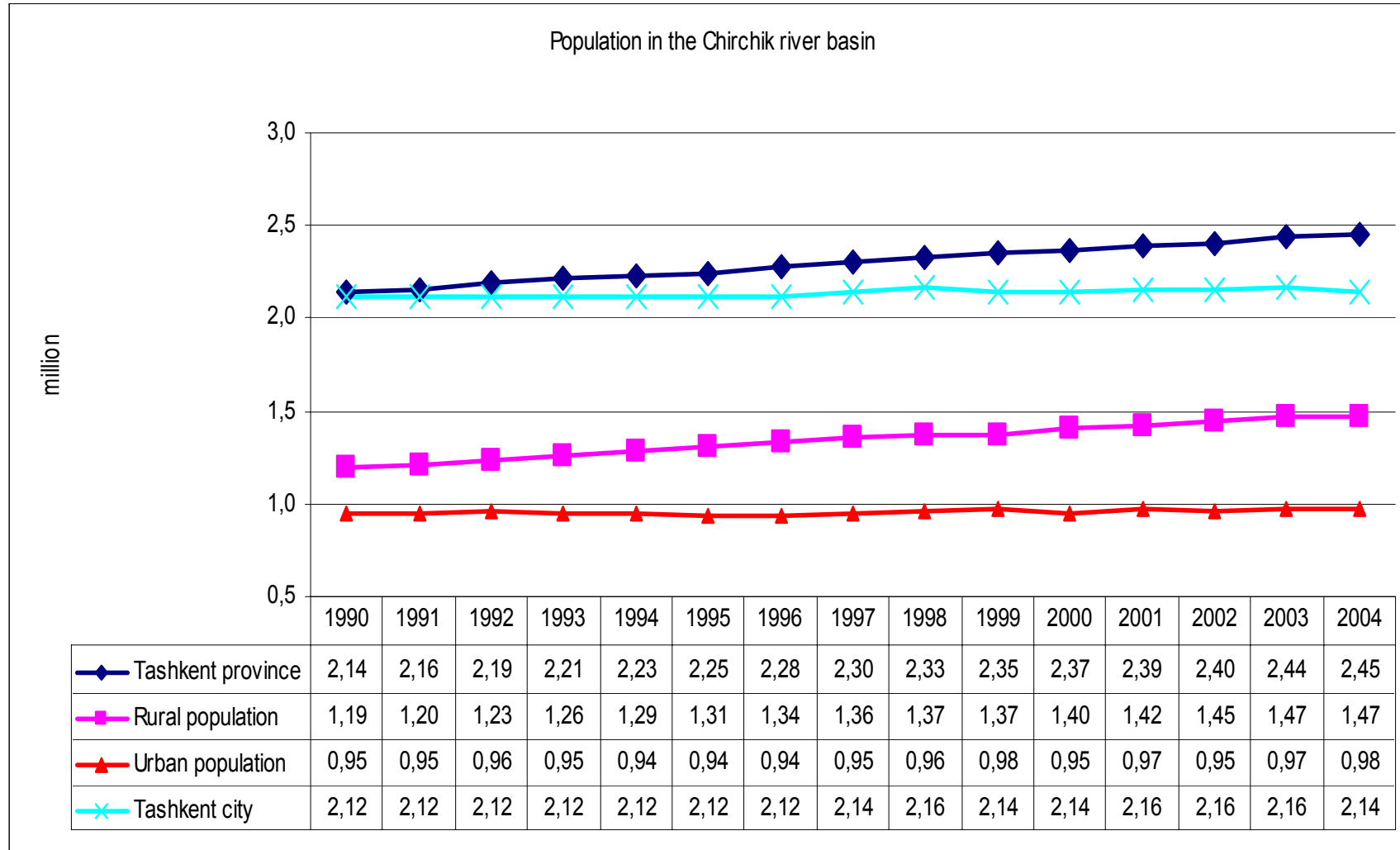
Socio-Economic Indicators for Chirchik- Akhangaran Basin

RIVERTWIN Project
Valeriy Prikhodko

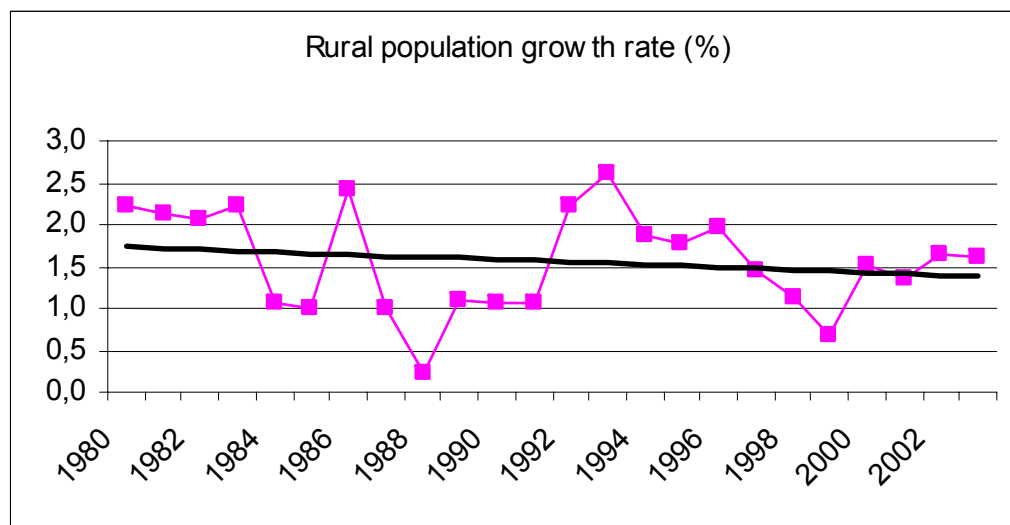
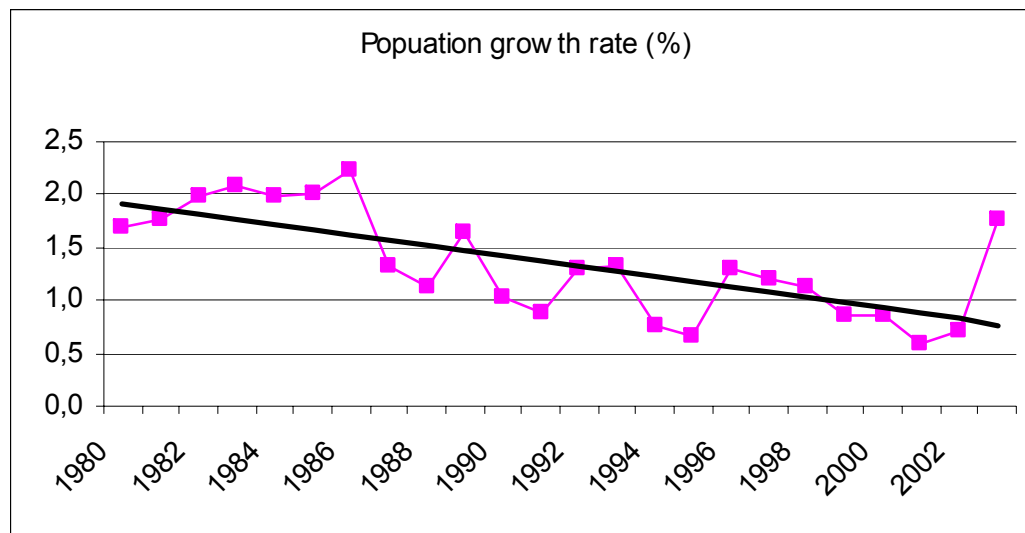
Chirchik and Akhangaran River Basin



In Tashkent province, only 10.87% of lands can be used as arable, while about 5% being as permanent residency for population.



Over 1980-1984, the mean annual population growth rate was 1.96%, later, in 1985-1989, it dropped to 1.38% and kept falling till 1994. Over 1990-1994, the growth rate was minimum of 0.91%. Since 1996 till 1999, the population growth rate increased to 1.3-1.9% per year and then again dropped to 0.6-0.9% per year at the beginning of New Millennium. In 2003, we observed abrupt increase up to 1.8%.

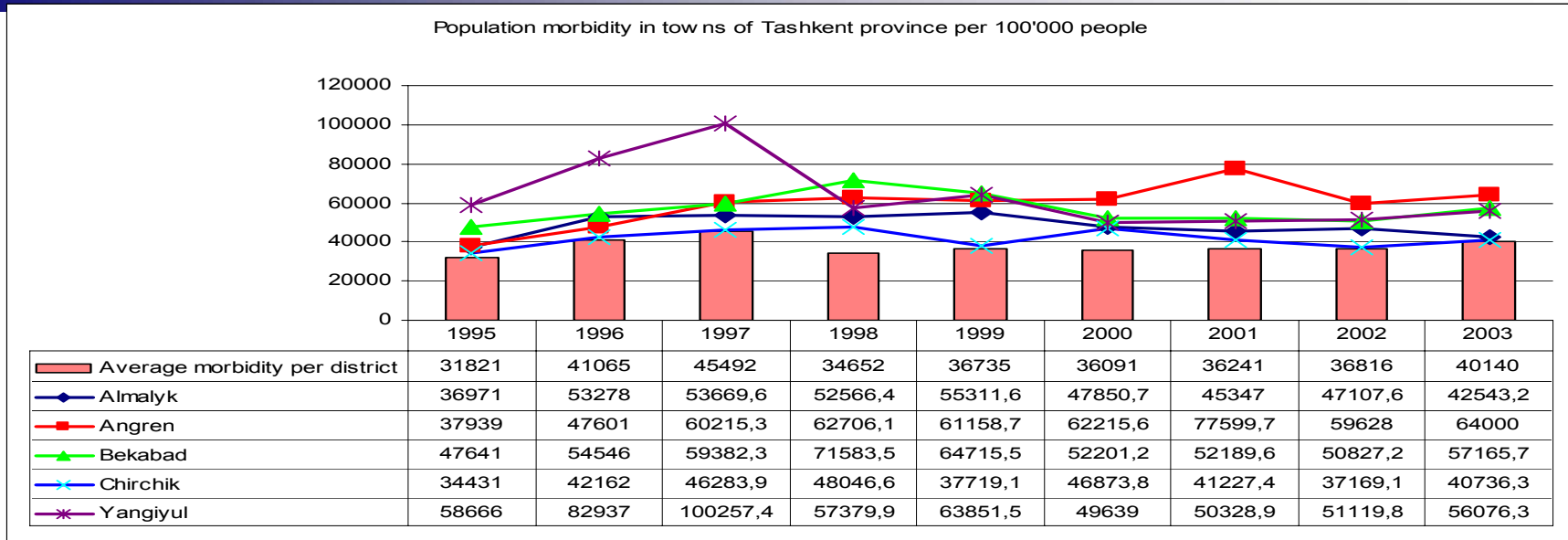


Population growth is slightly higher in rural areas than in the province as a whole.

Over the last years, the population growth rate in Tashkent city was 100.1 % per year. However, according to some estimates, the population in the city is about 3.5-4 million.

The total population in the Chirchik river basin is:

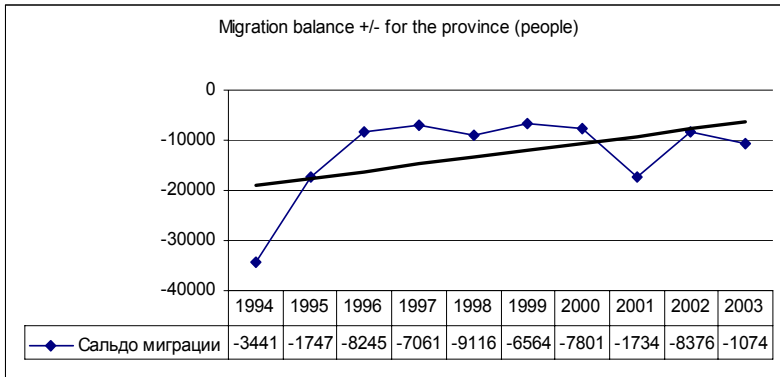
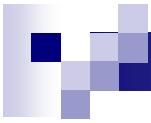
- 1. 4.59 million**
- 2. 5.95 million**



The population morbidity rate is still growing. The highest morbidity values are observed in industrial towns in the province. At present, Angren accounts for the highest morbidity rate. The average provincial figures are somewhat lower than in towns. Though they are very high in Chinaz, Bekabad and Buka districts. Every skipped day affects the economy in Tashkent province. Given that the average morbidity continuance is 5-7 days and treatment costs are \$5-10 a day, we derive total damage over 1995-2003 amounting to \$320 million.

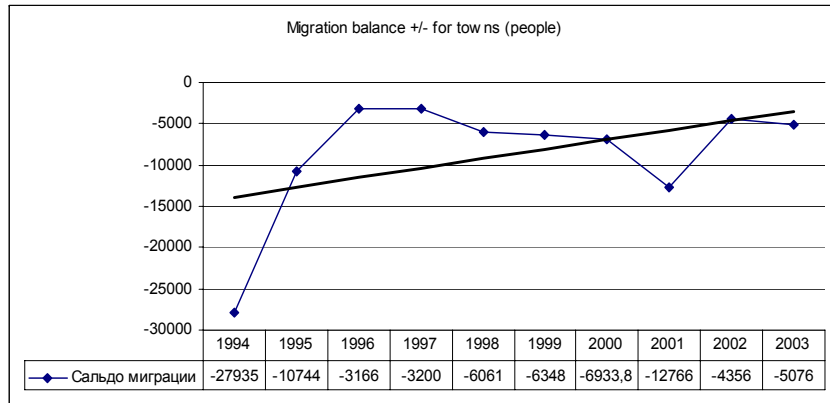
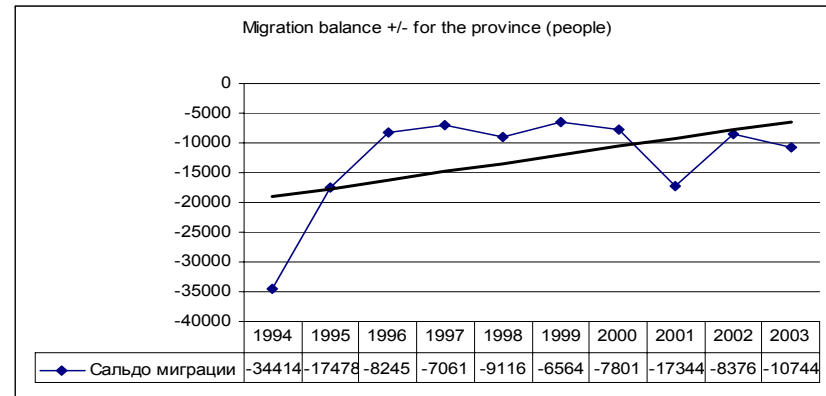
Damage from population morbidity in Tashkent province (\$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Damage from population morbidity	32.43	41.51	42.64	33.45	34.43	33.12	32.99	33.19	36.29

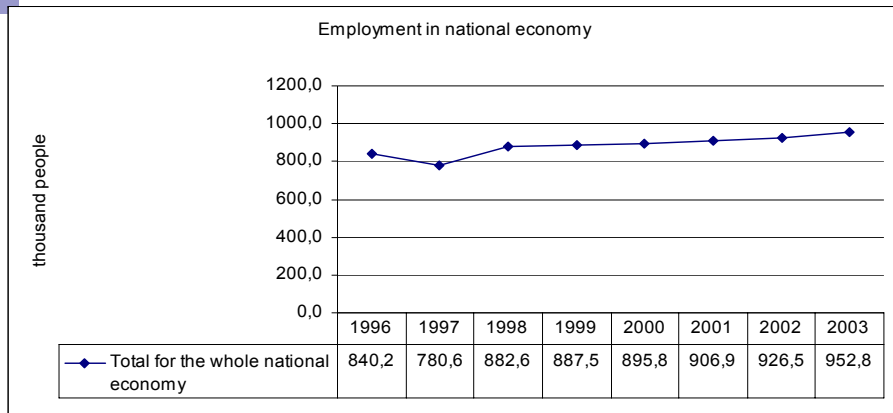


A negative balance characterizes migration flows over the last years, intensified by two population migration waves. These were basically those returning to their historic homelands. The first wave took place in the early and mid 1990s – the period of maximum migration of Russians, Germans, Jews and other nationalities. And the second migration wave in the start of the new millennium was caused by economic recession.

The migration from towns till the recent years was much higher than from rural areas. Because in the ethnic migration period, the migrants were mainly those who had a higher education and initial capital that was much higher in towns than in rural areas.

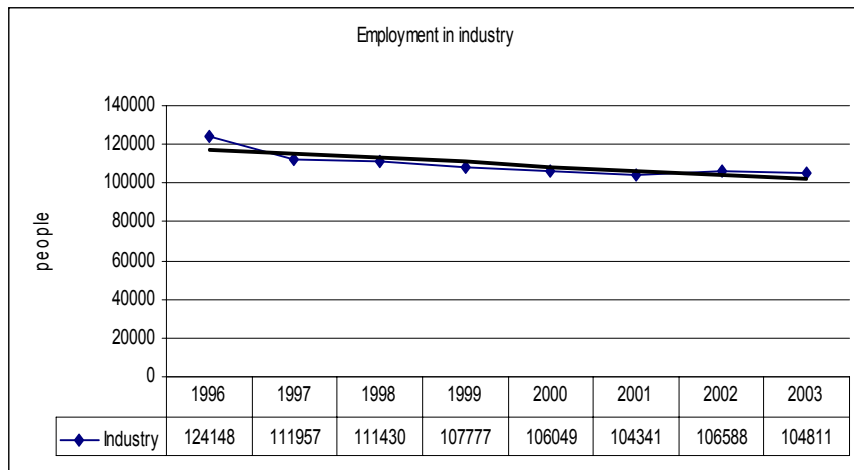
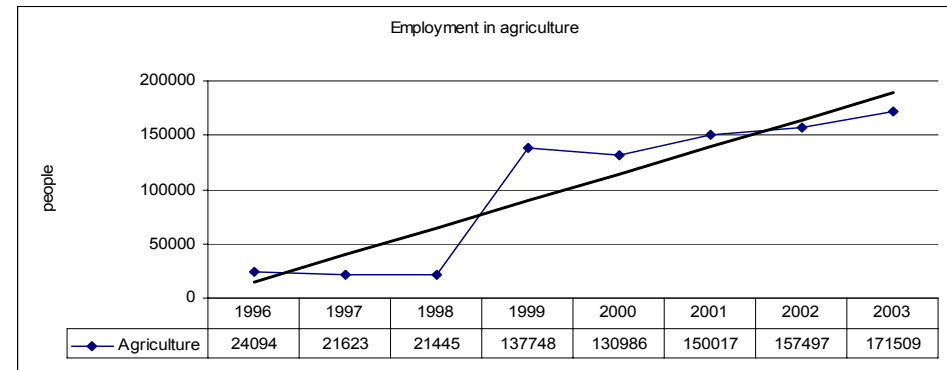


In the recent years 2002 and 2003, the tendency changed invertedly, and in 2003 the rural areas were left by more people than towns. If the trend line is extended, it may be supposed that migration flows would remain at the level of 2002-2003, with a decrease in migration from rural areas.

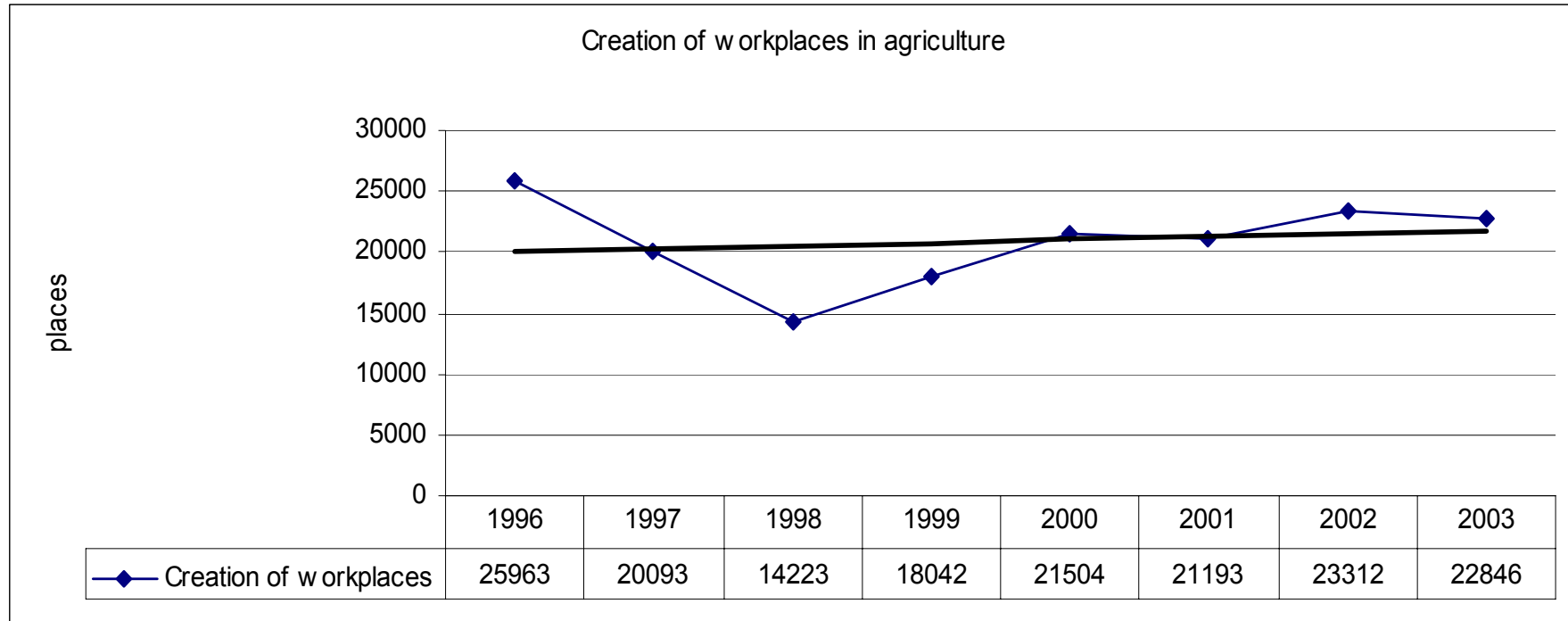


The percentage of labor resources to the population slightly changed from 47.1 to 53.2%, while, according to the official statistics, the participation of pensioners and teenagers in national economy considerably decreased, which does not take into account seasonal work in agriculture with attracting school pupils of junior and senior forms.

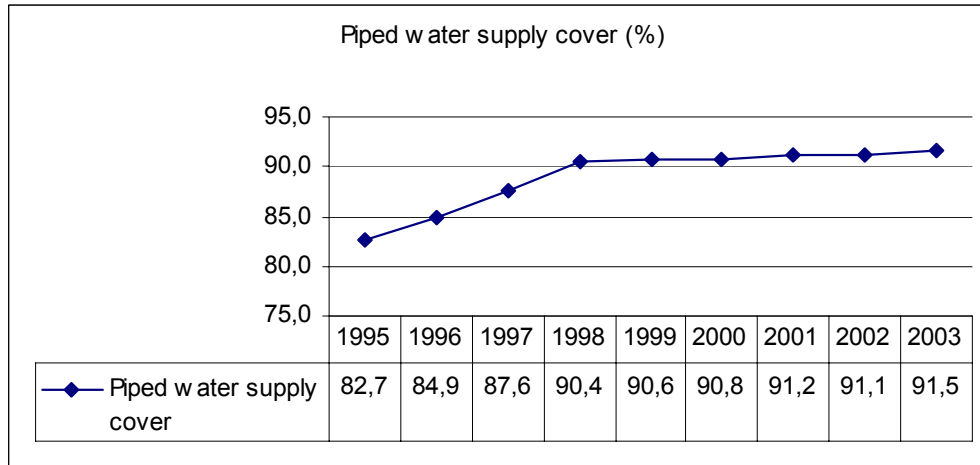
From 1998, after introducing new ownership forms into rural areas and putting relevant regulatory acts into force, the population employment in agricultural production rapidly increased. The increase occurred 6.4 times. And it may be assumed that it is necessary to add 30% of the employed in servicing sector to the employed in agricultural production. Altogether about 230'000 people are now employed in agricultural production in Tashkent province.



Though over the recent years the employment has stabilized, it does not have tendencies to increase, and has notably reduced as compared to the early and mid 1990s.

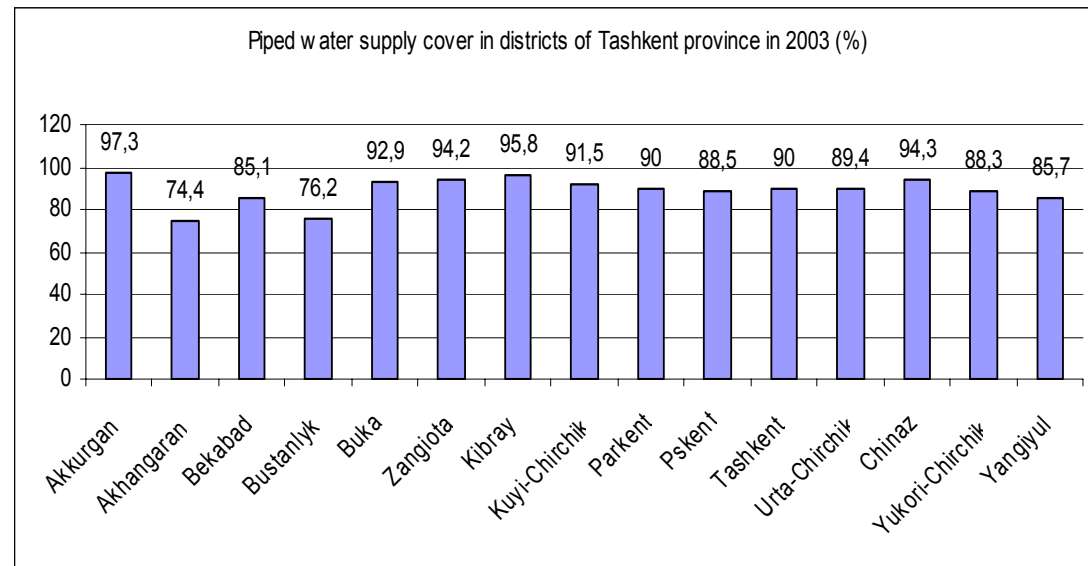


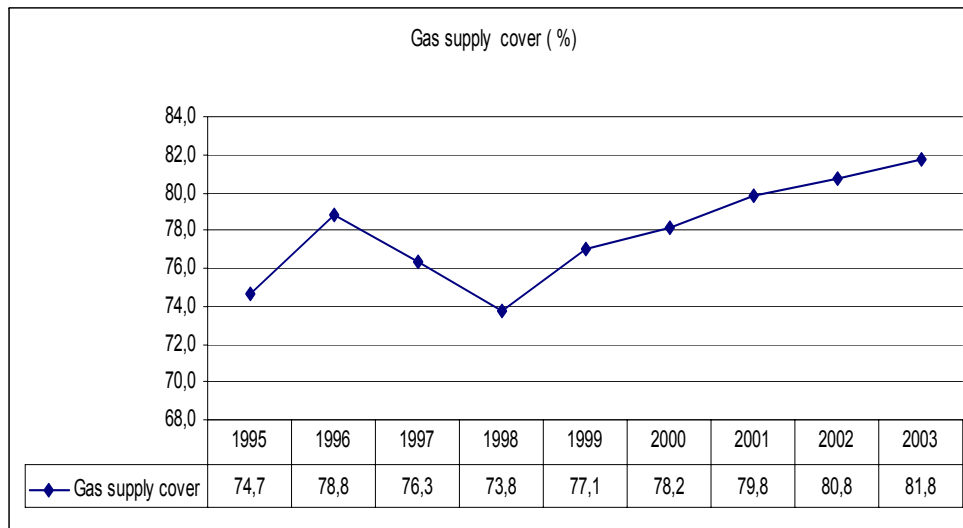
The creation of workplaces in the provinces steadily has an obvious decrease to the level of 1996, beginning of reformation in agricultural production.



In the province as a whole, water-supply lines account for 91,5 %.

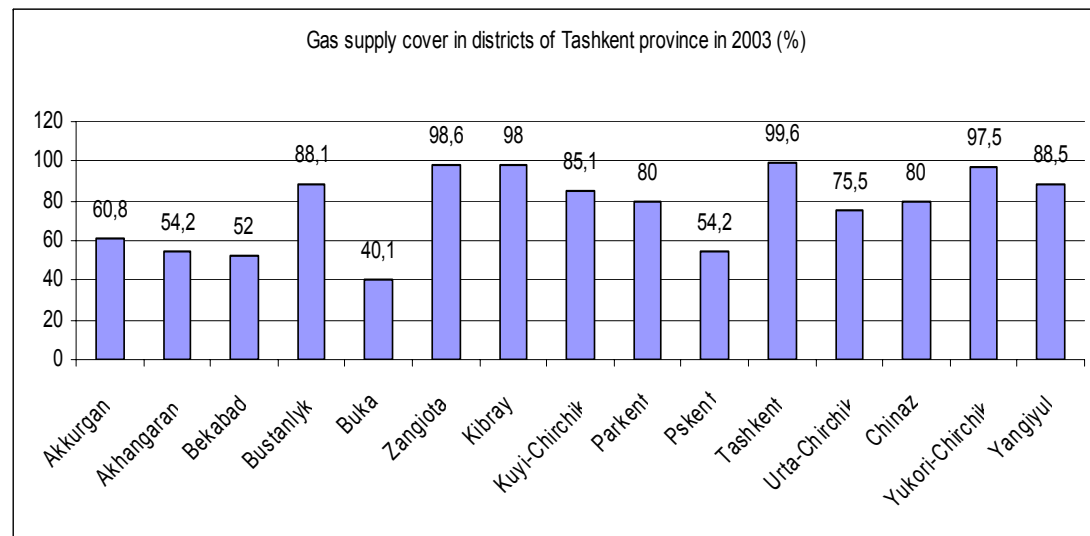
Practically in all towns (except for Angren – 93,7%), water-supply lines account for 98,4 to 99,2 %. Whereas in districts this figure is greatly variable. The average provision with water-supply lines is 88,9 %. The more complex situation is in Akhangaran and Buka districts.

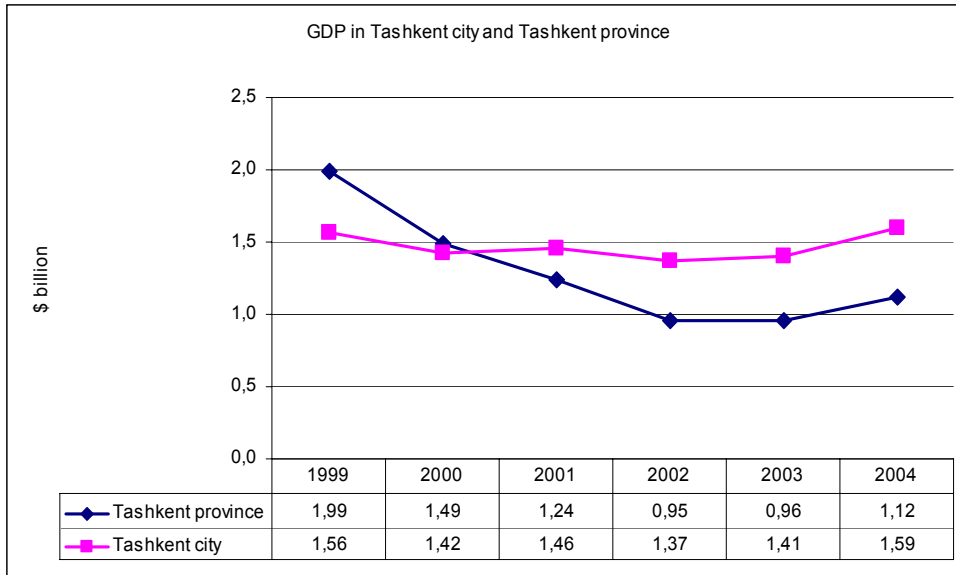
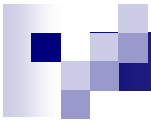




Provision with gas is slightly worse. By present, it accounts for on average 81,8 % throughout the province.

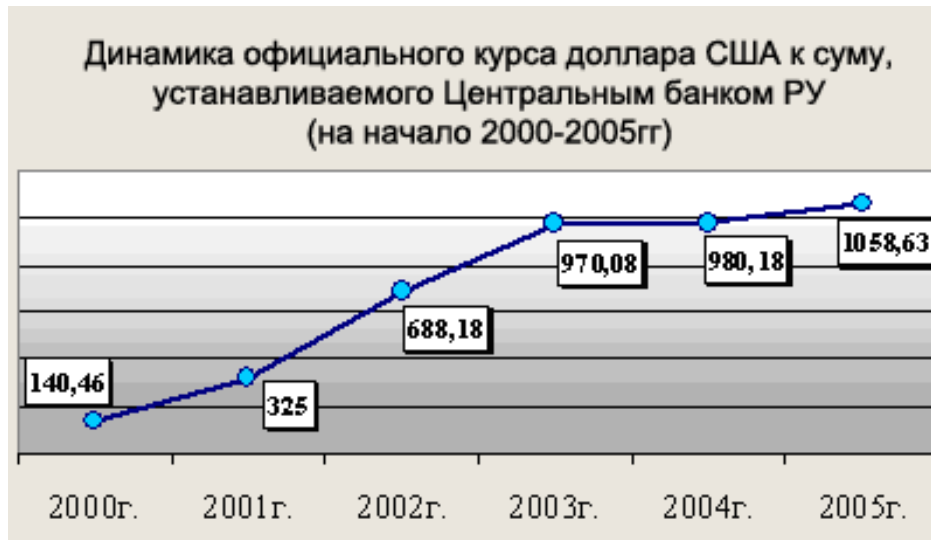
Critical situation relating to access to gas is observed in Buka district, where gas coverage is less than 50 %. Recently, gas coverage has been gradually increasing. The Government assigned to ensure 100% coverage with water-supply lines and gas by 2010.





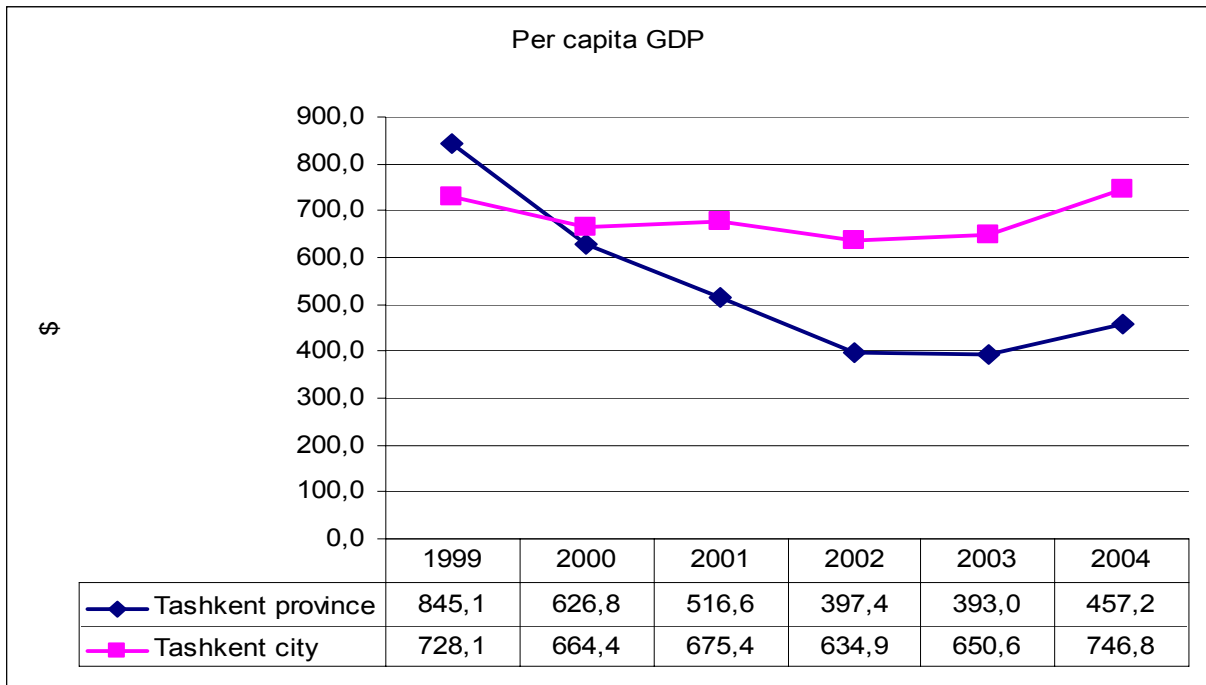
The GDP in US dollars in Tashkent province had a tendency to decrease from 1999 to 2003, and only in the past two years some growth was recorded (about 5% over the years 2003-2004); in Tashkent city the GDP started to grow from 2002 (about 4-5% in 2002-2004), while there was a 4% annual growth in national currency from 1999 to 2003, and 7-10% a year in the recent years.

In 2004, first for the years of reforms, GDP growth rate reached 7.7%, being 3.3% higher than the figure for 2003. The accelerated macroeconomic growth was practically observed in all the sectors of economy, including in industry – 109.4%, agriculture – 110%, paid services sector – 113.8%, construction – 103.6% and so on. The period of decline was caused by unsatisfactory situation in industry, troubles in agricultural production related to the transition to new management forms and weakening of the national currency, the devaluation level of which to US dollar is about 8 -10%, and inflation – 3.7-8 %.

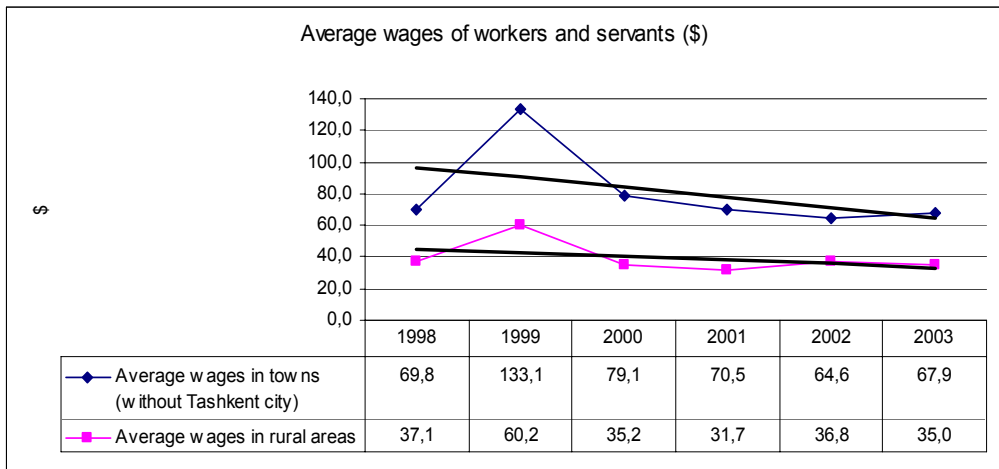


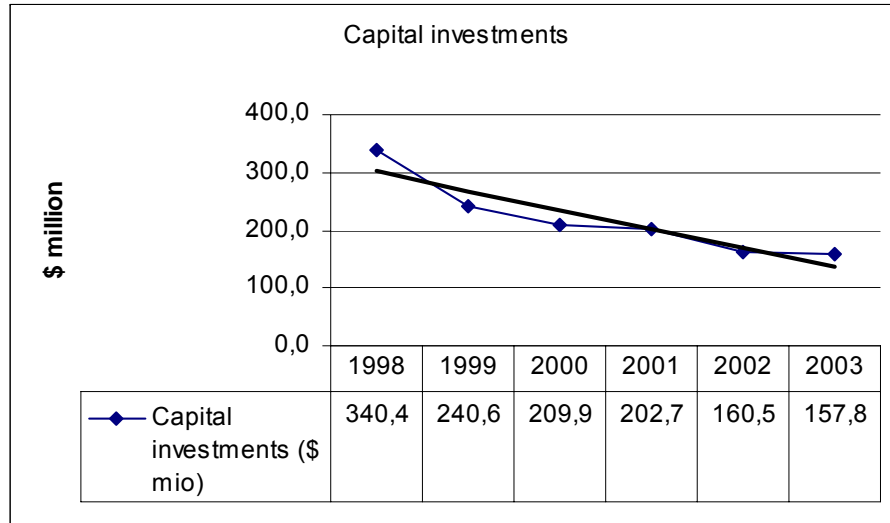
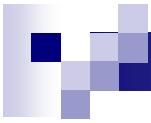
The GDP profile has significantly changed since the early 1990s, the industry and construction have lost their dominating role. Over the last five years, 33 to 40% of GDP is produced in agriculture.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GDP=100%	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Industry	27,4	28,9	36	28	35,2	37,9	38,8	36,6	28,9	43,3	21,9	23,3	24,8	25
Agriculture	29,2	27,6	28,4	34,8	32	28,9	22,2	23,7	43,7	32,9	39,7	38,6	37,8	40
Fishery	0,8	0,6	0,6	0,6	0,3	0,2	0,1	0,1	0,1	0,1	0,1	0,09	0,06	0,05
Construction	25,8	8,4	7,5	6,5	5,6	7,2	8,4	8,9	13,5	2,8	3,5	3,2	3	2,7
Transport and communications	7,4	2,5	1,9	1,1	2,9	3,3	5,2	3,2	4,2	3,3	7,3	7,1	7,1	2,5
Other	9,4	32	25,6	29	24	22,5	25,3	27,5	9,6	17,6	27,5	27,71	27,24	29,8



Wages are more than two times higher in towns than in rural areas. It is explained with that the living wage in towns is much more, and it is impossible to keep an auxiliary household. And also with the fact that wages in industry are somewhat higher than in other (non-commercial) activities.



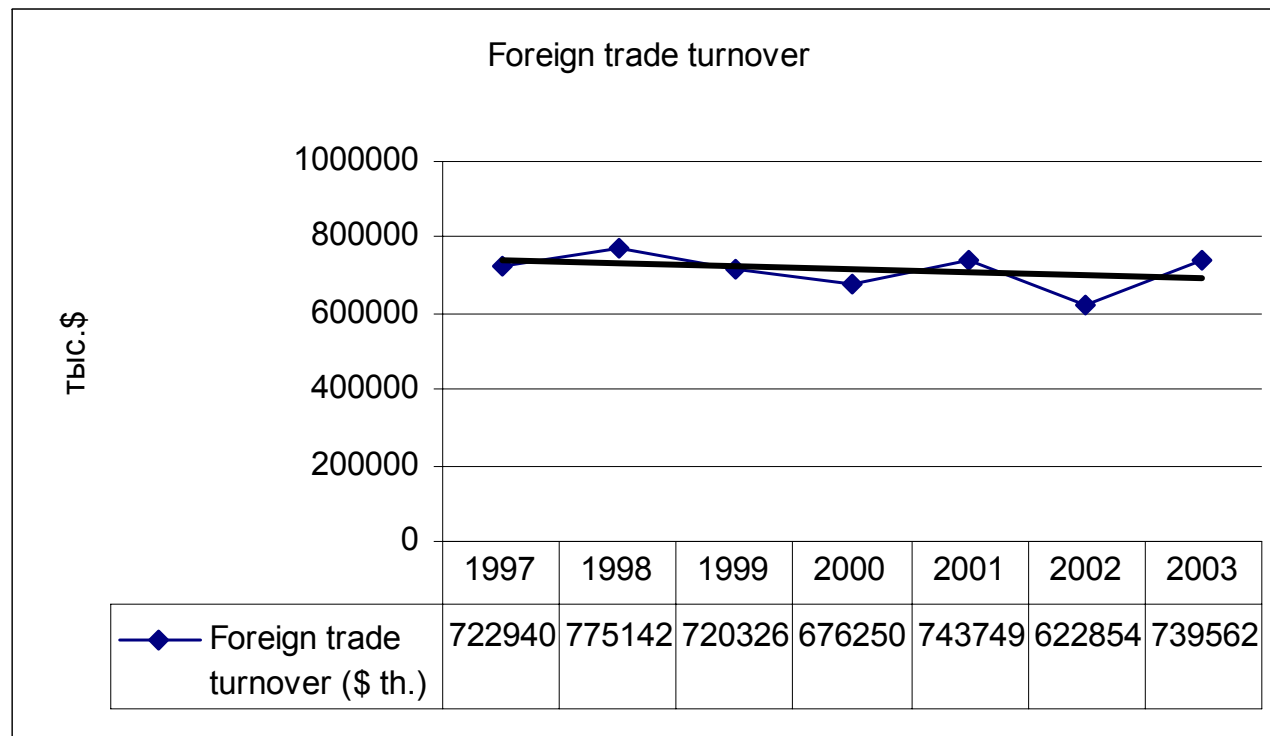


Balance cost of basic assets does not give a full picture of physical capital availability in the province, because their ageing should be taken into account. If to take basic assets, the ageing of basic assets in industry in the province is about 45%. The amount of capital investments is still decreasing, and over the past five years it has decreased twice. The largest part of capital investments in the province is directed to Almalyk and Angren towns, as well as to Kibray and Bostanlyk districts.

Sectoral profile of capital investments in 2003 (%)

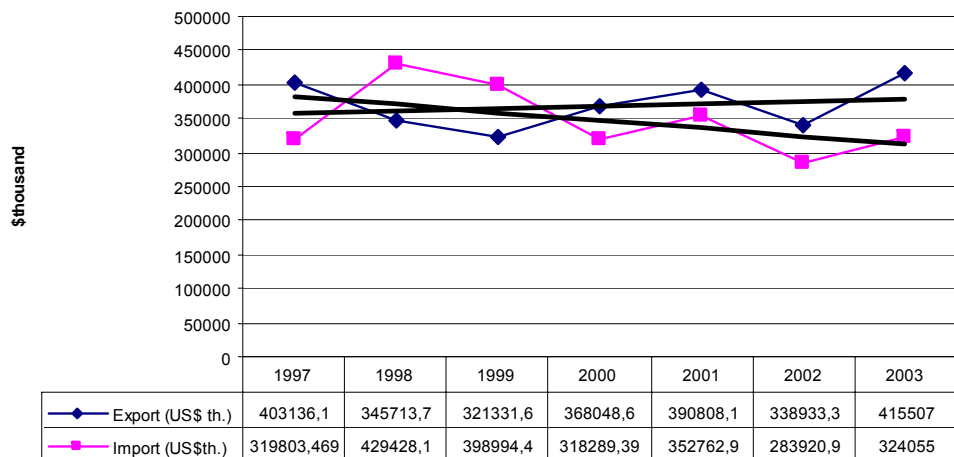
Sectors	Tashkent city	Tashkent province
Fuel-energy sectro	0.45	
Metallurgy	0.06	
Mechanical engineering	11.2	
Chemical industry	1.6	41.2
Light industry	2.8	
Food industry	2.4	
Other industries	13.4	
Agriculture	0.5	4.4
Construction	0.5	3.1
Transport	19.5	6.3
Communications and telecommunications	7.3	0.5
Education	4.8	17.3
Public health	2.7	4.5
House building	7.01	5.4
Other sectors of social sphere	9.4	0.08
Other sectors	16.5	17.2

In order to develop the manufacturing and service sectors, many factors are necessary. A part of goods necessary for both production and consumption is needed to import. The export gives necessary means for import and production development, and modern technologies are purchased through attracting foreign investments. All of that causes a need for intensified foreign economic activity.

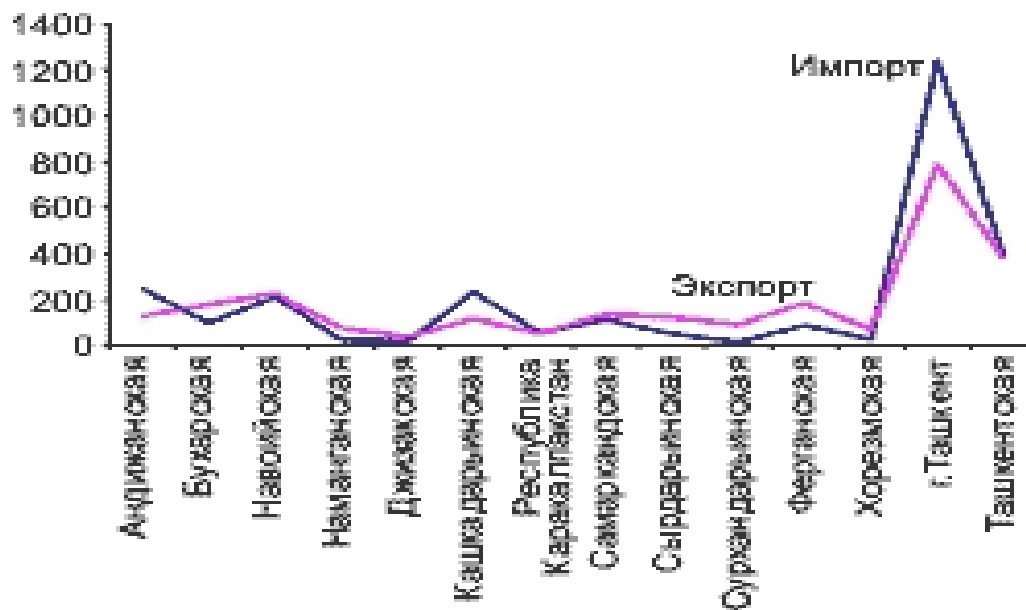


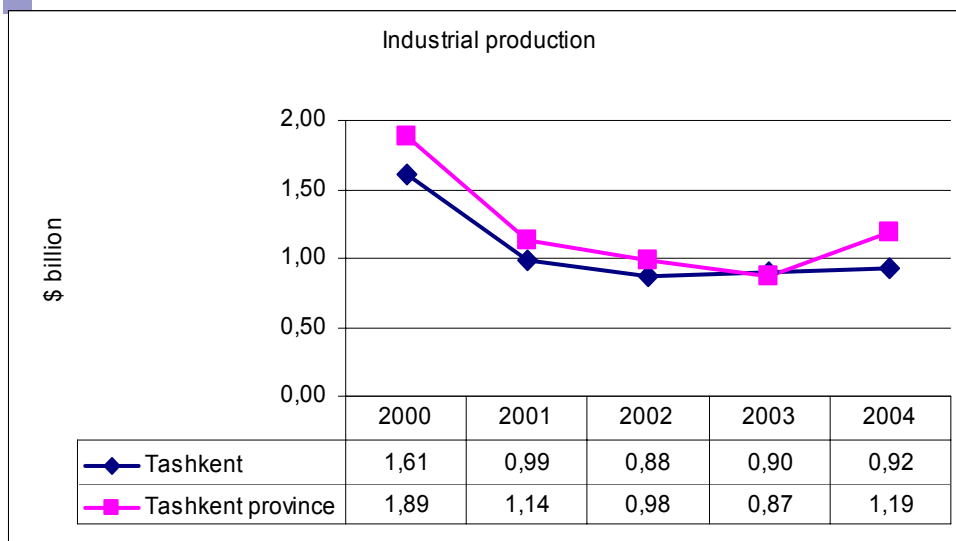


Export - Import



On the condition that the trends remain, it is seen that the share of export in the province would increase, and the share of import would decrease.





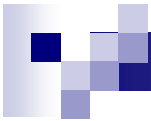
Industrialization of Uzbekistan, started from the 1920s and especially intensified in the 1960s and 1970s, was implemented from the 'top' under the directives of Moscow, taking into account available natural resources and interests of the USSR's industrial sector. Cultural, demographic and other factors of local community were not taken into account. As a result, an industrial system not fully meeting population requirements was formed (almost 60% of goods necessary for the republic were brought from the outside).

Industrial production percentage for Tashkent city and Tashkent province from the nation-wide value in 2003

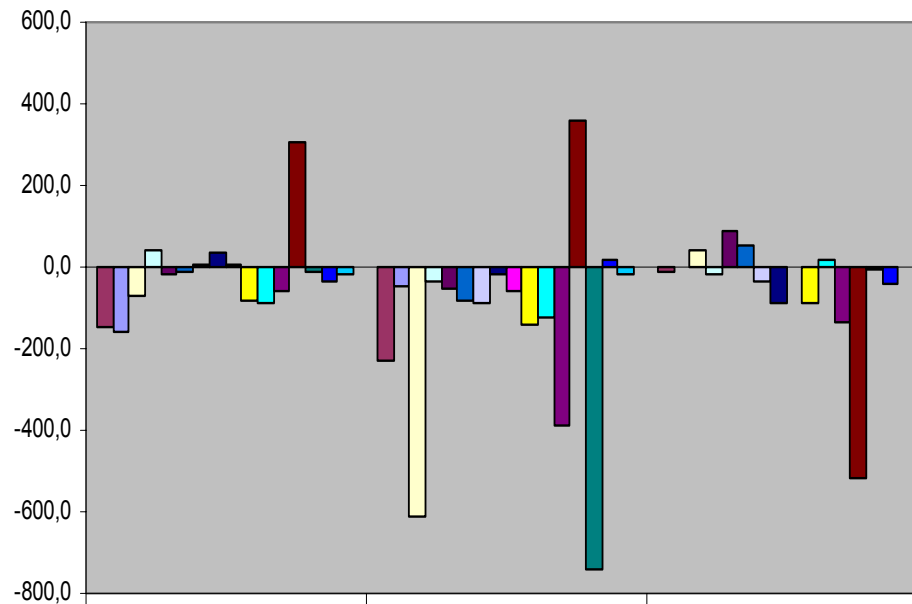
Provinces	Fuel-energy sector	Metallurgy	Mechanical engineering	Chemistry and petrochemistry	Light industry	Food industry	Other sectors
Tashkent province	-	37,9	3,5	11,2	14,8	10,8	21,8
Tashkent city	0,2	2,4	25,8	9,7	13,1	24,8	24
Total percentage	0,2	40,3	29,3	20,9	27,9	35,6	45,8

Output of basic products

	Item	Unit	1980	1985	1990	1995	2000	2001	2002	2003
1	Electric energy	MKWh		18374.7	24898	21247	21598	23193	18364.3	21108.4
2	Steel	Th.t	718.6	893.7	998.5	363.1	415.4	445.4	461.7	485.1
3	Coal	Th.t	5539	5099	6257	2980	2410	2620	2661.0	1848
4	Mineral fertilizers	Th.t	572.3	655.3	750.4	405.9	352.2	279.7	367.4	354.1
5	Caprolaktam	Th.t	5.5	45.6	53.5	4.4			0.051	
6	Lint-cotton	t	133747	134900	121700	73790	80059	80814	78389	62002
7	Fish catch	t	7191	9501	9108	3751	2222	1459	1378	1555
8	Rolling of ferrous metals	Th.t	318.8	744.3	955.3	321.8	372.3	403.4	419.6	446.5
9	Sectional iron	Th.t					277.1	299.8	300.8	323.3
10	Nitrogen fertilizers	Th.t	304.7	368.6	399.8	300.5	270.2	188.3	248.6	262.2
11	Ammonium nitrate	Th.t	336.1	674.6	484.1		402.3	324.3	422.4	442.8
12	Phosphorus fertilizers	Th.t					81.8			
13	Phosphate fertilizers	Th.t	267.6	286.7	350.6	105.5	81.8	91.6	118.8	91.9
14	Ammophos	Th.t	631.3	674.7	761.2	242.2	164.6	170.1	253.2	201
15	Power transformers	Th.KWA	6907.1	7567.3	8606.2	780.3	134	296.9	306	195
16	Vacuum pumps and aggregates	number			457	1528	115	5	1	8
17	Compressors	number	1708	2502	2052	179	46	53	36	18
18	Agricultural machinery *)	Th.soums	25135	38080	31267	104915	697596	818419	1538825	1831625
19	Tractor cultivators	numner	19310	22950	14570	446	1131	739	787	1015
20	Cement	Th.t	2344.7	2513	2576.8	1540.8	1254.9	1474.7	1563.7	1392.6
21	Shoes	Th.pairs	4757	5065	6313	706	358	476	576	683
22	Refined vegetable oil	t	24598	30444	31795	17048	17450	15410	13913	12496
23	Canned fruits and vegetables	тыб	185352	217493	261656	115194	64637	61173	61388	57821
24	Meat and meat products	t	41158	45458	43343	5416	11722	11465	11540	13100
25	Milk and dairy produce	t	58786	70298	86994	28147	9149	9442	10551	14351
26	Bread and bakery	t	55471	56674	137768	91807	111788	115072	104460	108022
27	Marketable food fish products	t	6569	8683	8214	2898	1757	1345	907	1281
28	Flour	t	147579	189706	217726	415177	118282	136725	115065	48468
29	Macarono	t				349	4026	4734	4713	3871



Difference between purchasing (+) and market (-) prices

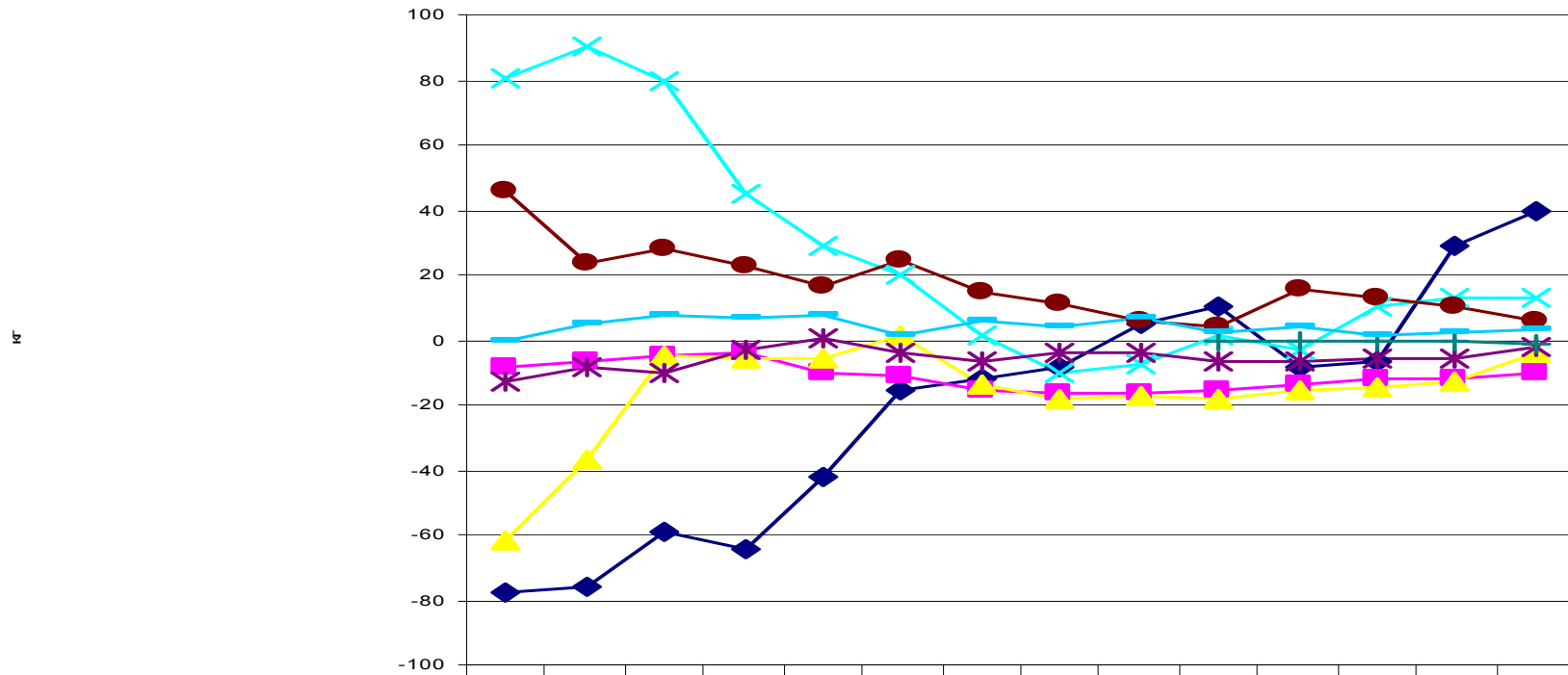


	2001	2002	2003
Total grain crops	-148,0	-231,6	-14,2
w heat	-156,9	-49,1	-1,8
rice	-72,4	-612,4	39,2
corn	39,2	-34,0	-19,8
beans	-18,7	-54,5	90,6
potatoes, total	-14,4	-81,8	54,6
vegetables	7,4	-88,3	-36,6
tomatoes	38,0	-15,3	-85,6
cucurbits	4,0	-57,2	-1,8

The difference between the purchasing and market prices remains significant in favor of the market prices, especially it was pronounced in 2001-2002. Over the last year, the market and purchasing prices were actually equal, and in some cases the purchasing prices exceeded the market ones. It is explained with that in that year the most part of produce was sold for salary.



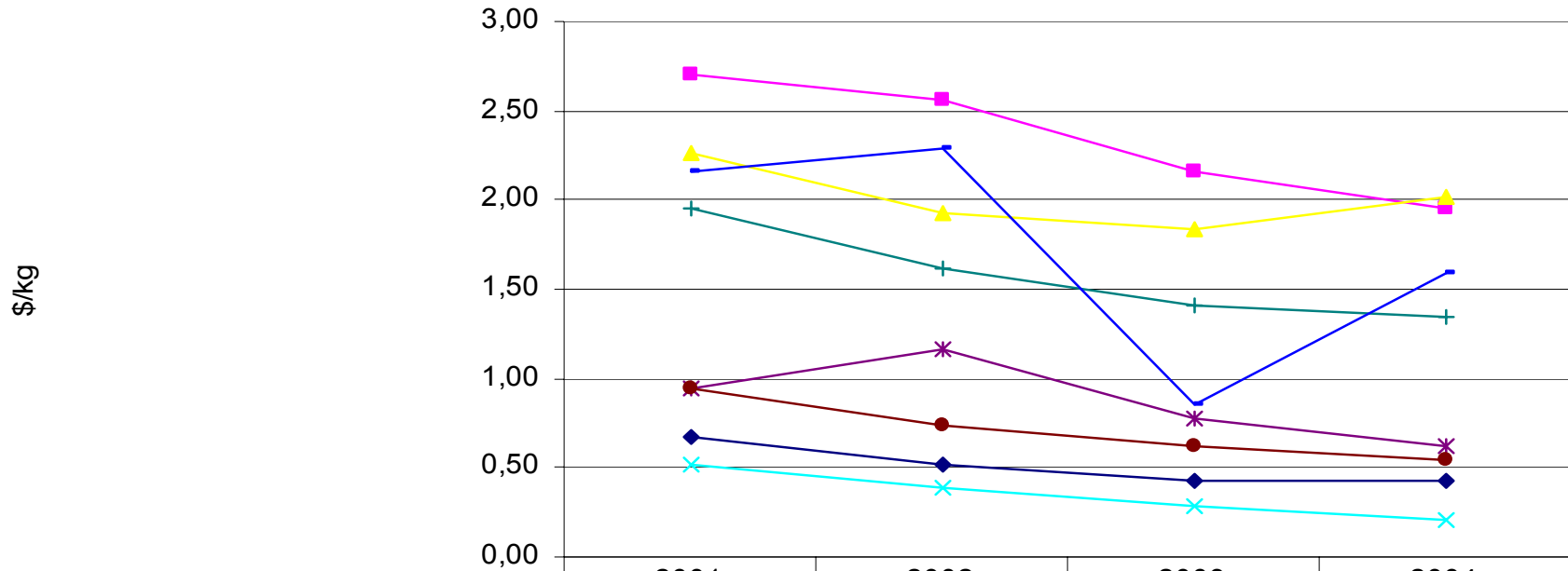
Food availability+ / lack- in the province (kg a year)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
◆ Bread and bread products	-77,4	-75,9	-58,8	-64,4	-41,8	-15,9	-11,6	-8,4	4,5	10,5	-8,2	-7	28,6	40
■ Meat and meat products	-8,4	-6,5	-5,1	-4,1	-10,1	-10,7	-15,2	-16,2	-16,2	-15,3	-13,7	-11,7	-11,8	-10,4
▲ Milk and dairy products	-62,1	-37	-4,5	-5,5	-6,2	0,9	-13,4	-18	-17,7	-17,8	-15,2	-14,7	-13,3	-3,9
× Vegetables and cucurbits	80,3	89,9	80	44,8	28,8	20,3	1,7	-10,3	-7,6	1	-2,9	10	13	13
* Potatoes	-12,6	-8,2	-10	-3,5	0,3	-3,7	-6,9	-3,8	-4,3	-7	-6,5	-6	-6,2	-2
● Grapes, berries and fruits	45,5	23,5	28,2	22,9	16,6	24,7	14,6	10,8	5,6	4,1	15,2	13	10,4	5,6
+ Vegetable oil										0	0	0	-0,7	-1,3
+ Eggs	0	5	8	7	8	1	6	4	7	2	4	1	2	3



Purchasing prices for basic food products



	2001	2002	2003	2004
◆ Bread and bread products	0,67	0,51	0,42	0,43
■ Meat and meat products	2,71	2,56	2,17	1,95
▲ Milk and dairy products	2,26	1,92	1,84	2,01
× Vegetables, including potatoes	0,52	0,38	0,28	0,21
* Fruits	0,95	1,16	0,78	0,63
● Sugar	0,95	0,73	0,62	0,55
+ Vegetable oil	1,96	1,62	1,41	1,35
— Fish and fish products	2,16	2,29	0,86	1,59



Conclusions:

- Transition to market economy in the province has not been completed, and is characterized with a drop in all the indicators
- The period of significant decline in these indicators up to 1996 changed by some unstable growth, slightly increased in the period 2003-2005
- Under these conditions, the business as usual scenario may be oriented to the mentioned period
- In the province, there is a considerable potential for industry and construction that has not been implemented
- The optimistic development scenario will be focused on restoring and re-orienting this potential, and will depend on the amounts of attracted investments.