

Agrarian sector in Chirchik and Akhangaran river basins



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Available land of Tashkent province, th.ha

| Years | Total Area | Irrigated area | Deposit, hey, pasture | | Total agriculture in public sector | | Agriculture of farmlands | | Other lands | |
|-------|------------|----------------|-----------------------|-----------|------------------------------------|-----------|--------------------------|-----------|-------------|-----------|
| | | | Total | irrigated | Total | irrigated | Total | irrigated | Total | irrigated |
| 1981 | 1524,0 | 328,5 | 512,1 | 2,8 | 893,1 | 305,2 | 26,7 | 21,5 | 604,2 | 1,8 |
| 1985 | 1523,9 | 341,0 | 494,3 | 2,5 | 870,1 | 315,1 | 29,3 | 23,4 | 619,5 | 2,5 |
| 1990 | 1458,6 | 361,7 | 458,6 | 2,6 | 829,2 | 318,1 | 49,7 | 41,6 | 579,7 | 2,0 |
| 1995 | 1496,0 | 360,0 | 424,5 | 2,5 | 767,4 | 307,6 | 58,9 | 50,0 | 669,6 | 2,4 |
| 2000 | 1480,4 | 357,1 | 387,2 | 2,8 | 729,3 | 305,7 | 58,2 | 48,5 | 692,8 | 2,9 |
| 2003 | 1495,1 | 353,6 | 423,7 | 1,8 | 763,0 | 301,6 | 59,8 | 49,2 | 672,3 | 2,8 |

Forms of management

| Forms | Area (th. ha) | % from total area |
|--|------------------|----------------------|
| Agriculture farms (Co-operative society, shirkats) | 206,6 | 61,4 |
| Farmers | 95,3 | 28,3 |
| Private farms | 34,4 | 10,3 |

Plant cultivation

STRUCTURE OF SOWN AREAS (%)

| Crop | 1981 | 1990 | 2003 |
|-------------------|------|------|------|
| Cotton | 54 | 46 | 34 |
| Grain | 2 | 6 | 37 |
| Maize | 6 | 5 | 3 |
| Rise | 2 | 3 | 3 |
| Potato | 3 | 3 | 2 |
| Vegetables | 6 | 7 | 9 |
| Melons and gourds | 1 | 1 | 1 |
| Forage | 26 | 29 | 11 |

Dynamics of garden areas and vineyards on irrigated lands and dry in Tashkent province for period 1981-2003

| Farms category | Years | Irrigated areas, th. ha | | Dry areas, th. ha | | Total | |
|--------------------|-------|-------------------------|----------|-------------------|----------|----------|----------|
| | | Orchards | Vineyard | Orchards | Vineyard | Orchards | Vineyard |
| All farms category | 1981 | 24,3 | 6,9 | 0,0 | 0,0 | 24,3 | 6,9 |
| | 1985 | 12,4 | 8,2 | 0,0 | 0,0 | 12,4 | 8,2 |
| | 1990 | 11,2 | 9,0 | 0,0 | 0,0 | 11,2 | 9,0 |
| | 1995 | 12,1 | 8,8 | 0,0 | 0,0 | 12,1 | 8,8 |
| | 2000 | 16,8 | 10,3 | 0,7 | 0,3 | 17,5 | 10,6 |
| | 2003 | 14,9 | 9,7 | 1,7 | 0,5 | 16,6 | 10,3 |

Sown area of agricultural crops on dry lands for period 1996-2003 in Tashkent province, th.ha

| Farms category | Years | Total sown area | including | | |
|--------------------|-------|-----------------------|-----------|------------|--------|
| | | | Cereals | Industrial | Forage |
| All farms category | 1996 | 25,6 | 20,0 | 0,6 | 5,0 |
| | 1997 | 27,5 | 21,1 | 1,7 | 4,6 |
| | 1998 | 24,8 | 18,8 | 1,9 | 4,2 |
| | 1999 | 23,5 | 17,6 | 2,5 | 3,5 |
| | 2000 | 22,4 | 16,0 | 2,1 | 4,2 |
| | 2001 | 21,5 | 15,5 | 2,1 | 3,9 |
| | 2002 | 23,7 | 16,8 | 1,2 | 5,8 |
| | 2003 | 23,7 | 19,7 | 0,9 | 3,2 |

Gross collection of the main agricultural crops on irrigated lands (th.ton)

(All farms category)

| Years | Grain | Raw cotton | Maize and grain | Rise | Potato | Vegetables | Melons and gourds |
|-------------|-------|------------|-----------------|------|--------|------------|-------------------|
| 1981 | 11,9 | 427,3 | 116,9 | 31,5 | 84,9 | 394,9 | 37,7 |
| 1985 | 10,7 | 375,4 | 58,5 | 28,3 | 63,3 | 359,5 | 25,8 |
| 1990 | 31,0 | 327,3 | 44,6 | 34,7 | 53,5 | 398,5 | 49,0 |
| 1995 | 204,3 | 244,4 | 7,9 | 24,5 | 33,0 | 261,6 | 18,3 |
| 2000 | 300,7 | 224,5 | 25,9 | 41,1 | 120,7 | 505,5 | 44,7 |
| 2003 | 431,7 | 187,9 | 29,2 | 32,3 | 135,6 | 586,2 | 56,0 |

Dynamics of yield modification of the main agricultural crops in Tashkent province from irrigated lands 1981-2003 years, th/ha

| Farms category | Years | Grain | Maize and grain | Rise | Raw cotton | Potato | Vegetables | Melons and gourds |
|---------------------------|--------------|--------------|------------------------|-------------|-------------------|---------------|-------------------|--------------------------|
| All farms category | 1981 | 2,4 | 7,5 | 5,5 | 3,7 | 10,5 | 24,0 | 18,2 |
| | 1985 | 2,2 | 3,4 | 5,3 | 3,1 | 8,7 | 22,5 | 17,6 |
| | 1990 | 1,9 | 3,6 | 5,1 | 2,9 | 6,5 | 21,8 | 16,2 |
| | 1995 | 2,9 | 2,5 | 3,4 | 2,6 | 9,2 | 20,9 | 13,0 |
| | 2000 | 3,2 | 3,1 | 3,7 | 2,4 | 15,5 | 22,6 | 16,9 |
| | 2003 | 4,1 | 3,7 | 4,0 | 2,0 | 21,2 | 22,5 | 17,0 |

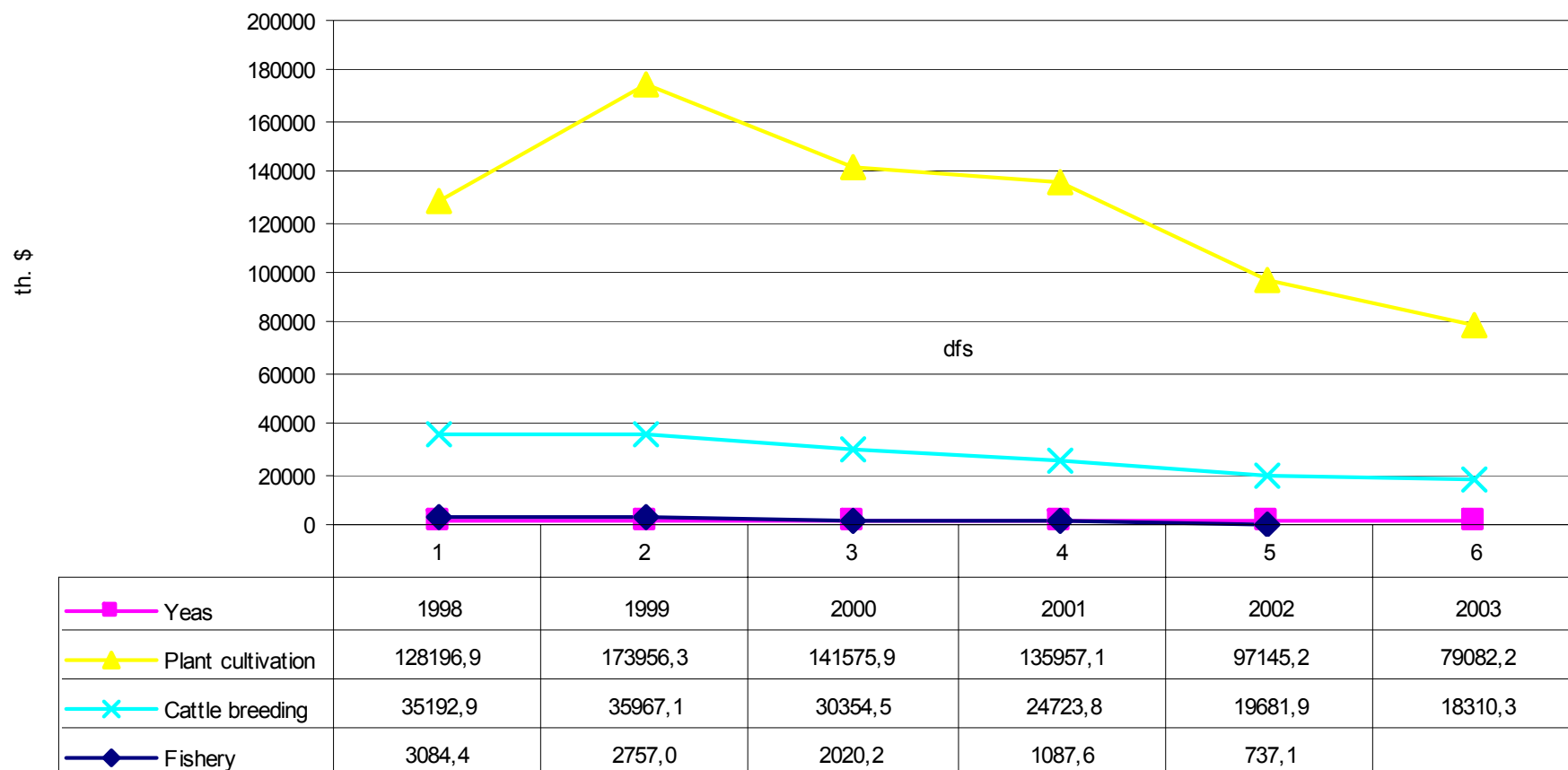
Average, maximum and potential yield of agricultural crops for Tashkent province (th.ha)

| Agricultural crops | Average yield of province for 1981-1985 | Average yield of province for 1999-2003 | Maximum yield received | | | Potential yield |
|-------------------------|---|---|------------------------|------|---------------------------|-----------------|
| | | | Yield | Year | Farm category | |
| Зерноколосовые | 2,5 | 3,7 | 5 | 2002 | Farmers and private farms | 6,0 |
| Cotton | 3,4 | 2,3 | 3,7 | 1981 | Around the province | 4,4 |
| Maize and grain | 5,6 | 3,4 | 7,5 | 1981 | Around the province | 9,0 |
| Rise | 5,7 | 3,8 | 6,2 | 1982 | Around the province | 7,4 |
| Potato | 10,7 | 17,7 | 24,7 | 2003 | Agricultural enterprises | 29,6 |
| Vegetables | 24,1 | 21,5 | 25,6 | 2002 | Farmers | 30,7 |
| Melons and gourds | 16,5 | 16,1 | 29,3 | 2000 | сельхозпредприятия | 35,2 |
| Roots | 28,8 | 27,9 | 37,5 | 2003 | Private farms | 45,0 |
| Maize and silage | 26,1 | 24,1 | 33,8 | 2002 | Private farms | 40,6 |
| Permanent grasses | 28,7 | 27,2 | 35,2 | 2001 | Private farms | 42,2 |

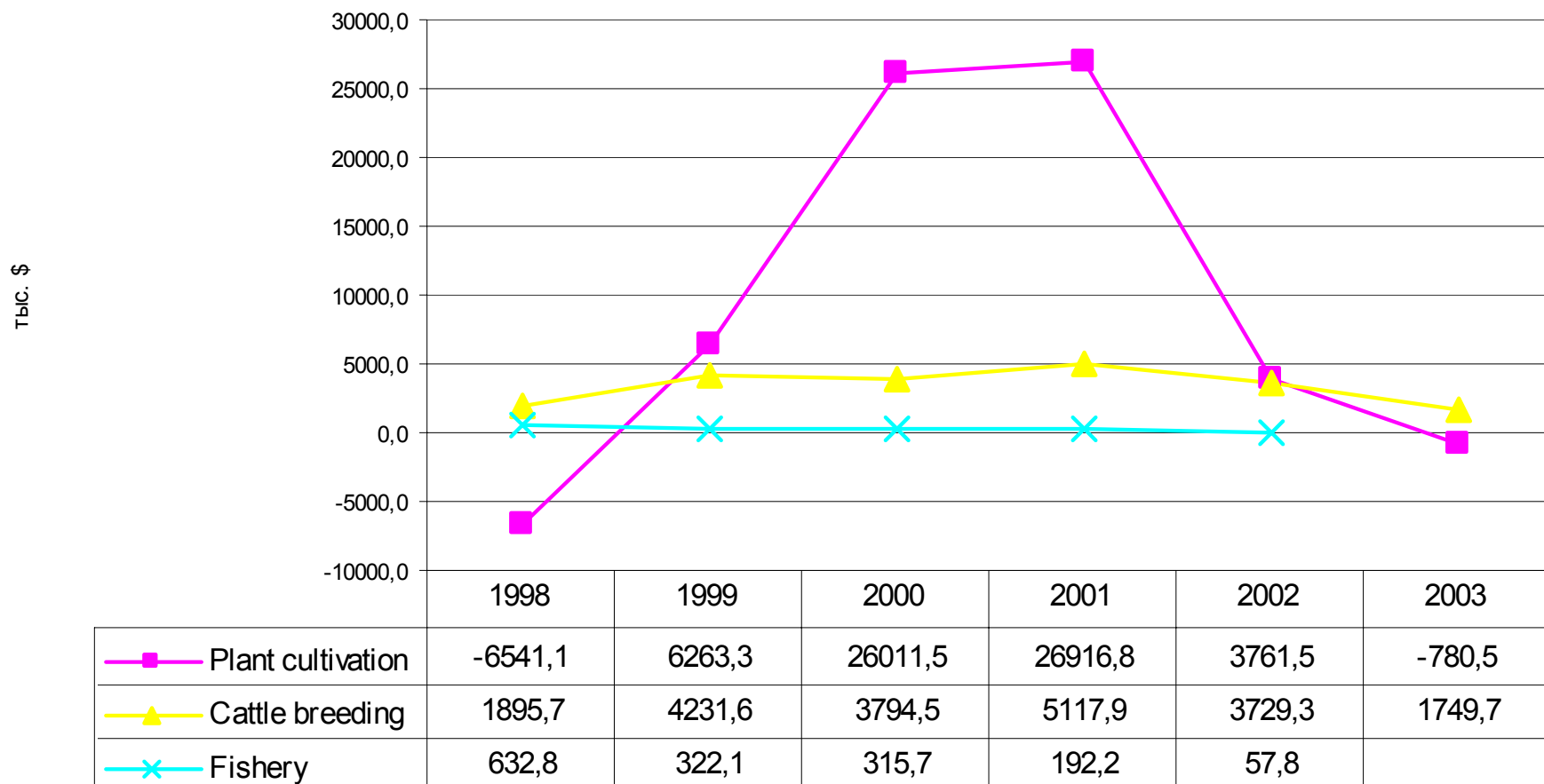
Main indicators of cattle breeding development in Tashkent province for 1985 – 2003 years

| Production indicators | 1985 | 1990 | 1995 | 2000 | 2003 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Meat (live weight), th. ton | 90,2 | 97,5 | 109,1 | 96,1 | 103,8 |
| Milk, th.ton | 321,0 | 377,1 | 364,7 | 321,7 | 358,9 |
| Eggs, mln. pcs. | 590,2 | 645,1 | 379,2 | 309 | 419,0 |
| Average yield of milk, kg/year | 2720,0 | 3032,0 | 1956,0 | 1950,0 | 2010,0 |
| Egg-laying qualities, pcs/year | 169,0 | 203,0 | 145,0 | 158,0 | 176,0 |
| Cattle, th.heads | 348,2 | 375,4 | 362,2 | 358,1 | 390,9 |
| Including cows, th.heads | 135,1 | 157,4 | 167,7 | 165,6 | 177,2 |
| Pigs, th.heads | 261,8 | 218,2 | 109,7 | 20,5 | 22,8 |
| Sheep and goats, th.heads | 565,6 | 582,5 | 421,8 | 370,7 | 1413,9 |
| Poultry, th.heads | 7185,3 | 6185,1 | 3193,0 | 3175,9 | 4176,0 |

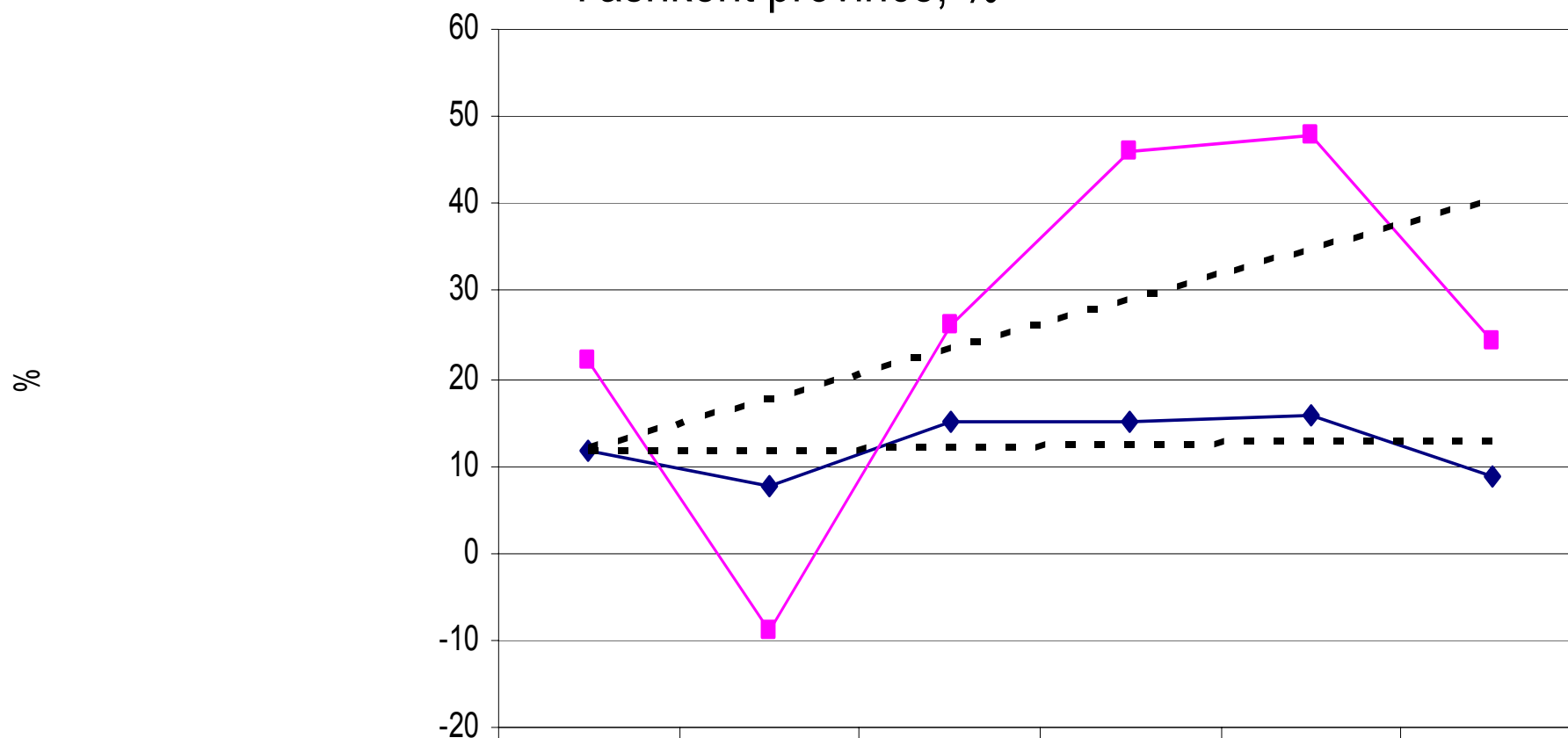
Proceeds from agricultural activity, th. \$



Financial result of agricultural crops, th. \$



Dynamics of plant cultivation and cattle breeding profitability in Tashkent province, %



| | 1993 | 1995 | 2000 | 2001 | 2002 | 2003 |
|-----------------------------------|------|------|------|------|------|------|
| ◆ Production of plant cultivation | 11,7 | 7,5 | 15,1 | 15 | 15,7 | 8,7 |
| ■ Production of cattle breeding | 22,2 | -8,9 | 26,2 | 46 | 47,7 | 24,3 |

Main obstacles, restrictive further development of agricultural production:

- Confinement property of sown areas selection structure;
- Financial losses of agriculture producers due to disparity costs to agricultural production and delivered their material and technical resources;
- Depreciation of exploited machinery and irregularity of spares and fuel supply;
- Chemical fertilizers are not use in total standard volume for plant growing;
- Insufficient provision of chemical and biological remedies of plant protection;
- Low quality and suggested choice of sowing material;
- Low level of water supply on lands irrigated by pumps;
- Poor information influence and limited of technological knowledge of farmers;
- Low specific gravity of sown areas structure of lucerne – culture, which have a high profile in rehabilitation and increasing of land fertility and cattle breeding development.

For realization of irrigated agriculture potential in Tashkent province it's necessary the availability of the following conditions:

- to increase the level of mechanization of agricultural works and power consumption in agriculture;
- to make use of standard quantity of organic and chemical fertilizers;
- completely rehabilitate hydrotechnical structures and collector-drainage network;
- to increase the efficiency of available lands use owing to repeated cultures and complete crop rotation;
- to provide needs of agriculture producers with bank loans and low interest rate;
- to create modern supply-domestic agricultural infrastructure;
- to limit interference of officials in production processes and in chosen of sown areas structure;
- to create effective system of Governmental support to agriculture entrepreneurship, including privileges and advantages system.