

Materials of Conferences

**STRUCTURE OF PRODUCTION
OF BRANCHES OF PLANT SCIENCE
AND DYNAMICS OF DEVELOPMENT
OF PLANT SCIENCE IN FARMS
OF THE TVER REGION**

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Plant science is one of the main branches in structure of agricultural production of the Tver region. Grain farm, vegetable and potato farming allocate in yielding of crop production of the region. Private subsidiary farming and country farms play an important role in production of plant science in the area. Gross collection of main types of crop production in country farms of the Tver region from 2000 to 2013 in general tended to increase, except for gross collection of flax fiber which for the studied period was reduced twice. The maximum gain of gross collection falls to the production of potatoes (increase by 5,4 times). Gross collection of vegetables increased by 3,2 times, and small grains by 1,7 times. Official statistical data on a condition of agriculture of the Tver region speaks about a gradual and sure exit of farmer sector of the region from a condition of an economic crisis and also about rise of competitiveness of farmer production and its profitability.

The most part of agricultural production of the Tver region falls to the agricultural organizations (55,7%) that is about 1,5 times more than the production made by private subsidiary farming of the Tver region and in 15 times more than quantity of the production made by the farmers of the Tver region (3,7%). If to consider the structure of production of branches of plant science on categories of farms of the Tver region, the most part (66,5%) falls to private subsidiary farming that is 2,4 times more than a similar indicator in the agricultural organizations (55,7%) and in 10,5 times more of the given value in country farms of the region [2]. Thus, dynamics of decrease is observed in private subsidiary farming and country farms in the considered indicator in comparison with previous year and changes in increasing of value of this indicator at the large agricultural organizations from 23,2% in 2010 to 27,2% for the beginning of 2013 [1].

One of the primary branches of plant science in structure of agricultural production of the Tver region is grain-growing. In 2013 the leading position on production of small grains among all agricultural producers of the Tver region is held by the agricultural organizations (88,1%). The smallest value has the considered indicator in private subsidiary farmings (1,9%). 10% of

production of grain falls on country farms. From 2000 to 2012 sure positive dynamics of change of this indicator is traced in farmer sector of the region by 3,6 times and decrease in value in the large agricultural organizations [1]. This dynamics testifies to gradual fixing of a role of farms in structure of agricultural production of the Tver region.

Vegeticulture is one more of gained the widest circulation in the Tver region branch of plant science. The main producer of vegetables in structure of agricultural production of the Tver region are private subsidiary farmings. 92,5% of production of vegetables in farms of all categories of the Tver region fall to private subsidiary farmings in 2013. The minimum share in structure of production of vegetables falls to farmer sector of the Tver region (1,7%). But thus it should be noted that from 2008 for 2013 production of vegetables farms remained almost low, while similar production for the considered time period in the agricultural organizations decreases gradually (from 10,4% in 2007 to 5,8% in 2012) [3]. That allows to draw a conclusion on a sustainable development of the farmer sector of the region.

Among producers of potatoes in the Tver region the leading position is held by private subsidiary farmings – 65,8% of the general production. Large agricultural producers are ahead a little of farmers by 6%. Thus from 2000 for 2013 steady dynamics of increase of value of an indicator of production of potatoes is observed by region farms (from 1,65 in 2000 to 14,1% in 2012) and decrease (reduction by 24%) in the considered indicator in subsidiary farms.

Besides a production indicator at the characteristic of development as agriculture in general, also branches of plant science, one of main indicators is also value of an index of sales of product.

The large agricultural enterprises possess the greatest index of sales of product both all agriculture in general, and branches of plant science separately. It is explained by existence of the state orders and direct contracts with the state while farmer and private subsidiary farmings are compelled to cooperate with dealers of agricultural production. Thus the index of realization of agricultural production of the Tver farmers remains positive from year to year and is characterized by dynamics of increase.

The leading position in structure of production is held by potatoes – its share in structure of production makes 63,9%. Specific weight of farmer sector of the Tver region in potatoes total production for the end of 2012 made 14,1% and from 2000 to 2013 has positive dynamics (increase in a share of production by 9,4 times) [1].

Cultivation of grain crops follows further (its share makes 13%). The insignificant share in structure of production of farmer sector is the share of cultivation of vegetable cultures (2,5%). Specific weight of country (farmer) farms of the Tver region in total production of vegetable cultures makes 1,7% and for the studied period it increased by 5,7 times.

Distinctive feature of farmer sector of the Tver region from similar farms of the next areas is existence in structure of production of agricultural production – a flax fiber (0,3%).

Specific weight of country farms in total production of flax fiber makes 3,6% and for the studied period has positive dynamics while specific weight in total production of flax fiber of the large agricultural enterprises is gradually reduced.

The cultivated area of country farms from 2000 to 2013 increased approximately twice. Now it makes 48,3 thousand hectares.

The greatest part of a cultivated area of farms of the Tver region is the share of forage crops (for the end of 2012 it made 37800 hectares), the smallest on vegetable (144 hectares) and industrial cultures (326 hectares). From 2010 to 2013 the cultivated area of all main crops has positive dynamics.

The greatest gain of farm field (by 4 times) for the studied period is the share of the industrial crops presented by flax fiber. The smallest gain (by 1,2 times) is observed at grain crops [4].

Gross collection of main types of crop production in country farms of the Tver region from 2000 to 2013 in general tended increases, except for gross collection of flax fiber which for the studied period was reduced twice. The maximum gain of gross collection is the share of potatoes (increase by 5,4 times). Gross collection of vegetables increased by 3,2 times, and grain crops by 1,7 times.

Specific weight of country farms of the Tver region made 10% in total production of grain crops for the end of 2012. From 2000 for 2013 the steady tendency of increase (by 3,6 times) of the specific weight of farmer sector in the region is observed in production of grain crops.

In structure of production of grain crops by country farms the leading position is held by oats (66% of the general gross collection), wheat – 21,4% follows further. Insignificant shares fall to rye and barley – 6,4% and 4,7% respectively.

Gross collection of main types of grain crops in farmer sector of the Tver region has a positive tendency. From 2010 to 2013 increase of gross collection of oats (from 26,7 thousand centner to 56,4 thousand centner) by 2,1 times, wheat twice, barley by 2,1 times is noted. Gross collection of rye for the studied period was reduced by 1,2 times [3].

57,8% in structure of realization of grain crops of farmer sector of the Tver region falls to oats, 36,3% to rye and 1,3% to barley.

The structure of realization of grain crops completely corresponds to structure of production of grain crops that testifies to the adjusted sales channels and realization of grain crops by farmers of the Tver region to the same customers and testifies “the grain cultivation to order”.

The structure of gross collection of main types of vegetable cultures in country farms of the Tver region is presented as follows: 50,6% falls to cucumbers, 30,7% to tomatoes, 15,7% to beet, that speaks natural and climatic conditions of the region which completely coincide (correspond) to an agrotechnics of cultivation of these cultures.

Productivity of the main crops in country farms of the Tver region from 2000 for 2013 had the general tendency to increase. Considerably productivity of vegetable cultures (by 2,6 times) and potatoes (by 2,1 times) increased. Productivity of grain crops increased slightly (by 1,4 times). Productivity of flax fiber tends to decrease (reduction by 1,3 times), that affected the level of gross collection of this crop [3].

Realization of main types of crop production farms of the Tver region in comparison with previous years (from 2007 to 2013) has positive dynamics. Potatoes are in the lead for the end of 2012 in structure of the realized production of crop branches of farmer sector of the Tver region (10062,7 tonnes). Most considerably (by 7,9 times) is the quantity of the realized flax fiber, the smallest increase (by 1,4 times) occurred in number of the realized vegetable cultures. Realization of grain crops farmer sector increased by 1,5 time, and potatoes by 1,6 times [2]. The similar structure of the realized production and increase in indicators speaks about emergence of new and steady channels of sales of product in the Tver region by farmers. One more advantage increasing quantity of the realized production is action in the territory of the area of the state program directed on support of farmer sector and allowing farmers to hand over partially crop production directly to the state overworking enterprises.

Thus, the structure of realization of agricultural production by country farms of the Tver region looks as follows: the maximum quantity of the realized production is the share of potatoes (46,9%) and grain crops (6%), minimum – of vegetables (0,02%).

Such distribution says that such types of production as vegetables farmers make for own needs and in the corresponding volumes. And for production of such types as potatoes, grain crops, a flax fiber at the Tver farmers are debugged channels of realization and there are constant sales markets.

Thus, having analysed and having compared official statistical data on a condition of agriculture of the Tver region, it is possible to draw a conclusion on a gradual and sure exit of farmer

sector of the region from a condition of an economic crisis, increase of competitiveness of farmer production and its profitability. In general, production of crop production by the Tver farmers from 2000 to 2013 increased by 10,8 times, and production of animal industry for the similar period by 1,8 times. Since 2010 the sharp increase in level of production of crop production (from 34,6% in 2000 to 62,6% in 2013) and considerable decrease in production of animal industry is observed (from 65,2% in 2000 to 37,2% in 2013) that speaks about prevalence in structure of production of farms of the Tver region of branches of plant science over branches of animal industry [4].

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The work is submitted to the International Scientific Conference “Prospects of development of plant growing”, Italy, April 11–18, 2015, came to the editorial office on 20.03.2015.