

Main directions of increase of competitiveness of peasant (farmer) farms

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Abstract. The main directions of increase of competitiveness of country (farmer) farms of the Kostanay region locate in article on the basis of quality standards about strong and weaknesses of their activity, and also influence of factors of environment. Four types of strategy of functioning of country (farmer) farms are formulated. Advantages of an intensive form of development of the agricultural production, productivities of use of production resources promoting growth, and, eventually, are shown to increase of competitiveness and economic efficiency of agrarian production. The content of offered actions for formation of competitive advantages on the example of country (farmer) economy "Dawn" reveals, economic effect and additional investment investments is calculated on unit of the land area.

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Introduction

Entrance of peasant (farmer) farms into the market of agrarian production is a starting point in their work on development of the market and fixing on it. Further, a systematic work on formation of the competitive status of the organization has to follow. The competitive status answers the question: "What is a position of the organization in the market in comparison with other competitors? ". Competitive advantages allow to answer the question: "What factors of external and internal character affected a possibility of achievement of this position by the organization?". The competitive status of peasant (farmer) farms is a function of level of its competitive advantages [1,2,3,4,5,6]. Thus, the competitive status of peasant (farmer) farms represents a set of strengths and weaknesses of their organizational economic situation in the branch and regional markets of agricultural production concerning its main competitors, reached by methods and the means which aren't contradicting provisions of the antitrust law of RK. In Table 1 the strengths and weaknesses of peasant (farmer) farms of Kostanay region's activity are presented.

The analysis showed that in the conditions of uncertainty of environment accurately designated strategy of development of peasant (farmer) farms, the directions, mechanisms and measures of state regulation which will allow to resolve issues of improvement of quality and competitiveness of agricultural production, increase of economic efficiency of functioning of peasant (farmer) farms is necessary.

Results of the carried-out analysis of the theory and practice of formation and development of peasant (farmer) farms in Kostanay region which were generalized in a matrix of SWOT - analysis allow to formulate the main directions of increase of their competitiveness (table 2) [7, 8].

SO – strategy predetermines increase of competitiveness of peasant (farmer) farms on the basis of their strengths and opportunities, ST – takes strengths of competitiveness and threat of its decrease, WO – is based on comparison of weaknesses and opportunities of increase of competitiveness, WT – strategy is directed on studying of weaknesses and a negative tendency of decrease in competitiveness [9, 10, 11, 12, 13].

One of the most important factors of increase of competitiveness of peasant (farmer) farms is the constant increase in gross croppage of agricultural production [14]. The increase in gross output volume influences on increase of level of competitiveness in two directions:

First, the quantity of realized production in the market is relatively and absolutely increased, as growth rates of total of realized production in the market, as a rule, higher than growth rates of intra production consumption that raises level of marketability of production.

Secondly, this circumstance leads to decrease in cost price of a unit of production. Increase in gross production in the long term in peasant (farmer) farm is possible to achieve, first of all, due to further growth of productivity of crops and

efficiency of animals on the basis of a production intensification.

Historical experience of functioning of peasant (farmer) farms shows that the intensive way of development is the main and the most perspective [15, 16]. Now, in the conditions of limitation of factors of production, the intensification becomes the major condition defining rates of development of all agriculture. At an intensive form of development the increase in production of agrarian production is reached at the expense of qualitative factors –

application of more perfect production resources, progressive technologies and forms of the organization of production and work of the scientific and technical progress, promoting growth of productivity using production resources, and eventually, increase of competitiveness and economic efficiency of agrarian production [17]. In recent years, as the analysis of agricultural production of Kostanay region showed, all agriculture in peasant (farmer) farms concentrated on grain cultivation. Thus, a main type of production is wheat.

Table 1. The analysis of strengths and weaknesses of functioning peasant (farmer) farms of Kostanay region (SWOT - analysis)

Strengths:	Weaknesses:
- existence of unique bioclimatic potential;	- low technical equipment, outdated equipment;
- existence of enough cultivated areas;	- violation of soil-protective system of agriculture, decrease in fertility of lands;
- available scientific base;	- non-compliance with agrotechnical terms of work performance, norms of storage, transportation, etc.;
- the developed transport network (automobile and the railroads);	- imperfect structure of agricultural production;
- MTS existence;	- lack of money on acquisition of the certified seeds, fertilizers, herbicides and agricultural machinery;
- providing with equipment on a leasing basis;	- disparity of the prices of an agricultural and industrial output;
- preferential credit resources on carrying out agricultural works	- inaccessibility of the credits;
- introduction of the grain receipt;	- high specific weight of small and average farms on the land area;
- participation of the state in grain purchase through Prodcorporation	- difficulties of production sale because of small volumes and poor quality;
	- backwardness of exchange trade;
	- insignificant state financial support;
	- low labor potential
Opportunities:	Threats:
- increase in demand for agricultural production as a result of an entry into the new markets;	- decrease in fertility of the soil;
- increase in financial investments of the state in agriculture;	- adverse weather conditions;
- development of exchange trade;	- wide circulation of infectious diseases of plants and animals;
- increase in productivity of crops due to introduction of soil-protective system of agriculture;	- rise in prices for energy carriers, fertilizers, etc.;
- price increase for agricultural production;	- price reduction for agricultural production;
- quality provision of agricultural production;	- environment change of the world market;
- optimization of structure of cultivated areas and herd, integration of the amount of production;	- development of the monopolized structures;
- favorable weather conditions;	- growth of unprofitable farms
- attraction of the commerce and industry capital to production.	
Note – It is made by authors on the basis of research	

Increase of production intensity of grain crops can be provided with observance of all elements of soil-protective system of agriculture: development of rational crop rotations and intensive technologies, agriculture chemicalization, effective system of seed farming [18, 19]. We will consider efficiency of use of soil-protective system of agriculture on the example of the peasant (farmer)

farm "Zarya" located in the Naurzumsk district of Kostanay region.

Under condition, that the workers of P (F) F " Zarya " using agrotechnical actions, will bring level of productivity of grain crops to 14 c from 1 hectare, at an invariable cultivated area of 1450 hectares the economy will receive 20300 cwt that above the

average level of 2007-2012 on 6467 cwt or for 31,8%.

For definition of level of marketability on long-term it is necessary to make a balance of production, cwt:

Gross production – 20300

Seed fund – 1905

Fodder fund – 244,6

On sale – 20300-1905-244,6=18150

Table 2. Strategic directions of increase of competitiveness of peasant (farmer) farms of Kostanyan region

SWOT-analysis		
	Strengths (S)	Weaknesses (W)
	- existence of unique bioclimatic potential;	- low technical equipment, outdated agricultural machinery and equipment;
	- existence of enough of cultivated areas;	- violation of soil-protective system of agriculture, decrease in fertility of lands;
	- available scientific base;	- non-compliance with agrotechnical terms of work performance, norms of drying, storage, transportation, etc.;
	- the developed transport network (automobile and the railroads);	- imperfect structure of production of agricultural production;
	- MTS existence;	- lack of money on acquisition of the certified seeds, fertilizers, herbicides and agricultural machinery other;
	- providing with equipment on a leasing basis;	- disparity of the prices of an agricultural and industrial output;
	- preferential credit resources on carrying out agricultural works	- inaccessibility of the credits;
	- introduction of the grain receipt;	- high specific weight of small and average farms on the land area;
	- participation of the state in grain purchase through Prodecooperation	- difficulties of production sale because of small volumes and poor quality; - backwardness of exchange trade; - insignificant state financial support; - low labor potential
Opportunities (O):	SO - strategy	WO - strategy
- increase in demand for agricultural production as a result of an entry into the new markets;	- development co-operation (peasant) farms	- a adherence to scientific-based farming systems
- increase in financial investments of the state in agriculture;	- concentration of production	- intensification of agricultural production
- development of exchange trade;		
- implementation of area farming systems;		
- price increase for agricultural production and its high quality;		
- optimization of structure of cultivated areas and herd, integration of the amount of production;		
- favorable weather conditions;		
Threats (T):	ST - strategy	WT - strategy
- decrease in fertility of the soil;	- improving the legal and regulatory framework	- scientific and staff provision, the formation of information and consultancy services
- a diverse weather conditions;	- strengthening of state financial support	- the introduction of innovations in the field of production
- wide circulation of infectious diseases of plants and animals;		
- rise in prices for energy carriers, fertilizers, etc.;		
- price reduction for agricultural production;		
- environment change of the world market;		
- development of the monopolized structures;		
- growth of unprofitable farms		

In conclusion, we calculate the opportunities of the farm in the direction of growth in production and sales of grain, taking into account the possible increase of grain yields (Table 3).

Table 3. Calculation of gross production and sale of grain in P (F) F "Zarya"

Indicators	Average 2007-2012 years	2015	Coefficient of indicators variation
Acreage of crops, ha	1450	1450	1,00
Yield per 1 ha, cwt	8,7	14	1,60
Gross grain, cwt	13833	20300	1,46
Sale of grain, cwt	11450	18150	1,58
Level of merchantability of grain farming, %	82,8	89,4	+6,6 п.

Note – It is made by authors on the basis of research

If the yield increase by 60 % on a constant acreage will allow to get 6467 cwt of grain, to increase the sale of grain to the 6700 cwt or 58.5% and increase the marketability of crops by 6.6 points.

At the final stage of the analysis it's necessary:

- To establish the minimum additional investment funds on the intensification of grain production, providing a significant reduction in the complexity of crop cultivation;

- To determine a possible level of cost of 1 cwt of grain in the coming period, taking into account the full mobilization of exposed reserves [20].

Let's calculate the complexity of grain production in the future, based on the measures for the intensification of its production (Table 4).

Table 4. Calculating the labor cost in the production of grain for the future in P (F) F "Zarya"

Indicators	Grain
In fact, during 2007-2012 years:	
acreage, ha	1450
gross output, thous. cwt	13,8
labor costs per gross output, thous. pers.-hour	8,3
including: per 1 ha of crop, pers.-hour	5,7
per 1 cwt, pers.-hour	0,60
Increase in gross output provided mobilization of revealed reserves, thous. cwt	6,4
Possible production in the long term, thous. cwt	20,3
Additional labor costs for the intensification of production and harvesting the crop growth, thousand men.-hours, total:	1,58
including:	
labor costs for fertilizer	0,48
labor costs for the application of herbicides	0,55
labor costs for extra harvesting	0,55
Total labor costs for production in the future, thous.pers.-hour	9,88
including: per 1 ha of crop, man.-hour	6,8
per 1 cwt, pers.-hour	0,48

Note – It is made by authors on the basis of research

Indicators of the table indicate the possibility of further reducing the complexity of the product as a result of the intensification of production and associated productivity growth. Labor costs per 1 cwt of grain in the long term can be reduced in comparison with 2007-2012 years by 0.12 pers. - hours or 20%.

Necessary additional investment funds on the intensification of grain production is 5838.9 thousand tenge, the cost of 1 ha of crops will increase by 4043.4 tenge, while the unit cost in the long term compared with 2007-2012 will decrease by 42.23 tenge.

The cost of additional production (6467 cwt × 1680,34 tenge) 10867 thousand tenge is more than the cost of additional expenses of production (5838.9 thousand tenge) in 1.8 times, i.e. the additional cost of paying off the intensification of grain production (Table 5).

Table 5. Calculation of costs of grain production in the future in P (F) F "Zarya"

Indicators	Grain
In fact, during 2007-2012 years:	
acreage, ha	1450
gross output, thous. cwt	13,8
Costs of gross output, thous.tg.	13371
including: per 1 ha of crop, tenge	9204,80
Per 1 cwt, tenge	968,93
Increase in gross output provided mobilization of revealed reserves, thous.cwt	6,4
Possible production in the long term, thous.cwt	20,3
Additional labor costs for the intensification of production and harvesting the crop growth, total:	5838.9
including:	
Labour cost	316,0
cost of fertilizers	3459,7
cost for extra harvesting	970
cost for herbicides	1093,2
Total labor costs for production in the future, thous.tenge	19209,9
including: per 1 ha of crop, tenge	13248,2
per 1 cwt, tenge	960,0
Note - It is made by authors on the basis of research	

Demand for agricultural machinery and its provision of a peasant (farmer) farm "Zarya" is shown in Tables 6 and 7.

Table 6. Demand for agricultural machinery in P (F) F "Zarya"

Brand	Annual volume of work cond. ref. hectare	The annual rate of production, cond. ref. hectare	Quantity, pieces
K-701	17326	3194	5
MTZ-80	630	584	1
T-4	6725	1350	5
JC Yenisei	1585	202	8
Note - It is made by authors on the basis of research			

For the production of agricultural products P (F) F "Zarya" must have 5 K-700 tractors, 1 tractor MTZ-80, 5 tractors T-4 and 8 combine harvesters.

Table 7. Provision of a peasant (farmer) farm by agricultural machinery

Brand	Demand, pieces	Availability, pieces	Provision, %
K-701	5	5	100,0
MTZ-80	1	1	100,0
T-4	5	2	40,0
JC Yenisei	8	3	37,5
Note - It is made by authors on the basis of research			

The farm is fully provided by K-700 tractors, MTZ -80 and tractors T-4 brand only 40%, provision of farms by combine harvesters is 37.5%.

Direct costs of the peasant (farmer) farm to operate agricultural machinery per 1 ha of crops constitute 2.5-3.0 thousand tenge. Investment costs related to the acquisition of agricultural machinery of peasant (farm) in this case amount to 426 thousand dollars (3 × 17000+ 5 × 75000) or 62.6 million tenge or 43186 tenge per 1 ha of arable land.

Options of obtaining the necessary equipment by (peasant) farms can be: a contractual relationship with agroservice enterprise, MTS and large agricultural enterprises; joining the cooperative on sharing of technology; lease the necessary equipment or its rent; Lease purchase. In Kostanai region 48% of (peasant) farms have tractors and 35% - combine harvesters. Low level of profitability, and low level of solvency prevents most households to acquire the necessary technology and equipment .

For timely implementation of technical measures in a timely manner, it's necessary to have a minimum set of agricultural tools, but due to lack of financial resources, the farm is incapable to buy. The solution of this problem is possible by using leasing to purchase agricultural machinery with the state [21]. However, advance payments in the first year of the lease is 25-30% of the original cost of equipment, which is unacceptable for producers who do not have income.

One of the effective ways of production is a development of agro-service market. Formation of this infrastructure is offered in the following areas: creation of own, cooperative structures of agroservice and service; rendering services by machine and technological stations, the organization on the basis of regional machine and technological stations of rolling points of the agricultural machinery, the mechanized groups for performance of field and transport works.

An important part of the infrastructure should be monetary system using existing and newly

organized credit unions; preferential financing of associations of agricultural producers on preparation, processing, storage and agricultural products sale.

Further development of the corporation in the form of agricultural credit cooperatives will solve the problem of providing producers by monetary resources through their own contributions and state financial support. Another important source of credit are loans of state, local and foreign investors.

The main directions of state financial support of (peasant) farms are: subsidies to increase the yield and quality of crop production, water delivery service, a bookmark and plantings of perennial fruit crops, crop insurance support, compensation of interest rates for leasing of agricultural machinery and they are usually sent to large farms.

The need for state support is determined by a slight amount of production, lack of own funds, high cost of provided services, including the field of credit and financial services; low level of infrastructure development. State support should be in the following areas: resource allocation at farm, access to soft loans, state order, leasing fund, creating an efficient logistics, financial and marketing infrastructure.

Co-financing should be more widely in agricultural production: agricultural producers provide 20% of credit, the state – 70, banks - 10%. This allows a positive impact on the macroeconomy, reduce budget spending and improve the efficiency of agricultural production; use futures and forward trading, trade credit for agricultural lending. Currently, the futures are applied in the country: creameries emit the fuels and lubricants, new agricultural machinery and money, in the end of the year they return them to creameries..

For concentrations of credit resources, above all, and subsidies from the budget it is required to create an "Agricultural Bank ". Priorities of its activities should be: a comprehensive service of agribusiness and related industries; approximation to the places of production and processing of agricultural products; formation of medium and long-term resources to finance logistical base. Credit institution has to participate in the implementation of government programs through direct lending, guarantees and settlement of payment transactions; use modern banking technologies. It is necessary that banks take part in the implementation of programs of financial support of agricultural production, serve leasing companies, invest through direct lending, provide guarantees, the form a long-term funding through the issuance of bonds, cooperate with the rural credit cooperatives. Effective system of services for agricultural production involves the creation of

information and counseling services in the districts and regions.

There is a need to organize a special service of agricultural training and consultation at the expense of the local budget and producers, at the regional and district administrative - research - consulting centers on issues of economics, finance, taxation, accounting , pricing and marketing of agricultural products, business plans, contained public funds and cooperating with the Ministry of Agriculture, research institutions and universities.

With a relatively small scale, peasant (farmer) farms only satisfy their food needs. Therefore, the creation of competitive agricultural production imposes special requirements on the justification parameters of agricultural units, primarily on the size of land, number of livestock and volume of fixed assets.

An important criterion in solving this problem should be to obtain the maximum output, which allows an efficient conduct of the proceedings on the basis of self-sufficiency and self-financing, the specialization and concentration of agricultural production. Benefits of specialized models of farms are the possibility of mechanization of labor-intensive processes, reducing labor costs, production of high quality competitive products.

Formation of well-functioning models of (peasant) farms should be based on maximum account of nature - economic conditions, competitiveness and meet the demands of the market quality of consumer goods, interaction with external stakeholders - consumers, suppliers, services and resources, maximizing profits, providing expanded reproduction. Taking into consideration the methodological approaches for the Northern region of Kazakhstan, a rational types of peasant (farms) are offered: Grain and grain - cattle specialization with the size of arable land from 300 to 3000 ha, using a 4- dipole cereal crop rotations with one steam field, 5- dipole - with one steam field and 5- dipole – with one steam and profitable field of perennial grasses that will increase wheat yields up to 15-16 kg/ha.

Experience of the small peasant (farmer) farms shows that for weak material and technical basis, without cooperation is not possible to create a highly profitable and efficient production, promote stability and competitive status of this form of management.

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