

## Farm management specificity under the conditions of low land price

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To approach the influence of land price on managerial priorities and tools in Russia, we address the following questions: 1) what is agricultural land price in the country; 2) what factors define its level; 3) what are the differences in farming practices under high and low land price; 4) what are the differences in managerial toolset due to different farming practices.

Table 1 addresses the first question. As the statistics of actual land<sup>1</sup> transactions virtually do not exist because of a limited number of such transactions, we present the estimated land price in Moscow region and actual data of land auctions in Saratov region compared to actual agricultural land market data of some European countries. Prices of land in two regions, which have relatively favourable economic and environmental conditions for agricultural production compared to many other Russian regions, are outstandingly low in comparison to European level. Given such level of prices, one can hardly expect that the land can be traded in a wide scale, except for non-agricultural purposes.

There are two groups of factors making land in Russia so cheap: permanent and temporary (i.e. specific for transitional period). The first group includes relatively low population density (that does not affect Moscow region but many other regions) and unfavourable environmental conditions (either short summer or scarce and unstable precipitation on most of territory). The second group includes relative shortage of turnover assets (table 2); underdevelopment of rural financial system; costly restructuring of production; underdevelopment of rural infrastructure; price structure in national economy that is unfavourable for agriculture; complicated legislation and uncertain property rights; managerial failures caused by permanent changes in economic and juridical environment, which makes it impossible to effectively use accumulated managerial experience. The factors of the second group can be potentially used as means of affecting land price.

Different land price assumes different farming practices. 1) The higher the price of land the more intensively it is used. 2) Private land property hardly can be spoken of when the land costs too few, because owner's obligations cost about higher than the property itself; land

<sup>1</sup> Hereafter under the term 'land' agricultural land is assumed.

market also cannot work, being shrunk to solitary bargains due to transaction costs.

1. Average prices of agricultural land in Russian regions compared to EU countries, euro×1000 per ha

Countries	1995	1998	1999	2000	2001
The Netherlands	19,7	24,9	31,5	36,4	...
Spain	11,8	16,3	17,5	18,8	19,0
Belgium	12,9	12,6	13,9	14,1	15,9
Italy	10,8	12,8	13,2	13,7	14,3
Denmark	7,6	9,7	10,5	11,0	12,9
Greece	12,2	11,8	11,6	11,9	11,9
Great Britain	6,0	9,2	10,0	11,7	11,6
Finland	3,0	3,1	3,4	3,9	4,0
Sweden	1,2	1,6	1,7	2,0	2,0
Moscow region	1,3 <sup>1</sup>	0,47 <sup>2</sup>	0,10 <sup>3</sup>	0,50 <sup>4</sup>	0,43 <sup>4</sup>
Saratov region	...	0,008 <sup>5</sup>	0,008 <sup>5</sup>	...	...

Sources:

On EU countries: National statistics agency of Sweden.

- 1) Author's estimation (partial equilibrium model).
- 2) Reformation of economic relations in agrarian sphere / A.V. Gordeev, ed. Moscow, 1999.
- 3) Author's estimation (based on farm behaviour model).
- 4) Estimation by N.V. Il'ina (LP model of land rent).
- 5) Data of land auctions in Saratov region.

2. Resources per unit of gross agricultural production in corporate farms (% to 1990)

Resources	1995	1996	1997	1998	1999
Agricultural land	167,9	185,0	176,8	222,0	208,4
Arable land	180,6	197,3	188,3	233,4	217,9
Fixed assets					
Tractors	158,5	161,9	...	178,7	155,7
Harvesters	147,2	148,2	...	161,5	139,2
Overall power sources	170,3	174,8	...	188,2	164,0
Turnover assets					
Mineral fertilizers	31,2	34,7	33,9	37,4	30,0
Fuel	68,4	66,5	70,0	75,5	61,3
Electric power	162,0	165,6	139,9	162,6	137,7
Fodder	117,8	109,0	94,2	106,6	...
Concentrated fodder	114,7	99,0	86,8	105,0	...

Source: Federal statistical committee of Russian Federation.

3) Consequently, cheap land cannot serve as mortgage means, being replaced by incomplete production mortgage. 4) Because of extensive technologies, which prevail when the land is cheap, the structure of farm assets shifts to a larger share of turnover assets. 5) The same

reason motivates use of low-paid workers instead of machinery, meanwhile under high land prices highly qualified and paid labour force is required first of all. 6) Intensive use of expensive land assumes wide application of chemicals while cheap land stimulates ecological production with minimal or zero use of fertilisers, herbicides etc. 7) A farm using cheap land would typically have larger land area and smaller share of arable land, because under extensive farming small land plot would bring too few production to motivate entering agricultural business.

All the mentioned differences can be observed between European (also Eastern European) and Russian farms. They remained unchanged in spite of restructuring and forming a new juridical and institutional environment in order to support private property and market process, although there are many noticeable changes in management, marketing policies and production structure. It is quite natural that the specific type of farm that is determined by cheap land needs some specific managerial tools to achieve its business aims satisfactory.

Low land price makes a manager to think about replacements for three means that she/he used to have at hand in a farm using expensive land. The first is borrowings secured by land mortgage. The second is high wages as a motivating factor for employees. The third, leasing as an opportunity to expand fixed capital and introduce the newest technologies. Instead, her/his financial strategy should consider incomplete production mortgage, integration with industrial and financial enterprises in order to get access to credit resources against their security, wide use of state support (in particular, bidding for futures contracts against state credit), optimisation of cash flow and of turnover assets structure. Labour motivation should use a cheap resource of land: more workers can be employed if a household plot usage is among the terms of labour contract. To involve more resources in production process, the manager is rather interested to use more land than to lease expensive fixed assets. For this purpose she/he actively co-operates with householders, who manage to produce agricultural products by means of minimal possible amount of assets.

#### Conclusions.

1. European management experience may cause failures in Russia, where land is cheap and, because of that, managerial priorities and tools are different.

2. The managerial practice and education of managers in Russia should be adjusted to the conditions of low land price. In present situation Russian manager has to be able to efficiently use the above mentioned managerial tools.

3. The key element of land market development in Russia is increasing land price by means of overcoming temporary factors of low price. Otherwise Russian countryside will unlikely benefit from market system just because it won't work.