# Organizational innovation in Russian agriculture: the emergence of "New agricultural operators" and its consequences

Dmitri N. Rylko, General Director, Institute for Agricultural Market Studies (IKAR), Head of IMEMO Agribusiness Center, Moscow, Russia

Robert W. Jolly, Professor of Economics, Iowa State University, Ames, Iowa, USA

## 1. Problem definition

During the 1990s Russian and FSU agriculture experienced dramatic decapitalization, downsizing and fragmentation. All the key indicators of agricultural efficiency and productivity have substantially deteriorated. According to the official concept, the organizational landscape of domestic agriculture is composed of three sectors ("orders"): collective farms that have undergone primary privatization, individual (family) farms, and subsistence plots[1]. Due to many reasons, including insufficient structural reform policy, private farming did not take deep root in Russia. Collective farms and subsistence plots (that are closely linked and interdependent with collective farms) both account for the largest share in gross agricultural output (about 45 and 50%, respectively).

Within the private investment community Russian agriculture has inherited a reputation of sector fraught with loss of credit and low return on investment. Agricultural financing was considered the highest risk venture-type activity.

However, at the end of 1990s the widely spread perception of Russian farm sector as "hopelessly stagnating" began to change. Russian agriculture, especially crop production, has been steadily growing since 1999. Deep organizational changes and innovations are underway in the domestic farm sector. **The domestic collective farming segment is the key target and subject of innovations.** Outside investors and operators have acquired control over farm assets (including thousands of hectares of Russian farmland) from the primary nominal owners and possessors. As a result, exceptionally large commercial farm operations – "***agroholdings***" - are being created. At the same time, some "traditional" agricultural producers have begun to modify and extend their farming activities. Both inside and outside innovators are introducing organizational changes such as vertical integration, custom and contract farming, land leasing, machinery sharing and others.

Our working "hypothesis" is that "***new agricultural operators" (NAOs) is a heterogeneous transitional sector in the domestic agriculture***. For the purposes and convenience of the study, to draw the virtual frontiers we define two main features of the newly emerging "sector":

- Active participation of non-agricultural entity in the farm production decision-making and
- Investing ("value at risk") in agriculture.

One should stress that the definition of NAOs sector frontiers is rather conditional. NAOs may be viewed as both a transitional *sector* and a *group of ways* of converting "traditional Soviet collective farm" into something different. We will describe this later in the paper. "*New agricultural operators"* is a conditional term that we use to identify and describe new players and new functions in the Russian agriculture.

---

[1] Serova (1999), Uzun (2000). There are various modifications of this basic classification: The fractions of collective farms (or updated collective farms) are called corporate farms. They are grouped by official legal status (joint stocks, production coops, etc.), by financial status, and by gross revenues. Some researchers combine individual farms and subsistence plots into a single private farming «order».

The size, scope and character of the ongoing innovations are a serious challenge not only to the domestic, but also to the world agriculture in general. Since most NAOs rely on hired labor, they represent an even further retreat from the individual family farm concept.

## 2. Theoretical background and working hypothesis

Theory says that at the heart of any innovation lie transaction and coordination costs along with informational asymmetries. A firm develops new ways of doing business to reduce these costs and align incentives among and between economic agents. An organizational innovation has the potential to reduce or mitigate factor and product market distortions – at least in the short run. In the long run an organizational innovation can lead to inefficiencies or inequities through, for example, concentration of power and absentee ownership. Such inefficiencies can overwhelm any short-term societal gains. As a consequence, we believe that it is essential to understand how and why the organization of agricultural firms in Russia is changing and what these changes imply for future productivity, competitiveness, rural development and income distribution.

Several working "hypotheses" should be mentioned that could explain the emergence of NAOs. Among them are:

- *Incomplete and insufficient markets*. Incomplete transitional markets cause market imperfections and stimulate over-reliance on vertical and horizontal integration as a tool to mitigate extremely high transaction costs and risks. It seems more economical and less risky to produce inside the firm rather than buy from outside. Such a behavior is a specific analogue of well-studied developments in the US and West European agriculture in the 1950s, 1960s. Incomplete transitional markets also cause unequal conditions for competition between firms and industry branches. Those firms win that have better access to political lobbying groups and administrative power. As a rule, new agricultural entrants possess such a political and administrative power.

- *Weak or non-existent rural banking system*. It makes intra-firm capital flows the only real alternative tool of investing in agriculture.

- *Manageability trap*. The immediate result of collective farms' primary privatization was that land assets were divided into hundreds of small virtual land shares, while the rest of farm assets formed charter capital of the farms. It created a very risky environment for the farm management, control and investment. In addition, the productivity of a "traditional" collective farm was so low that it was incapable of servicing short or medium term debt. This led to the development of new organizational strategies that could bypass the fragmentation of assets.

- *Consequences of the 1998 financial crisis*. Devaluation of Ruble led to a sizable import substitution and export-oriented demand for domestic foods. Despite low prices for key agricultural inputs and devaluation of farm debts it met very low supply elasticity of the "traditional" Russian agricultural producers. New entrants and formats have captured the opportunity. Again, studied phenomena can be viewed as a rough analogue of US "bonanza farming" in the late 19th century and middle 1970s[2].

- *Long-term shifts in opportunity cost of capital* (type of application of the convergence theory). One may say that due to dramatic long-term decapitalization and downsizing agricultural asset values are now more in line with earnings. From this point of view agricultural investments are quite competitive (as compared with other sectors of the economy).

[2] Drache (1964).

- *Influence of foreign trade and investments* (including FDI) on the domestic economy. One should mention that many new farm operators are closely linked with opportunities and needs of foreign trade and investments, including technology and management transfer.

Evidently, the above-mentioned «hypotheses» have both causal and functional connections with each other. Some of them explain "growth opportunities", while others put sector "growth limitations". **However, in our view, none of them taken separately can satisfactorily explain the emergence of new organizational and functional agricultural forms**.

## 3. Research approach and sources of information

The research questions posed in the foregoing discussion are:

1. Why and how is organizational innovation taking place in Russian agriculture?
2. What is the scope of changes?
3. What do these changes imply in terms of future productivity, competitiveness and social welfare?
4. Why is a further retreat from the concept of independent family farm taking place and is it inevitable?

In order to address these issues we employ the combination of empirical analysis, survey (interviews and questionnaire) and (micro) case study approaches. Case study research methods are ideally suited for examining "how" and "why" questions. Further, they can be particularly helpful when dealing with unprecedented change and when data is not available or reliable. In this section, we sketch the approach taken and describe the research design. Our case study research design follows the model developed by Yin[3].

Individual NAO was chosen as a unit of analysis. We developed a series of case studies of NAOs that differ by their position within the supply chain and their motivation for organizational innovation. The initial propositions were as follows:

Organizational innovation by NAOs

a. Is driven largely by the firm's need to reduce transaction and coordination costs or exploit economies of size,
b. Is driven by the need to reduce costs associated with inadequate market infrastructure, commercial law, political influence or regulation,
c. Is driven by opportunities to acquire productive assets that are under-priced due to market imperfections, information asymmetries, poverty or the absence of clearly defined and enforceable property rights.

A standard case study protocol was developed. Finally, cross case analysis was conducted to examine the propositions listed earlier..

As of today we have conducted 5 full-size case studies and several dozen micro cases addressing a limited number of key questions.

Complementary to case study, the method of empirical analysis was used. Various sources of information, including Russian Internet, newspapers, industry journals, personal contacts were employed to put together and perpetually update the unique Russian NAOs data base. Right now it contains the background information on more than 150 NAOs.

---

[3] Yin (2003a, 2003b). For examples of case study research on agricultural issues see Doye et al. (2000), Schertz and Doering (1999), Drache (1964), Westgren and Zering (1998).

## 4. Main results of the study

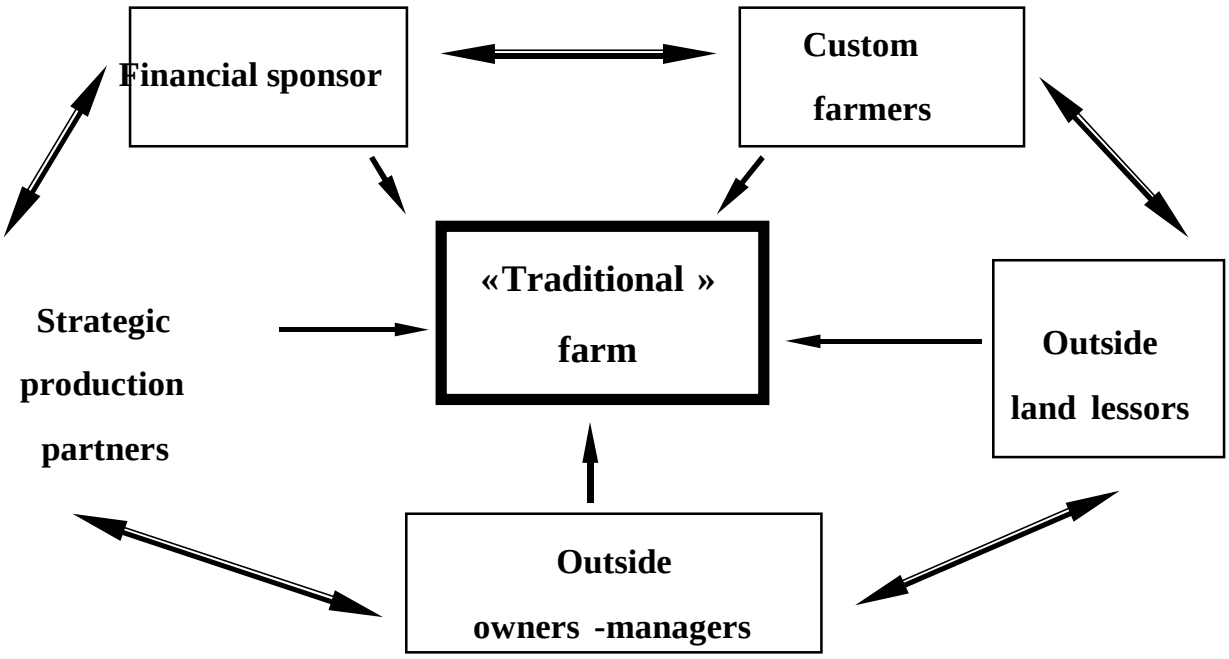
Section 4 provides just a brief summary of most important findings of the study.

### .4.1 Entry patterns and functions

We distinguish five principal patterns of an outside operator's entry in domestic agriculture (Figure 1):

- become financial "sponsor" of the farm
- enter joint production agreements
- provide custom farming services
- lease agricultural land
- acquire farm's non-land or total assets.

**Figure 1. Entry patterns and functions**




The ownership and control patterns, as well as functions of "traditional" independent collective farms are being eroded and modified by outside operators. *Sponsored farms* occupy an intermediate position between "traditional" and "new" farms. "Sponsors" are usually wealthy non-agricultural entities. They do not directly control and own farm assets and do not manage the farm on a daily basis. Sponsors typically bear the farm's financial failure risk. Their main function is to provide a guarantee to an input supplier or financial creditor or to invest in farming activities themselves. The sponsored farms usually belong to the elite part of Russian collective or private farms. Another indirect sponsor's function is to assist transformation of a "traditional" farm into a more up-to-date operation. Under *joint production agreements* outside entities don't become owners of farm assets, but participate in farm production decision-making. Under *custom farming*, an outside firm provides production services and partly bears the risks of crop failure, adverse commodity price trends and other market developments. Under *land lease agreements* an outside firm engages in all production activities and takes agricultural risks dependent on and limited by the size of the leased land plot. *Acquisition of farm non-land assets* is typically accompanied by land lease from individual land share owners or municipal authorities and fully makes the firm an agricultural producer. In most Russian cases the acquisition of non-land assets is made in the form of establishing a new legal

entity that is not burdened with overdue debts. The new entity acquires the most valuable physical assets from the old farm and in one way or another (gradually) solves the old farm's outstanding debt problem[4]. The side effect of the operation is the emergence of numerous "shell" (asset-empty) legal agricultural entities that exist only on paper.

### .4.2 Size and scope of NAOs sector

As of late May 2004 we have collected information on 150 NAOs functioning in 32 out of 89 Russian administrative regions. Many developed domestic agricultural production regions (such as Astrakhan, Kaliningrad, Kaluga, Kemerovo, Novosibirsk, Tyumen, Vologda, Russian Far East region, etc.) have not been examined yet due to the limited size of the study. And many regions, although included into the database, are still under-investigated. In addition, our list of NAOs does not include such "frontier" NAOs formats, as custom farming (unless they are linked with concrete farming unit), "sponsored" and "joint production agreement" farms. In our survey we focused on land lease and non-land farm acquisition formats.

Out of 150 surveyed companies, managers of 115 provided information on the size of controlled land. Others failed or refused to provide the information, or it was irrelevant due to the commercial livestock specialization of the holding. In 2003 the total number of farm production units controlled by the 115 companies amounted to 1026 entities, and agricultural land area under their control - to 6119 thousand hectares.

### .4.3 Origin and entry period

The data on origin of the farm holding "mother company" (farm project originator) is quite ambiguous as most of them are diversified, while others are parts of bigger holding groups. The general distribution by sector of origin and period of emergence is given in **Table 1**.

**Table 1. NAOs matrix by origin and entry period, thousand ha and %**

| | A | T | F | AS | AG | C | U | B | S | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Before and 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 530 | 601 |
| 1999-2000 | 585 | 34 | 369 | 47 | 0 | 345 | 0 | 0 | 942 | 2323 |
| 2001-2003 | 727 | 90 | 498 | 166 | 55 | 259 | 217 | 110 | 1334 | 2256 |
| Total | 1312 | 124 | 867 | 213 | 55 | 604 | 217 | 181 | 1606 | 5180 |
| % | | | | | | | | | | |
| Before and 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 33 | 11 |
| 1999-2000 | 45 | 27 | 43 | 22 | 0 | 57 | 0 | 0 | 59 | 45 |
| 2001-2003 | 55 | 73 | 57 | 78 | 100 | 43 | 100 | 61 | 8 | 44 |

Notes: Data for holdings that answered the respective question. Origin: industry focus of the mother company. A – diversified agribusiness, T – procurement and ag commodity trade, F – food industry, AS – ag supplier, AG – agricultural producer, B – banking/finance, S – state and quasi state entity, N – unidentified, C – industrial conglomerates.

Source: IKAR NAOs database.

Table 1 confirms the theory of multiple motivation for NAOs start-ups. The surveyed companies with various agribusiness and other industry roots entered agriculture immediately after the 1998 financial crisis or in modern post-crisis time, in response to the booming food consumer demand and growing ag. commodity export opportunities. The surveyed companies with direct banking and financial roots entered agricultural production either well before, or well after the financial crisis. Finally, the state and quasi state organizations represent the most diversified entry cause/motivation spectrum. Some of them are quasi-privatized parts of traditional Soviet industrial monopolies (*Gasprom*), some remain owned by regional governments (*Bashptitseprom*), some were recently

[4] For more details see e.g. Rylko (2002).

formed by regional governments to manage and update bankrupt farms (state-owned *Voronezhinvest*).

### .4.4 Regional location and concentration

NAOs tend to be created in the most productive regions, characterized by "strong" local agricultural policy (subsidizing level) and close access to the end user market. According to the Moscow oblast agricultural officials, more than half of oblast's collective farms are already controlled by "investors". In Tatarstan (according to local officials) "investors" acquired about 700 thousand ha, or 15% of all farmland. In Oryol oblast, according to our (incomplete) database, NAOs control 56% of all farmland. The concentration of holding companies may be even higher at rayon (district) level. In Belgorod, Krasnodar, Moscow, Tambov oblasts there are rayons, where almost all collective farms are controlled by one holding company. As a rule, the key local procurement and/or food processing facility is controlled by the same company. Such a concentration of power presents a challenge to the domestic agribusiness decision-makers.

### .4.5 NAOs project profiles

Out of 150 surveyed companies, 58 specialize on crop production, 48 are diversified farm operations and 26 are livestock producers (the rest failed or refused to provide information on specialization). More than 30 surveyed companies gave annual agricultural revenue figures. They show quite a strong correlation between project land size and earnings in case the company is a crop or diversified farm operation.

Table 2 provides information on crop and diversified farm operations by project land size. Being a part of the emerging sector, NAOs vary greatly by project size. It may range from one farm unit with several thousand hectares (*Uspenskiy Elevator*, Altay; *Krasnodaragroalians*, Krasnodar) to a multi-unit mega-size farming operation located in several regions (*Youg Rusi*, *Razguliay*, etc.).

**Table 2. Break-down of NAOs ag lands by origin and size**

| | A | T | F | AS | AG | B | C | U | S | Total: |
|---|---|---|---|---|---|---|---|---|---|---|
| *Thousand ha* | | | | | | | | | | |
| >300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1344 | 1344 |
| 200-299 | 200 | 0 | 0 | 0 | 0 | 0 | 180 | 0 | 0 | 380 |
| 100-199 | 692 | 0 | 225 | 100 | 0 | 0 | 0 | 0 | 239 | 1256 |
| 50-99 | 214 | 72 | 255 | 65 | 85 | 110 | 286 | 80 | 0 | 1167 |
| <50 | 414 | 191 | 445 | 123 | 142 | 71 | 216 | 346 | 23 | 1971 |
| Total: | 1520 | 263 | 925 | 288 | 227 | 181 | 682 | 426 | 1606 | 6119 |
| *Number of holdings* | | | | | | | | | | |
| >300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 200-299 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 100-199 | 6 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 11 |
| 50-99 | 3 | 1 | 4 | 1 | 1 | 1 | 4 | 1 | 0 | 16 |
| <50 | 18 | 9 | 17 | 5 | 7 | 1 | 10 | 15 | 1 | 83 |
| Total: | 28 | 10 | 23 | 7 | 8 | 2 | 15 | 16 | 6 | 115 |

Note: see footnotes to Table 1.

Source: IKAR' NAOs data base.

During the last three years the average NAOs size has not grown significantly. In 2001 the average number of production farming units per project (holding company) for the studied 115 companies was 8.9 while the average land area (leased and owned) was 54.8 thousand ha. In 2003 these figures were 8.3 and 53.2, respectively. In terms of modal (most typical) estimate, in 2001 a typical farm project had 3 production units and 40 thousand ha of farmland (total). In 2003 these figures were 3 and 30 thousand, respectively. Moreover, the biggest companies tend not to expand in terms of land area, while smaller ones continue to grow aggressively. In 2001 11 of the surveyed biggest land holdings controlled 2278 thousand ha (207 thousand ha on the average). In 2003 the same

companies controlled 2284 thousand ha, and 3 of them have substantially cut the land area. In contrast, in 2001 36 "small" holdings (30 thousand ha of farmland and less) controlled 523 thousand ha. In 2003 the same companies extended their operations to 1059 thousand ha. These developments may be interpreted as a search for optimal holding size given potential management difficulties faced by the biggest farm holdings. Such a conclusion is confirmed by our case studies (*EFCO*, 2003). It is also important to mention that the biggest holdings tend to be not in the private agribusiness, but in the state and quasi-state origin category.

### .4.6 Drivers of the sector

The data in Table 1 and other company survey materials demonstrate that even in the most recent years (after the well-documented post-crisis entry motivations have expired) the NAOs sector continues to grow. The number of new registered entries exceeds the number of exits. Probably, the most important fact is that even if a company decides to leave agriculture, its farm project is inherited/taken by another outsider (*OGO*, *Planta*, *ISC* cases). In other words, there is no way back to the collective farm.

### .4.7 NAOs and vertical integration

Our case studies demonstrate that NAOs (in a broad meaning) may or may not be linked with vertical integration. It quite strongly depends on the origin and industry. State and quasi state, as well as conglomerate and banking companies tend to be in agriculture as an industry, not as a part of vertical supply chain. On the other hand, smaller regional agribusiness holdings tend to establish close links with owned farm supply, procurement or processing facilities. Large, diversified interregional agribusiness companies usually employ vertical integration strategies, although the real agribusiness assets' integrity (including farming units) may be very modest. In addition, even a big agricultural operation may not match the company's vertical pipeline needs. Our *EFCO* case clearly demonstrates this: the company possesses a huge multi-farm operation of 100 thousand ha but it covers only about 7% of the company's raw input (sunseeds) requirements.

The highest level of vertical integration is observed in the domestic poultry industry, where 5 leading vertically integrated companies (*Severnaya*, *Planeta*, *Agroholding, APK Mikhailovskiy*, *Golden Rooster*) control 24 farms and provide 35.1% of the national broiler output (*IKAR*, 2003). Other identified holding companies control another 13.1% of the output, while the rest is still produced by independent collective farms. In other industries the level of real integration is much lower, although the presence of leading agribusiness companies in agriculture is high. For example, in the grain industry out of 10 leading exporters 6 (*Agrico, Aston, Razguliay, Roskhleboproduct, Youg Rusi, Yugtransitservice*) have grain production projects. In the sugar beet industry all the 10 leading companies (accounting for about 85% of the output) have sugar beet production projects. However, both in the grain and sugar beet sectors the level of company captive-owned supply remains quite modest.

### .4.8 Influence on farm factor and product markets, and internal organization

Case studies form the background for this part of the report. The summary of our findings related to the internal structure and vertical supply chain is given in Table 3.

**Table 3. Summary findings: market imperfections and organizational change in agriculture**

| | ***Traditional or prevailing practice*** | ***Organizational response*** |
|---|---|---|
| | *Inputs* | |
| Fuel supply | 1. District fuel stations and intermediaries arrange official and "hidden" long and short barter agreements with local farms. 2. Regional authorities arrange budget-debt schemes between fuel suppliers and farms and allocate fuel to farms against deliveries to regional food fund. | No substantial change is observed: fuel is purchased through district fuel stations. However, banking cash transfers allow to improve terms of trade and to guarantee quality of fuel. |

| | | |
|---|---|---|
| Seed supply | Raw crop seeds (sunseeds, corn, sugar beets) are acquired through various intermediaries. Cheap varieties are usually obtained. | Mega-deals at the level of agriholding headquarters prevail. Raw crop seeds are obtained from licensed dealers of international seed companies, or directly from originators. Own multiplication centers are established. Mass transfer to hybrids takes place. |
| Feedstuffs supply | Primitive on-farm production and/or purchase of standardized concentrates from independent feed mills. | Feed mills are incorporated into a vertically integrated company. Farms order formulas specified according to the current market situation and livestock growing needs. Holding company places mega orders among global high protein feed and premix suppliers. |
| Fertilizers supply | 1. Purchased by farms for cash from local distributors. 2. Arranged through long barter schemes by regional administration and distributed to local farms to be repaid in-kind on highly disadvantageous terms. | Centralized mega-deals between agriholding and global supplier. Partial pre-payment combined with credits opened against turnover. The final pay-back is made in money, not in kind. |
| Crop protection | Same as fertilizers. However, as compared with fertilizers regional budget schemes are less employed since chemicals are considered a type of secondary inputs. | 1. Same scheme as for fertilizers. 2. Agriholdings organize tenders between local distributors of big chemical firms to supply them with chemicals. A substantial cut of distributors' margins is observed as the result of these practices. |
| Machinery and equipment | Large collective farms own machinery, as well as provide/hire custom services to neighboring farms (when available). There are substantial differences between farms: from excessive capacity to lack of pieces of integral technological chain. | Professional custom farming companies operate at the local, regional and inter-regional level. Custom service market is offering more and more competitive rates. |
| Credit | General lack of farm's commercial bankability, from business planning to business transparency causes inability to "package" the farm business for the bank. Weak farm collateral potential causes constant lack of working capital finance and collection cases, which in turn causes high dependence on non-banking finance, namely local authorities, or intermediaries. | Centralization of debt financing process at the agribusiness holding headquarters' level. Business planning is formalized and standardized. Companies consolidate entire collateral mass. To obtain a banking ag finance, they mobilize non-agricultural and non-agribusiness collateral. Contrary, farm commodity collateral is used to obtain banking finance for non-agricultural part of the holding. Credit limits are established for the entire holding, not a single operational unit/ branch of business. |
| Labor | (Relative) excess of permanent low-skilled and undisciplined farm labor. | New operators gradually cut excessive farm labor. Highly qualified temporary crews of engineers are hired outside. |
| Land | "Mother farm" leases land from virtual land share-owners. Lease agreements are often not formalized. Often no payment is made due to the lack of official farming activities.<br>Land is taken into informal lease and cultivation by "farmers". | Long-term lease of defined land plots (fields) is registered in the local registration body. Land lease rates are proposed by the single farm management and approved by the holding headquarters. Rentals are regularly paid. First attempts are made to include and evaluate long-term land lease agreements as a part of overall company collateral portfolio (as a type of additional bank loan security). |
| *Various services* | | |
| General manage-ment structure | Traditional Soviet-type management structure with two extreme scenarios: either autocratic strong farm manager (rare cases since such farms tend to become agriholding companies themselves), or weak manager highly dependent on numerous labor and local authorities. | Rely upon many positive aspects of centralization. Tend to create highly hierarchic top-down *up-to-four-level* management structure: Moscow-based holding headquarters – industry/regional management company – regional farming holding - farm. Sometimes quite chaotic steps from "vertical industry" to "regional cluster" and back. Top farm managers are often replaced. High risk of undermining reasonable and timely farm decision making process.<br>Outsourcing narrow agricultural specialists to solve concrete managerial and technical problems. |
| Tax manage-ment | Tax arrears. Inability to obtain "VAT compensation". Overpayment of taxes by (very few) disciplined farm taxpayers.<br>In those regions that introduced the single farm tax, farms get into seasonal "tax trap". | Employment of sophisticated legitimate tax optimization (VAT, social benefits) schemes.<br>Professional teams of in-house lawyers solve problems with the single farm tax payment. |

| | | |
|---|---|---|
| Crop insurance | Practically unavailable for collective farms. | Attempts to strike comprehensive crop insurance deals at the holding headquarters' level. Face substantial difficulties due to inadequacy of the current crop insurance state support. |
| *Marketing, product risk management* | | |
| Marketing of farm products | Prevalence of spot and "pocket" cash sales provides disincentives for labor and undermines farms' bankability. | Developing "captive market" strategies. 1. Farm tends to become a part of the vertical supply company pipeline. 2. Signing a global off-take agreement with reputable food processors and exporters. Known reliable buyers and predictable transparent cash flow positively influence all aspects of farm performance. |
| Legal protection | Farm is almost disarmed before numerous regulatory bodies and business counterparts. | An army of holding company lawyers is defending the company's portfolio, including farm assets, claims and obligations. |

Source: authors based on case studies.

## 5. Selected conclusions and policy recommendations

1. It is clear that the traditional domestic three-sector Russian farming doctrine is not adequate any longer. All aspects of the domestic farm policy – from official agricultural statistics to state farm support - must be reconsidered given the emergence of new operational formats. The official definition of an "*agricultural producer*" should be matched with the reality. For example, a full service highly capitalized custom farming operator can be considered not a producer (and will not be eligible for farm support programs), while a "shell" (asset-empty) collective farm may still enjoy various producer privileges.

2. The destiny of independent collective farm. It appears that independent collective farm is gradually dissolving. One should briefly mention just three of its biggest problems: (a) Numerous nominal owners-employees lack real ownership and control function; (b) Lack of bankability due to inefficient management (reasons are rooted in (a)); (c) Lack of legal and organizational protection, which makes the farm exposed to very high risks in the modern domestic political and economic environment. The decision makers must keep in mind this potential historic scenario when considering policy measures.

3. The destiny of individual family farming. Despite its apparent failure in modern Russia, in the long term we remain optimistic about the concept of family farm in the country. There are first signs of turning mega-farming projects towards more operational freedoms of smaller production units. Some holdings create and incorporate family farms into their operations. Again, the decision makers must keep in mind this potential historic scenario when considering policy measures.

4. In a relatively short time NAOs have become the most powerful sector in the domestic agriculture. The sector's agricultural value at risk is enormous. Meanwhile agribusiness administrators tend to ignore the NAOs' views on the key domestic agribusiness regulation programs. The classic example is the regulation of domestic sugar and meat industries. NAOs must make efforts to launch the sector's consolidated lobbying platform, while authorities must develop mechanisms to respond to the powerful industry voice. One of the solutions is the approval of Law on industry associations.

5. To make necessary investments in agriculture, NAOs have to collateralize their non-agricultural assets (at least in the foreseeable future, having in mind domestic agriculture's under-capitalization level). First, it refocuses and distracts company's resources from key industrial projects. Second, given naturally high agricultural risks the company faces a significant threat of losing its entire business. The government should provide adequate support package helping to mitigate risks of new agricultural investors. The brief list of the most urgent measures is as follows:

- Radical modification and strengthening of the absolutely outdated general and agricultural collateral legislation (efficient grain warehouse receipts legislation and enforcement system, legalization of lean rights, launching of rural credit bureaus and collateral filing offices,

launching of simplified out-of-court credit enforcement procedures). These measures would many times increase the rural collateral mass and make investments against rural collateral less risky.

- Modification of the current crop insurance government program to make it more available and reasonable for the wide range of agricultural investors (development of alternative subsidized insurance packages, shift from all-inclusive to specific risks coverage packages, conversion from historically low to investment-based insurance values, satisfactory solution of reinsurance issue, and others). Again, such a modification would lower pre-harvest investment risks.

6. Land lease and ownership rights. The issue remains extremely foggy, which makes long-term investments in agriculture extremely risky and costly. For example, before signing land lease agreements, new entrants have to take care of proper land ownership rights' registration by numerous individual land share owners. In other words, they pay for the bad government job. And the cost of land plot registration may exceed the cost of land itself. It would be reasonable if these costs were born by authorities, not the private business.

We are eyewitnesses of just the initial steps of domestic agriculture's organizational change. Further intensive research is necessary to track the situation and make profound observations and recommendations.

## 6. References


AAKRE, D. (1999). Custom farming rates on North Dakota farms, NDSU, January.

DOYE, Damona, Robert Jolly, Rob Hornbaker, Tim Cross, Robert P. King, William Lazarus, YEBOAH Anthony. (2000). Case Studies of Farmer's Use of Information Systems. Review of Agricultural Economics 22(2): 566-585.

DRACHE, Hiram M. (1964). The Day of the Bonanza; A History of Bonanza Farming in the Red River Valley of the North. North Dakota Institute for Regional Studies.

HOPPE R., Johnson J., Perry J., Banker D. (2000). A new farm typology for a diverse ag sector. ERS USDA.

RYLKO, D. (1999). Operators Farming in Russia. IMEMO working paper, Moscow.

RYLKO, D. (2000). «Operators farming»: a new sector in the Russian agriculture. The Russian economic barometer Vol. IX, N2, pp.11-19.

RYLKO, D. (2002). New operators in Russian agriculture. Russian Politics and Law, 40 (2).

RYLKO, D. (2002). New agricultural operators, input markets and vertical sector coordination. In: FACTOR MARKETS IN RUSSIA'S AGRI-FOOD SECTOR: framework for further analysis. IET, Moscow.

SEROVA, E. (1999). The impact of privatization and farm restructuring in Russian agriculture. IET, Moscow.

SEROVA, E., ed. (2000). Agroprodovolstvenniy rynok Rossii. IET, Moscow.

SEROVA, E., Khramova I. (2000). Emerging Supply Chain Management in Russia's Agro-Food Markets, Discussion Paper n. 14, Bonn, July.

UZUN V. (2000). Agrarnaya structura Rossii: tipy, rol, razmery i effectivnost khozyaistv. In: Perekhodnaya agrarnaya economika: problemy, reshenia, modely. VIAPI, Russia.

WESTGREN, Randall and Kelly Zering. (1998). Case Study Research Methods for Firm and Market Research. Agribusiness 14 (5).

YASTREBOVA, O., Oijen R. (1999). Agricultural Debts: Problems and Solutions. TACIS, Belgium.

YIN, Robert K. (2003a). A Case Study Research: Design and Methods. Third Edition. Sage Publications.

YIN, Robert K. (2003b). Application of Case Study Research. Second Edition. Sage