

Methodology of Efficient Business Form Determination in the Process of Institutional Transformation of Agricultural Sphere in Russia

¹E.A. Aleshina, ²L.N. Mineeva, ²A.I. Pshentsova, ²L.A. Sleptsova and ³G.S. Klychova
¹Volga Region Research Institute of Economy and Organization (AIC), 410010 Saratov, Russia
²Saratov State Agrarian University named after N.I. Vavilov, Saratov, Russia
³Kazan Federal University, Kazan State Agrarian University, Kazan, Russia

Abstract: The study deals with the analysis of institutional transformations carried out in conditions of market relations establishment in agricultural economy. Scientific concepts and conclusions of the researchers are accompanied by the research results of numerous works fulfilled by the domestic and Foreign researchers on the issues of formation, development and transformation of institutional structures in agriculture pertaining to Federal and regional AIC. The research resulted in demonstration the influence of business forms on economic efficiency of their market activity through optimizing of specialization and diversifying of production and applying estimation criteria basing on indicators accounting of profit-making per each employee, per arable land hectare and production profitability level. The offered methodology enables to evaluate efficiency of institutional transformations in agricultural sphere and adjust their direction for activating and support of more perspective business forms.

Key words: Transformation, business forms, institutional transformations, peasant farm enterprises, private household plots, agricultural enterprises, formal institutions, non-formal institutions, efficiency

INTRODUCTION

The current Russian agricultural institutional structure cannot be considered optimal as there exist no progressive development of enterprises: yielding capacity, labor productivity, energy consumption, profitability fluctuating by years and on the whole, the domestic agricultural production does not provide the national security. Market transformations are not coordinated in many issues with social, cultural and historical traditions in rural regions, development peculiarities of Russian agriculture. All this resulted in contradictions currently hindering the formation of the efficient owner in agricultural production and restraining this industry development.

As a result of institutional transformations most of agricultural manufacturers failed to adapt themselves to market conditions, so, unprofitable and low-profit enterprises prevailed. Thus, the research of business forms transformation in conditions of institutional changes of Russian agricultural economy and determining of the most efficient forms for enterprises shall be relevant both in theoretical and practical aspects of agrarian market operation.

The study aims at substantiation of institutional transformations substantiation as well as development of methodology for efficient owner formation in agricultural business of Russia.

MATERIALS AND METHODS

Theory: Systematic approach as dialectic method of knowledge as well as institutional theory became methodological basis for the research. Its founder D. Nort remarked that new institutions appear when there occur opportunities for profit making which cannot be acquired in conditions of the already existing institutional environment.

Economic literature gives a wide coverage of business form's transformation process. It presents transformation of enterprises of one organizational-business forms into the other very different ones so that, each enterprise could have all conditions for maximum application of its resources potential and effective production. Among the followers of such approach are the scientists: Shutkov (2004), Khlystun (2005), Arashukov (2000) and Oleynik (2002). However, this is a rather one-sided point of view as it does not consider the important fact that the establishment of new economic institutions occurs by different methods.

Growth of theoretical knowledge consists in specifying the content of the institutional transformation process at the enterprises with consideration of genetic peculiarities of their origin. They are particularly as follows: formation of new efficiently operating organizational-legal forms (LLC, LLP), restoration of business forms perished in the process of the society's

historical evolution (agricultural cooperatives, joint-stock companies), transplantation of institutions existing in other countries (P(F) e-Peasant (farm) enterprise). The main aspect herewith is optimal adjustment of agricultural enterprise to business conditions.

Federal Service of State Statistics also served a research basis enabling the authors to make accurate and substantiated conclusions on formation of new economic institutions and development tendencies for enterprises of different business forms in RF agriculture. The basic ones among them are the following: annual decrease in the entire quantity of enterprises with different business forms, gross product structure change by categories of businesses which is manifested in the decrease of share in agricultural enterprise's production and the increase of peasant (farm) enterprises and household plots in agricultural production.

Current stage of the domestic agricultural economy development is preconditioned by the formation and improvement of the new model of market institutions in conditions when manufacturers are free to choose their types of activity under different forms of ownership for production means.

Institutional basis for agrarian reform served the formation of new economic institutions-economic-legal forms of property, production and management, financial institutions and market infrastructure.

Institutions differ by the performance degree and are differentiated into formal institutions that is laws developed by people, instructions and rules, business forms, organization as well as non-formal institutions that is formed and publicly accepted stereotypes, traditions and habits, structuring interrelations and legitimizing the activity of formal institutions (Odintsova, 2007).

We consider that the main condition determining opportunities of sustainable and efficient development of agriculture is coordination between formal and non-formal institutions and elimination of contradictions between them. This fact was not considered by the reformers. This is vividly seen by the example of reorganization and privatization of collective and soviet farms (Kolkhoz and Sovkhoz). Vigorous change of ownership and business forms has practically not influenced the production relationships transformation inside an enterprise. Aims and methods of privatization form and speed of transformation have been under permanent criticism and not without reason. However, currently we witness an importance growth not only and not so much of their critical evaluation as the scientific substantiation of development prospects for different business forms (Vyakina, 2016).

To our opinion, neither formal nor non-formal economic institutions, adequate to the market system have been formed to the full extent in agricultural production. The problem of institutional changes solution in agrarian sector implies the necessity of multi-level structure creation and infrastructure of agrarian market. It will enable to form the efficient owner and there through to realize most completely the operation of market tools and institutions (Stepanov *et al.*, 2015).

Thus, in conditions of core institutional transformations relevant is the problem of agricultural enterprises adaptation to the market business conditions. That is why, we have offered directions of agricultural enterprises adaptation to the market. These include: cooperation and agro-industrial integration development (Yurkova and Pshentsova, 2010) intensification of specialization; diversification of production activity considering the peculiar features of labor and material resources at different agricultural enterprises, types of production relations in different entities of agrarian sector, material and technical resources (Subaeva and Zamaidinov, 2015; Mahmoudi *et al.*, 2009), profit distribution character, etc. Herewith, each transformation stage shall be implemented under the state support which is represented on the scheme (Fig. 1) (Pshentsova, 2008).

We have carried out complex generalization and specification of the existing theoretical basics of institutional transformation following the systematic theory and institutional approach. It allows us to determine it as a transformation process of one organization and legal form (formed in the state ownership forms to production means) into absolutely different business forms (mainly of the private forms of ownership), so that, each of the forms could have all conditions for maximum application of its resource potential and effective production (Klychova *et al.*, 2015a-c; Kuznetsov *et al.*, 2016).

To our opinion, transformation of social economic system in Russia into qualitatively new state was narrowed down to a process of reorganization and privatization of enterprises. In other words, these changes involved mainly substitution of the formal owner.

All collective enterprises were subject to reorganization regardless of the efficiency of their activity. This process by large had a character of forced farmerization and destruction of large businesses-Kolkhozes and Sovkhozes (Table 1). Thus, 27.3 thousand Kolkhozes and Sovkhozes were reorganized for the period of 1992-2016 into joint-stock companies, agricultural cooperatives, partnerships (94.6% of businesses), 5.4% preserved their status.

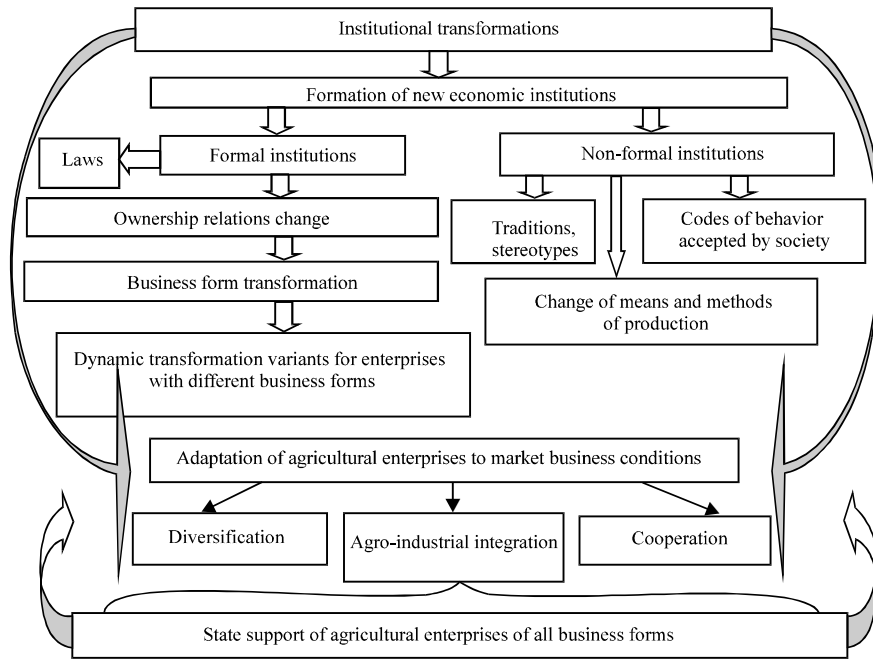


Fig. 1: System of elements of institutional transformations

Table 1: Structure of organization and legal forms in agricultural enterprises of RF (%)

Business forms	1990	1995	2000	2005	2010	2016
Joint-stock companies	-	2.2	19.0	16.2	15.7	15.7
Limited liability companies	-	33.5	22.8	11.5	15.5	20.6
Trust partnership	-	-	0.8	0.8	0.8	0.6
Peasant (farm) enterprise	-	2.8	3.6	1.7	0.9	0.8
Agricultural cooperatives	-	6.6	15.2	46.0	48.5	45.6
Kolkhoz and sovkhoz	100	43.2	23.2	10.9	6.2	5.6
Collective enterprises	-	7.8	6.3	2.3	1.6	1.0
State enterprises	-	-	5.1	6.5	7.7	7.0
Other	-	5.0	4.0	4.1	3.2	3.2
Total	100	100.0	100.0	100.0	100.0	100.0

Thus, structural analysis of an agricultural enterprise enables to observe the tendency of agricultural cooperatives growth in RF. Note that qualitative growth of cooperative form became evident after the financial recession of 1998, after introduction of legislative rules on bankruptcy and insolvency which in its turn, caused the increase of agricultural cooperatives quantity as an adequate measure for preserving property complex integrity in collective farms (Klychova *et al.*, 2014a, b). Here, one may notice another tendency: the number of limited liability companies and joint-stock companies is growing in the recent years which evidences activation of entrepreneurship activity in agriculture. During the course

of the main agricultural products analysis held at the enterprises with different business forms during the period of 1990-2016, it has been established, that currently there has been formed a clear industrial labor specialization between different business categories. It is determined by a peculiar use of labor and material resources at different agrarian enterprises, type of production relations in business entities of agrarian sector, material and technical base, specialization and production concentration, etc.

Thus, main manufacturers of crop production including grain, sugar beet and sunflower in Russia are agricultural enterprises and peasant-farmers enterprises (Klychova *et al.*, 2015a-c). Household plots play an important source of production in such labor consuming areas as vegetable growing, gardening, potato growing as well as husbandry.

RESULTS AND DISCUSSION

Agricultural development in Saratov Region also relies on its multi-structural character. Efficiency of institutional transformations in agrarian sphere manifests itself primarily in the fact, that new institutions created in the process of transformation provide maximum yield from the use of production factors involved into agricultural production (Govvadovskaya and Gorlov, 2011; Klychova *et al.*, 2014a, b). We have proved scientifically the influence rendered by the business form

on economic efficiency of its operation through optimal specialization. It is proved by comparative evaluation of activity efficiency at enterprises with different organization-legal forms, PFE and PHP. We have used the methodology (by example of grain production, considering that in 2016, 66.6% of land under cultivation was engaged by grain) by the following criteria: calculation of profit making indicator per each worker, calculation of profit making per area unit of arable land, calculation of profitability level. Evaluation and calculation of efficiency coefficient of agricultural production location by each business category by Eq. 1:

$$K_p = C \times N / Z \quad (1)$$

Where:

- C = Realization price of grain products
- N = Specific regional crop yield of grain products
- Z = Production costs by each group of entities

Crop yield of grain products at agricultural enterprises in Saratov Region comprises 13.1 centner/ha in PFE-16.3 centner/ha in PHP-15.5 centner/ha which in average figures makes 14.5 centner/ha. Upon calculations one can make a conclusion, that growing of grain crops are preferable in agricultural enterprises, considering that the location efficiency coefficient makes 17.1 in PFE-15.8. The location efficiency coefficient of grain crops at the enterprises being different, the optimal variant of production location in the definite business category (or definite enterprise) from cost accounting point can be reached under the following condition:

$$K_p \times S_i / S_i \rightarrow \max \quad (2)$$

where, S_i is an arable area under a definite crop in ha. If the efficiency coefficient of production location happens to be lower at evaluation of definite situation, it will be necessary to enlarge the arable land area under a definite crop.

Coefficient calculation of agricultural production location at different business forms enables to evaluate opportunities of location in every business category of the most productive product types. Labor efficiency evaluation and calculation of standard profit output per each worker by Eq. 3:

$$\Pi = (C \times K) - Z / T \quad (3)$$

Where:

- Π = Standard profit output (rub.)
- K = Product quality (centners)
- T = Number of workers

Table 2: Aggregate table of efficiency indicators at enterprises with different business forms in Saratov region in 2016

Variables	Proccation location coefficient (Kp)	Standard profit output per 1 worker (Π, rub./person)	Standard profit output per unit of arable land area (ΘΦ, rub./ha)	Production profitability level (Pr. lev. %)
Agricultural enterprises	17.1	8250	545.6	18.0
PFE	15.8	2454	363.6	9.0
PHP	15.2	510	187.0	4.7

Efficiency evaluation of the used land resources and calculation of standard profit output per unit of arable land area:

$$\Theta\Phi = \Pi / S \quad (4)$$

where, S arable land area in each business groups. Opportunity evaluation of increased reproduction and calculation of profitability level of grain crops by business categories:

$$\text{Profitability level} = \Pi / Z \times 100\% \quad (5)$$

Calculations of grain production example manifest, that agricultural enterprises have all benefits in growing grain crops: gross profit value-8250 rub./person, land resources are used most effectively 545.6 rub./ha., the highest profitability level-18% (Table 2).

Thus, such business category at present is able to support simple reproduction, agricultural enterprise has a potential for development. PFE with their profitability level of 9% and PHP with 4.7% are unable to fulfill even simple reproduction. This happens due to the well-known fact, that the extended production can be fulfilled only at those enterprises where the profitability level comprises 25% and simple reproduction demands 12% of profitability level.

This methodological approach can be applied to find optimal profitable specialization and specification of the most profitable types of agricultural production for enterprises in each business form. However, it is notable that at the present stage of agrarian science development one of the most essential aspects in agriculture of the regional agro-industrial complex is the achievement of optimal combination of enterprises with different business forms.

CONCLUSION

Complex generalization and specification has been carried out on the basis of systematic theory and institutional approach concerning the existing theoretical basics in business forms establishment in the process of institutional transformations in agricultural economy. This

process enabled us to notice both positive aspects (institutional import promoted transfer to the market economy) and negative outcomes (the reform has been carried out in short time limits; a lot of business forms have been imposed from “above”, there have been a lot of mistakes in evaluation and distribution of property shares).

RECOMMENDATIONS

Further transformation of agriculture and extension of institutional transformation must create objective conditions for creation of the modern agrarian market in Russia, strengthening of its multi-structural character, broadening of entrepreneur activity and development of efficient organization and legal business forms in agriculture. Finally, it will become one of the important factors for achievement of strategic goals for long-term sustainable development of agriculture in the country and food supply security provision.

Organization and legal business forms have objective character and rely on the clear-cut specialization of each form in definite types of production. This is supported by a comparative evaluation of their activity efficiency by application of the researcher’s proprietary methodology. Such, methodological approach to the activity efficiency evaluation of agricultural enterprises in different organization and legal forms based on such indicators as calculation of profit output per each worker, calculation of profit output per unit of arable land area, calculation of production profitability will enable to duly determine the most optimal specialization for the enterprise and take necessary measures for efficiency increase in production and management spheres of business entitie’s activity.

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