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The influence of the parameters of the cultural code of the organization's employees on the formation of social capital, reduction of transaction costs in the agricultural economy.

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Abstract. Analytical methods such as sociological and expert interviews, content and problem-oriented analysis were used in an attempt to achieve the desired goal. The investigation of behavioural characteristics was based on G. Hofstede's parametrical models adapted to agriculture. The methods we used were intended to achieve the following goals: to reveal the essence of the agrarian sector's transactional costs while taking into account peculiar features in the field, to identify the specifics of behavioural settings and values, the specifics of cost patterns within the regional institutional interaction framework, and to analyse cultural codes and the agrarian sector's path dependence problem.

The parameters of existing organisational culture were studied on the materials of the agrarian sector of the regional economy; transaction cost specifics shaped by cultural component were identified; and research on cultural codes was carried out. The agrarian sector exhibited the following characteristics: an excessive production cycle, unequal income distribution throughout the year, and dependence on natural and climatic conditions. The features outlined above demonstrate the importance of state support and a well-developed communication system. The cluster of cultural components denotes a cultural code that reflects a high level of role differentiation between men and women; prevalent collective consciousness; a tendency to avoid situations of uncertainty and clearly established courses of action and regulations; a low level of self-control and a low level of the need to satisfy basic needs. Specific transactional costs shaped by cultural determinants include: data searching, processing, and storage costs, negotiating and contracting costs, coordination costs, politicization costs, collective decision making costs, and

lost profits costs. The paper aimed to help solving issues related to overcoming informal institutional limitations, also it could be applied for development and accumulation of social capital, implementation of best informal practices on costs reduction by elimination of lost profits, functioning quality increase of transactional sector of economy in general.

Keywords: Agricultural science; organizational culture; social capital; transaction costs

Влияние параметров культурного кода сотрудников организации на формирование социального капитала, сокращение транзакционных издержек в аграрной экономике.

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Аннотация. Целью данного исследования является изучение параметров существующей организационной культуры в аграрном секторе как ресурса формирования социального капитала и ее влияния на формирование транзакционных издержек.

Для достижения желаемой цели использовались такие аналитические методы, как социологические и экспертные интервью, контентный и проблемный анализ. Исследование поведенческих характеристик было основано на параметрических моделях Г. Хофстеде, адаптированных к сельскому хозяйству. Используемые нами методы были направлены на достижение следующих целей: выявить сущность транзакционных издержек аграрного сектора с учетом особенностей отрасли, выявить специфику поведенческих установок и ценностей, специфику структур затрат внутри региона. рамки институционального взаимодействия, а также для анализа культурных кодов и проблемы зависимости аграрного сектора от траектории движения.

Изучены параметры существующей организационной культуры на материалах аграрного сектора экономики региона; выявлены особенности транзакционных издержек, обусловленные культурной составляющей; и было проведено исследование культурных кодов. Аграрный сектор характеризовался следующими характеристиками: избыточный

производственный цикл, неравномерное распределение доходов в течение года и зависимость от природно-климатических условий. Вышеперечисленные особенности демонстрируют важность государственной поддержки и развитой системы коммуникаций. Группа культурных компонентов обозначает культурный код, который отражает высокий уровень ролевой дифференциации между мужчинами и женщинами; преобладающее коллективное сознание; тенденция избегать ситуаций неопределенности и четко установленных планов действий и правил; низкий уровень самоконтроля и низкий уровень потребности в удовлетворении базовых потребностей. Конкретные транзакционные издержки, сформированные культурными детерминантами, включают: затраты на поиск, обработку и хранение данных, затраты на переговоры и заключение договоров, затраты на координацию, затраты на политизацию, затраты на коллективное принятие решений и затраты на упущенную выгоду. Работа направлена на решение вопросов, связанных с преодолением неформальных институциональных ограничений, а также может быть применена для развития и накопления социального капитала, внедрения лучших неформальных практик по снижению затрат за счет устранения упущенной выгоды, повышению качества функционирования транзакционного сектора экономики.

1. INTRODUCTION

The current study aims to investigate the parameters of existing organisational culture as a source of forming social capital, traditions, values, symbols, general approach, and mentality of the population. The amount of culture influence on forming an organisational climate on the territory was assessed

during the process of social and economic research based on the agricultural sector of the region's economy, and practical recommendations were provided. Given recommendations were designed to overcome the developmental imbalance of transactional and transformational sectors of economy and informal institutional limitations. Also, those recommendations may be applicable for social capital development and accumulation, implementation of best informal practices on costs reduction by elimination of lost profits. The literature connecting social capital with natural resources management has increased significantly in the past decade. Several studies have indicated that higher levels of social capital may lead to improved environmental management by communities [1-3].

One of the reasons of the Russian economy growing slowly is the high level of transaction costs. The economy has reached the level where market transaction services require disproportionately high resources and there are no quality changes represented by outrunning growth of profit as a result of commercial activities [4,5]. According to the institutional theory, transaction costs define parameters of relations between subjects including market transactions losses, while being the result of conforming to general rules of institutions. Thus, the more effective economic institutions are, the more they contribute to minimizing transaction costs.

1.1 State of the Art

Until the beginning of the 70s of the previous century, economic science held a certain idea about the factors of economic growth. According to this idea, accumulated wealth in the form of available resources, human capital and manufacturing investment played the major role. Institutionalist economists included existent formal and informal institutions as a prerequisite for stability and dynamic development of the country. Recently, scientists have commenced regarding social capital as a growth and stability resource. For example, in L. Polischuk's view "the vector of state transaction policy aimed at developing social and cultural characteristics reduces uncertainties, increases the effectiveness of interaction between businesses and the government, lowers administrative barriers, helps to fight opportunism, enhances the effectiveness of infrastructure institutes, etc." [6].

Social capital includes some well-known constituents: it is based on trust, codes and values shared in the society and various social networks. The government's aim is to provide public goods. As D. North and J. Wallis noted in their works, "as soon as people are unable to manage this well, they 'invite' the government. At the same time, effective, regulated, uncorrupted government is a public good itself and there is no government body which controls this public good. Such a public good as an effective government can be provided only by society itself. For this reason, if society is organized enough and possesses a lot of social capital, the government functions well" [7].

Transaction costs are the costs incurred in the coordination of market processes in an external environment, in the hierarchical structure of a firm and implied costs such as loss from the transactions. Uneconomic factors which form transaction costs are informal institutions and negative activities which are done by people and influence their behavioral principles [8].

In the view of the current ideas about the institutional economics, a characteristic of an informal institution is the fact that it is not founded by the government but is a result of interaction between individuals. Institutional constraints are the system of values, principles and cultural codes of the economy, which together with formal institutions determine the actions of subjects in the social and economic environment. Being a social capital resource, organizational culture forms traditions, values, symbols, general approaches and mentality of organization's members and influences the creation of social capital and employees' perception of a situation.

Social capital affects the economy and business behavior horizontally and vertically. As regards the horizontal channel, the experience of reaching an agreement and cooperative regulation of relations, self-management and trust allow eliminating contradictions in business communication without government engagement that decreases transaction costs. Transaction participants of informal institutions are effective in commercial interaction without resorting to government help. The vertical channel of influence ensures synchronization with government bodies and the quality of government management.

There are various classifications of organizational culture. K. Cameron and R. Quinn built the methodology based on competing values. They suggest two dimensions: 1) flexibility, discretion and dynamism of an organization at one end of a scale and stability, order and control on the other; 2) internal orientation, integration and unity at one end and external orientation, differentiation and rivalry on the other. Both dimensions form four squares of different framing values, reflecting types of organizational culture: hierarchy, clan, market and adhocracy [9].

American sociologist Ch. Handy's methodology distinguishes 4 types of culture with the following parameters: organization's business character and structure; relationships between an individual and an organization; the process of distribution of power and personal values.

According to the author, the types of culture are the culture of power, the culture of role, the culture of task and the culture of person [10].

G. Hofstede's classification of organizational culture was developed in the 80s of the previous centuries. The basis of the model was a global-scale research conducted by a transnational corporation IBM. More than 116 thousand employees in 40 countries took part in the survey. The suggested classification helps to understand the mechanism of correlation between organizational behavior and culture. This classification is the most popular among scientific community due to the set of familiar parameters used for analyzing organizations of different cultures regardless the country where they are based in [11]. G. Hofstede's findings are relevant for managers of different levels in any country including Russia. The relevance is due to the current labor market having general characteristics: the drift of unskilled labor, growing migration processes, foreign companies entering the market and changing game rules. It is obvious that under the condition of immigration being poorly regulated by top management and government bodies there is a problem of adapting people from different cultures both at the level of business and region wide.

In terms of our research, G. Hofstede's classification of behavioral characteristics is favorable for studying the interrelation of organizational behavior and culture [12]. The classification has the following parameters: individualism vs. collectivism; power distance (the amount of participation in making decisions concerning everybody); uncertainty avoidance; masculinity vs. femininity; long-term orientation and indulgence vs. restraint. According to G. Hofstede's classification, the estimation of the interrelation between organizational behavior and culture and the present situation in the society, country or region is the basis for assessing the condition of social capital.

2. METHODS APPLIED

The research on cultural codes of the agricultural sector of the region's economy was conducted to find out the specifics of transaction costs. The influence of cultural determinants (informal institutions) on the content and structure of the transaction component of the agricultural sector of the region's economy was under study. In order to reach the aims of the research the following objectives were set:

1. To find out the specifics of transaction costs regarding the peculiarities of the agricultural sector, behavioral principles and values, and the structure of costs in institutional interaction
2. Questioning specialists of agricultural organizations and city government.
3. Processing and systematization of the collected data.
4. Analyzing the results of the conducted research.
5. Describing and graphically representing the research.

In the present research the problem-oriented analysis was applied. It is the analysis of business activity of an organization which identifies problems, determines the reasons and finds solutions. There were 93 respondents, who took part in the questionnaire, with branch managers of agricultural organizations and heads of administration of agriculture of municipal areas among them. The research was conducted in 17 municipal areas of Omsk region in three natural and climatic zones.

The study of behavioral characteristics was based on the parametric model of G. Hofstede adapted for agricultural specifics [12]. The research was based on six parameters of culture dimensions: power distance, uncertainty avoidance, individualism vs. collectivism, masculinity vs. femininity, long-term vs. short-term orientation and indulgence vs. restraint. The methods of

assessing cultural components are: 1) there are six parameter block models in the questionnaire and each question corresponds to a certain cultural characteristic; 2) based on the chosen option the answer is referred to one of the parameters of cultural characteristics; 3) quantitative and qualitative characteristics were determined by comparing the received data within specified intervals.

3. RESULTS AND DISCUSSION

The particularities of the agricultural sector and the influence of informal institutions form the specific interaction in the agro-industrial business. Table 1 shows intervals of cultural dimensions and characteristics of their expression degree. Thus, duration of manufacture cycles, unequal allocation of profits throughout the year, dependence on natural and climatic conditions determine the need for government support and developed communication system. The higher the level of power distance is the more complicated the interaction becomes. Power distance is affected by such cultural preferences and informal practices as people's attitude to hierarchy, relationships with subordinates, attitude to older generations and others.

The set of cultural characteristics presents the cultural code which reflects the constituents of informal institutions. The conducted research revealed:

- High degree of differentiation between male and female roles;
- Collective consciousness dominates in relationships with its peculiarity being vertical collectivism and weak rivalry;
- Uncertainty avoidance and the need for order and rules;
- The need for clarity regarding future;
- Low level of self-control and the need for satisfaction of basic desires.

The stages of the research were:

Table 1. Intervals of cultural dimensions and characteristics of their expression degree

Cultural dimensions exponent	Exponent intervals/characteristics of expression degree		
	0,6<x<1	0,6<x<0,3	0<x<0,3
Power distance degree	High	Medium	Low
Uncertainty avoidance degree	High	Medium	Low
Individualism vs. collectivism	Individualism	Vertical collectivism or horizontal individualism	Collectivism
Masculinity vs. femininity	Masculinity	Equalities dominate	Femininity
Time orientation	Long-term	Medium-term	Short-term
Indulgence vs. restraint	High	Medium	Low

Dimensions values of cultural characteristics are represented in Table 2.

Table 2. Dimensions values of cultural characteristics in the agricultural sector

Cultural dimensions	Dimensions values	Parameter characteristics (degree)
Masculinity vs. femininity	0,62	Masculinity
Individualism vs. collectivism	0,43	Collectivism
Uncertainty avoidance	0,74	High degree of uncertainty avoidance

Power distance	0,62	High degree of power distance
Time orientation	0,63	Long-term orientation
Indulgence vs. restraint	0,73	Indulgence

Thus, the whole complex of cultural quantitative characteristics provides an idea of cultural code in the Omsk region agricultural sphere of the economy. The society is represented by collectivist groups with individualism being barely developed.

This reflects people’s inclination to avoid taking responsibility for the results of their work. There is no capacity for individual self- expression, rivalry and developing competitive advantages while the capacity for working in a team and for collective thinking with the focus on the common result is well-developed and forms trust in a close setting. High degree of uncertainty avoidance indicates the need for precision, clarity, well-working rules, situation regulation, planning and information. Uncertainty avoidance is a cultural characteristic which is also determined by the peculiarities of the agricultural sector that are the dependence on natural and climatic conditions and the entwinement of manufacturing and biological processes. Power distance implies complicated hierarchy in government and society relationship system, unequal distribution of profits and low level of trust. Specific transaction costs resulting from informal institutions, practices and cultural determinants include information search, procession and storing costs, negotiations and contracts execution costs, coordination and politicization costs, costs of collective decision-making and lost earnings costs.

Problem-oriented approach in analysis revealed the following:

- The agricultural sector is unable to successfully develop without support, but 22% of respondents point out that government support is not effective.
- 47% of respondents expressed the lack of trust towards the government, and 23% had a positive attitude to the government regarding them as a legal protection, security guarantee and financial support.
- According to 87% of respondents, it is beneficial to establish effective communication between society and government, which would allow speaking about problems openly and contribute suggestions. This indicates a potential opportunity to decrease the existing power distance.
- The main spheres of government support should be the following: development of in-house raw material processing 48%; production distribution assistance - 47%; development of workforce capacity in the country and creating a developed, modern and social infrastructure - 49%; development of legal support in order to protect agricultural manufacturers against partners’ opportunism and dishonesty of distribution chains in particular - 17,2% of respondents.

The analysis of social and cultural characteristics of the society in the agricultural sphere helped to determine cultural codes of the economy and path-dependence problem conditioned by informal institutions and negative informal practices.

4. CONCLUSIONS

Transaction costs reduction is promoted by the development and reinforcement of social capital, determining cultural codes of the economy and their regulation. The development of

communicative interaction of market participants, science and production and commercial activities contributes to lowering transaction costs in the form of lost earnings, information searching costs and bounded rationality.

Lowering administrative barriers will change the structure of transaction costs by increasing transaction cost of overcoming opportunistic behaviour and reducing lost earnings. Decreasing transaction costs in the form of lost earnings and strengthening trust towards institutions will be fostered by improving the quality of information, reacting against unregistered statistics and lobbying interests of certain groups and overcoming the limited access.

As experience in conducting agricultural reforms has shown, agricultural organisations are unable to compete successfully outside the cost managing system. Internal and external factors predetermine the necessity of the mechanism of internal transaction costs management being focused on solving the problem of defining the reasonable scale of market activity of an enterprise, increasing the manageability of an economic entity due to implementing a transaction costs management system and formulating unified policy such as rules of conduct of the subject.

The higher the external transaction costs, the more probable it is that a firm will seek an opportunity to replace market transactions with internal ones. On the level of an organisation, it is accomplished by developing internal transaction policy. In conclusion, implementing the described mechanism contributes to overcoming imbalance between the development of transaction and transformation economic sectors, overcoming restrictions of informal institutions, developing and accumulating social capital, strengthening positive informal practices, improving the quality of functioning of the transaction sector of the economy as the whole and reducing costs in the form of lost earnings of organisations.

Competing interests

Authors have declared that no competing interests exist.

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