

DOI: 10.6084/m9.figshare.11969082

UDC 005.8: 330.133/.138:658.5:624]-047.44(043.5)

Ryzhakova Galyna

Head of the Construction Management Department, DSc (in Economics), Professor, honoured economist of Ukraine, excellent educator of Ukraine, orcid.org/0000-0002-7875-9768

Kyiv National University of Construction and Architecture, Kyiv

Petrukha Serhii

Member of the Expert Group of the Food and Agriculture Organisation of the United Nations (FAO) on agricultural and trade policy in the CIS countries, orcid.org/0000-0002-8859-0724

Kunyskyi Kostyantyn

PhD, student, orcid.org/0000-0002-6234-9836

Kyiv National University of Construction and Architecture, Kyiv

INSTITUTIONAL FOUNDATIONS AND REGULATORY LEVERS FOR THE DEVELOPMENT OF AGRICULTURAL CONSTRUCTION UNDER CONDITIONS OF SYSTEMIC ECONOMIC TRANSFORMATION

Abstract. *The article has proved that in the globalisation conditions, the level of infrastructure industries' development is decisive for the competitiveness of the agricultural sector of the country's economy, forming the backbone for ensuring sustainable dynamics of agri-food value chains, since in some countries, infrastructure issues are associated with the objectives of improving the existing agricultural structure, in others they are linked to increasing the level of infrastructure equipment, as for Ukraine, it absorbs these two approaches. Framework of concepts and terminology has been classified, in particular the concept of 'infrastructure', 'social infrastructure', 'major construction work', etc., and the author's definition of 'rural development' suggested as a combination of survey, design and construction organisations and enterprises of construction industry experts who are familiar with the specific features of agrarian sector's functioning of the national economy and rural areas, specialising in infrastructure development of wholesale food markets with the aim of creating favourable socio-economic conditions for the implementation by village in general and rural society in particular of its industrial and other local, regional and national functions, including focused on the development of food sovereignty and food security. The expediency of using the historiographical principle in the study of rural construction in the context of transformational processes taking place in the agricultural sector of the economy and the development of rural areas in the conditions of economic policy's upgrade and the new economic reality has been proved. The author's vision of the stages of rural construction evolution in modern Ukraine has been formed: the first 'stabilising' stage (1990s-early 2000s), the second 'reconstructive' stage (early 2000s-mid-2000s) and the third 'strategic' stage (mid-2000s-until present), with individual evolutionary advances both within and between them characterised. This has allowed to substantiate two basic adaptation models of the agricultural sector, construction industry and rural society to the changing socio-economic processes, called 'symbiotic-passive-adaptive' and 'innovative adaptive', and also to form the key principles of public regulation of the triad 'the agricultural sector of the economy (together with rural areas and in a few cases with depressed development territories) – infrastructure industries – construction sector' for further stabilisation and sustainable dynamics of rural construction.*

Keywords: *agricultural economy sector; agriculture; rural construction; construction sector; infrastructure industries; globalisation; food security; rural areas*

Problem statement

Modern research of scientific and popular science profile presents the concept of sustainable development of the agricultural sector of the economy, which is based on a multi-point socio-ecological and economic approach to ensure sustainable dynamics and comprehensive and at the same time balanced development of agriculture and

rural areas in general. Models and strategies of socio-economic and political development of the countries of the former Soviet Union are largely determined by the processes of globalisation, which is the root cause of large-scale transformations.

One of the most important manifestations of the modern globalisation of the world economy is the formation of global material, information, organisational

and economic infrastructure that ensures the implementation of international financial, economic, social and trade cooperation. Just as a single national economy is subject to globalisation processes, we are witnessing manifestations of globalism in the infrastructure and construction support of economic systems. As a complex economic phenomenon, globalisation has a significant impact on various vectors of creation and development of infrastructure from the perspective of operational and financial management systems. At the same time, relevant approaches, tools and mechanisms for solving infrastructure problems of the economy in general and its agricultural sector in particular are also subject to the revolutionary ontogenesis. Infrastructure is becoming a key factor in the development of national agro-economic systems and their integration into the world food market. The level of infrastructure industries' development is crucial for the competitiveness of the agricultural sector of the country's economy, forming the backbone for ensuring sustainable dynamics of agri-food value chains. So, in some countries, infrastructure issues are related to the tasks of improving the existing agrarian structure to meet the conditions of new technological way in the innovation vector of economic development, and in the others countries they are related to improving infrastructural equipment in order to provide civilised life conditions in the rural society and of the employed population in food processing industry.

Research of international consulting corporations, in particular McKinsey and the Boston Consulting Group, world development institutions, including the World Bank groups and the Organisation for Economic Cooperation and Development point to the formation of a sustainable hyper-deficiency trend (about \$ 2 trillion) [25] of long-term investment resources required annually for sufficient and balanced reproduction of infrastructure facilities. This issue requires non-trivial solutions, new approaches as to its solution, and the formation of multi-(global coordination of the economic systems development, their orientation to the necessity of implementing the Sustainable Development Goals adopted by the General Assembly of the United Nations on 25 September 2015) and mono-institutional (formation of global values in the development of the food market, the implementation of the objectives of the Strategic Goals of the Food and Agriculture Organisation of the United Nations (FAO)) levels of practical tools to ensure dynamic growth of rural construction.

Since the agricultural sector of the economy is the only sector that shows positive growth (according to the State Statistics Service of Ukraine [12] and according to our own studies [13–14], increasing food production compared to the previous year has reached a record high of 16%, with the average yield increased by 14%), 'the main and, alas, so far the only locomotive to support

economic stability in Ukraine, a foreign currency earnings accelerator' [4], research on the current trends in balancing of the development of infrastructural sectors with agriculture in the economy in globalisation conditions and intensification of European integration processes are of scientific and practical interest. Given the immediacy of the infrastructure issue of ensuring sustainable agricultural dynamics facing Ukraine, as well as unconstructive trade policy on the part of certain countries of the Customs Union of the Eurasian Economic Union, obstacles are created not only for free circulation of agricultural products but also in attracting financial resources. Therefore, the analysis of the best global practices for the development of agricultural infrastructure by means of rural construction is important for the formation of a set of guidelines on incentives for infrastructure development of the agrarian sector of the Ukrainian economy, given the high level of activity of the Council on Drafting an Integrated Strategy for the Development of Agriculture and Rural Territories in Ukraine for 2015–2020 [17].

Analysis of recent publications as for the range of issues and identification of previously unsolved parts of the general issue

The 'infrastructure' category as a prime driver of 'rural construction' first became the object of scientific research in the 19th century. So, Karl Heinrich Marx, in his fundamental work 'Capital' [27] pointed out the functions of infrastructure, according to which the economy and society have the necessary basic conditions for the labour process created.

Foreign academic economists, supporters of institutional theory, and above all Antonio Pesenti, Paul Narcoz Rosenstein-Rodan, Paul Anthony Samuelson and Albert Otto Hirschman contributed to the development of the theory of infrastructure by adjusting the dependence of the economic entities' income on its condition. The idea of separating from the 'infrastructure' category of its special subspecies, 'social infrastructure', also belongs to these authors, which provided further ontogenesis of theories of agriculture and rural settlements' development, the apogee of which were the relevant decisions in the 'Treaty of Rome' (signed on 25 March 1957), which were further reflected in the Common Agricultural Policy of the European Union.

In turn, such researchers as Walt Whitman Rostow and Hans Wolfgang Singer have established the existence of a certain relationship between the quantitative and qualitative results of the economic systems' functioning and the mass of targeted investment in infrastructure facilities, in particular those that ensure the functioning of the food market in the chain 'producer – logistics – market – consumer'. Subsequently,

researchers encounter such issues as improving the mechanism and tools for the development of infrastructure industries, in particular: project financing, public-and-private partnership, public support (assistance), corporate incentives, etc. The works of such outstanding researchers as E.R. Yescombe, K. Peter, K. Nevitt, Frank J. Fabozzi, Adolph Wagner, S. Srivastava, A.M.A. Rodriguez, and others are dedicated to these issues.

Among the Ukrainian scientists who study the issues (including the global aspect) of infrastructure industries development, infrastructure support of the agricultural sector of the economy, rural construction in general and in the context of housing, cultural and industrial components, are as follows: S.V. Petrukha, D.F. Krysanov, P.T. Sabluk, O.V. Vyshnevetska, Ya.K. Bilousko, M.M. Mohylova, H.M. Pidlisetskyi, Yu.O. Lupenko, O.V. Zakharchuk, V.A. Golyan, M.I. Malik, M.A. Khvesyk, O.H. Shpykulyak, P.I. Gaidutskyi, V.M. Zhuk, O.H. Bilorus and others.

The urgent issues of the construction sector development, including its role in sectoral and industry transformations of the national economy, its innovatization, are highlighted in the works of V.M. Lych, P.M. Kulikov, O.Yu. Belenkova, Ye.V. Bondarenko, A.H. Zharinova, H.M. Ryzhakova, S.P. Stetsenko, O.A. Bondar, O.V. Dykyi, and others. Issues of diagnosis and development of proposals on adaptation of the best global practice, combination of various forms of financial tools for the infrastructure development to support housing construction in rural areas, in particular in the framework of the state program 'Own House', regulatory support of these processes are presented in the works of I.S. Ivakhnenko, I.A. Azhaman, V.V. Latysheva, O.L. Popova, I.A. Azhaman and other scientists. At the same time, the Google Scholar search engine has not detected specialised scientific works for the period of 2000 – 2018, directly related to the rural construction issues. On the basis of the above, as well as taking into account the revision of the listed Ukrainian and foreign scientists, the issues of designing economic policy and rural development policy for the formation of 'growth points' of rural construction are still insufficiently studied.

The objective of the article

The objective of the article is a comprehensive study of the rural construction system in the context of formation and development of national economic and rural development policies.

Presentation of the basic research material

One of the key drivers of the global economy is the adequacy and conditions of infrastructure facilities: 'Modern economics is a set of motion forms as systems of dynamic flows of goods, capitals, information, energy

and migration movements' [2, p. 372]. An infrastructure factor is always at the heart of such a movement. Traditionally, in Ukrainian and foreign economics, infrastructure is divided into sectors of social and industrial, and sometimes economic infrastructure. This classification is based on the idea of autonomy of infrastructure industries. However, in the context of globalisation of socio-economic processes, such a division acquires a conditional character and gradually loses its theoretical value.

From the functional point of view, infrastructure sectors in the new economic reality are not autonomous, therefore, the study of individual infrastructure sectors outside the context of the sectoral structure of the national economy, the development of quantitative and qualitative parameters of their work as closed sectoral systems, is counterproductive. The interdependence of rural construction and sectoral changes in agriculture poses the challenge of investigating this phenomenon through the lens of the ontogenesis of economic policy and rural development policy using an integrated approach.

Modern scientific literature on economics presents various options of the 'infrastructure' definition (derived from Latin *infra structura*), but the content of this category is reduced to ensuring the integrity of the economy and society's functioning. In contrast, the 'rural construction' category is little studied in the works of Ukrainian scientists, having acquired in some highly specialised studies the features of disputability. Thus, according to the authors of this article, this concept has acquired its basic features in the studies of Soviet scientists (primarily in the works of the initiator of the introduction of the food dictatorship in the state – O. Tsyurupa [23]) that both preceded the first (1928 – 1933-ies) five-year plan for the economy development of the Soviet Union, and accompanied this process. Let us recall that the five-year planning period was taken on purpose: "it was believed that new enterprises can be built in five years on average" [26, p. 14]. As a result, the first tractor came off the assembly line of the Kharkiv Tractor Plant, the construction of new plants brought Ukraine to the level of large industrial countries in Europe, its industrial potential in 1940 was seven times higher than in 1913, and the concept of 'major construction' was introduced into scientific and regulatory circulation as an independent definition, derived by Soviet scientists as a result of revolutionary transformations of economic policy.

The scale of rural construction increased substantially at the intersection of the third with the fourth five-year plan, that is, after the World War II (1939–1945), in particular: first, until the early 1950-ies, extensive restoration work in the agricultural sector had been carried out, with a target "to improve the performance of agricultural labour by 3 %, with volume

of capital investments in the amount of RUB 65 million, which exceeded the total level of investment for the three pre-war five-year plan" [8]; secondly, since 1954, rural construction started on virgin land resources of Kazakhstan, the Volga region, the Urals, Siberia and the Far East of the Russian Federation ("Development of virgin and long-fallow land, mainly to create farms and without any preliminary preparation, in the absence of infrastructure such as roads, silos, skilled personnel, repair facilities for equipment, spending 20% of all investments in Soviet agriculture") [10, p. 481]; third, since 1959, a large-scale rural development launched based on rural zoned planning ("comprehensive solution of issues related to the development of large-scale agricultural production and reorganisation of the village gave the opportunity to identify a rational network of rural settlements, due to the relocation of small villages and hamlets to significantly enlarge the rural settlements – the number of villages decreased from 705,000 in 1959 to 469,000 in 1970" [5, p. 87]).

By the Decision of the March (1965) Plenum of the CPSU Central Committee, resolutions of the CPSU Central Committee and USSR Council of Ministers 'On Regulation of Construction in Rural Areas' (1968), 'On Measures for Further Development of Agriculture of the Nonchernozem Belt of the RSFSR' (1974) the institutional and regulatory basis for further scaling-up of rural construction was created, providing a continuous increase in volumes of performed construction works in rural areas. The volume of capital investments in this sector is also continuously growing [13–14; 19]: in the fifth five-year plan (1951–1955), they amounted to RUB 14.7 billion with 28.5 billion in the sixth (1956–1960), 45.6 billion in the seventh (1961–1965), 74.6 billion in the eighth five-year plan (1966–1970). For four years of the ninth five-year plan (1971–1974) it made up RUB 91.1 billion.

American model of accelerated industrial growth, applied in the Soviet Union, resource-based "by the transfer of funds from agriculture, due to the price discrepancy in industrial and agricultural products" [20, p. 119], provided the transition of agriculture into an industrial model in which the role of rural construction increased considerably, having acquired systemic signs, including through the formation of development institutions in the form of agrarian and industrial associations – new chief priority of the agrarian policy of the CPSU [1; 7; 18]. Effective integration of agriculture and industry required a new scaling of rural construction to bring it closer in quantitative and qualitative parameters of the development to industrial and urban construction. This allowed to build a large cattle-breeding complexes ("in 1971–1975, 1,170 large public complexes for the production of livestock products are expected to be built, including: 228 complexes for breeding and fattening pigs, 307 complexes for beef

production, 635 complexes for milk production" [21, p. 62], grain storage and processing facilities ("an extensive programme for the construction of grain storages has been developed, especially silos, the following measures were expected to be provided: increasing capacity of existing elevators by building silos housing extensions; the construction along with the procurement elevators with capacity of 50,000 tons of grain elevators with capacity of 150–250,000 tons; the construction of elevators near the mills and cereal plants subject to storing six-, and in some cases nine-month grain reserve; application of industrial methods of construction, including precast concrete" [9]), enterprises for industrial processing of agricultural products (refrigerators, canned food and feed mills, slaughter points, etc.), large greenhouse complexes, poultry farms, to implement large-scale reclamation work.

Such a specific field of rural construction as housing and civil one has undergone significant changes, too. In the villages, houses of different types are being built: three- and five-storey buildings, one-storey buildings with one or two flats, block type buildings with two-level flats and others. In the construction of rural social infrastructure (schools, hospitals, shops, clubs, kindergartens, canteens, factories and consumer service establishments), a steady adherence to the principle of graded service of the rural population is provided, (it provides for a placement of a network of daily consumer service establishments in each locality, with facilities providing periodic or episodic services established in the main towns or district councils), which gave the opportunity to build major hospitals, shopping centres, providing social amenities for the rural population at the city level. So-called infrastructure branches, namely gas and water pipelines, a network of local value roads, actively develop as separate directions of rural development.

That is, in the USSR, the rural development was understood as the construction industry, which served agricultural production and cultural and everyday needs of the rural population, formed the basis for the implementation of five-year plans for the development of the Soviet Union economy, the implementation of agricultural policy objectives, including within the framework of the goal-setting reform of H. Malenkov (1953 – 1955ies) and Thaw of M. Khrushchev (the second half of the 1950s-early 1960s).

Rural development was carried out by a number of organisations headed by the Ministry of Rural Development of the USSR, which together with 13 Republican ministries, a network of trusts and mobile mechanised columns only in 1975 performed construction and installation works for RUB 5 billion [24], which was equal to 0.5 % of GDP (USD 686 billion [11]) of the USSR. The second most important contractors were the inter-kolkhoz (collective farm)

building organisations, which carried out construction and installation work in the collective farms. They included district, regional and republican branches, own network of enterprises, manufacturers of building materials and a number of specialised design organisations. The cost of works performed in this way in 1975 made up RUB 4.6 billion, that is, slightly less than 0.5 % of the GDP of the USSR. The third contractor was the Ministry of Melioration and Water Economy of the USSR, and the fourth one was a conglomerate of specialised ministries, primarily the Ministry of Energy and Electrification of the USSR, Ministry of Transport Construction of the USSR, Ministry of Mounting and Special Works of the USSR and All-Union Soyuzsilgospstehnika Association.

Modern studies of rural development, in particular, are conducted by the staff of the Construction Management Department of the Kyiv National University of Construction and Architecture (Kyiv, Ukraine). M. Ryzhakova, V.H. Fedorenko, H.V. Lagutin and others), National Research Centre 'Institute of Agrarian Economics' (P.T. Sabluk, M.I. Kisil, P.I. Haidutskyi, M. Ya. Demyanenko, O.V. Krysalny, Yu.O. Lupenko, M.I. Malik, V.Ya. Mesel-Veselyak, M.M. Fedorov, O.M. Shpychak, V.V. Yurchyshyn), State Institution 'Institute of Economics of Nature Management and Sustainable Development of NAS of Ukraine' (M.A. Khvesyk, I.K. Bystryakov, L.V. Levkovska and others) and State Academic and Research Institution 'Academy of Financial Management' (S.S. Hasanov, S.V. Petrukha and others) are based on an integrated socio-ecologic and economic approach to the development of agriculture and rural areas in general, that is, on the conceptual principles of sustainable dynamics of the agricultural sector of the national economy. However, the ontogenesis of the agrarian model is mainly interpreted by the globalisation processes, which cause large-scale transformations in the sector, often of a negative nature, and not least related to the development of rural areas. It is for a good reason that the Law of Ukraine 'On Boosting of the Regions Development' of 08.09.2005 No. 2850-IV introduces the category 'depressed territory' with its special subspecies 'depressed rural area' into regulatory circulation, and among the measures of state incentives of their development are determined 'the field of housing construction in rural areas and stimulation of development and improvement of the social field of the village' [16].

Arrangement of the views of the above scientists made it possible to form the author's vision of the staged evolution of rural development in modern Ukraine:

The first stage (90s – early 2000s) is stabilising, aimed at stopping the decline in production in agriculture, which occurred due to changes in the

paradigm of ownership of agricultural formations and land management. At this stage, a new agrarian way of life forms in the agrarian sector of economy of Ukraine, on the one hand, the quintessence of which form a privatised collective and state farms, farms and private farms; and on the other hand, there is a significant deterioration in dynamic food and economic parameters of agriculture due to substantial liberalisation, and in some cases a complete lack of state control of the agrarian economy, particularly in terms of the parameterisation of the operation of the building sector on new technical, organisational and economic needs of agricultural companies. That is, the state agrarian policy, insufficiently prepared and thought-out at the beginning of the post-perestroika period, caused the rapid collapse of collective and state farms, which during the domination of the Soviet model of rural development were the key recipients of the rural construction sector. For the stabilisation of agriculture, a significant number of different laws and regulations were adopted, in which there had been a trend of regulatory contradictions and lack of institutional memory, which increased crisis tendency of the agricultural sector activities, rural areas and loss of control of its work in general and agricultural development in particular, expressed in macro-policies of non-interference in the pricing of agricultural products, price disparities, the gap in the system of economic and social relations in the construction and installation works sector conducted for the needs of agriculture, which had developed yet in the pre-perestroika period. Due to the total impoverishment of the rural population on the background of significant growth in the share of private farms, introduction of the institute of farms, which were in the stage of adaptation to market-centric business model, economic decline of large agricultural enterprises, there is a strong effect of 'technological primitivisation' (actually a return to patriarchal relations) of agricultural production management, which nullified the scale of industrial and civil rural building, set in the late 1980-ies of the 20th century. Ukraine was really threatened by the loss of food sovereignty and food security, as in 1991–1999 agricultural production decreased by 2.1 times, including in agricultural enterprises it decreased by 3.4 times, and the caloric content of average daily consumption per person decreased in 1999 by 29 % (compared to 1990) and made up 2565 kcal, approaching the international criterion of the poverty threshold (2500 kcal) [13 – 14; 22].

The second recovery stage (early 2000s – mid-2000s). At this stage, the state target programs for the development of agriculture, rural areas, food processing industry, infrastructure industries and the construction sector are adopted, which determine the main factors of stabilisation and ensuring the progressive development of rural construction. It primarily means [15]:

1) accelerated development of livestock breeding; 2) boosting of small forms of management's development; 3) improving rural engineering infrastructure; 4) housing for youth in rural areas; 5) development prospects of the rural settlement network; 6) ensuring the development of agricultural market infrastructure; 7) innovation and investment to strengthen facilities and resources of agricultural sector, the introduction of resource-saving technologies.

Some stabilisation and increase of agricultural production volumes are observed in 2000 – 2006, which gives the opportunity to increase the level of consumption of basic foodstuffs per person, however it remains well below not only rational but also from the minimum norms established by the Cabinet of Ministers of Ukraine "On approval of food sets, sets of non-food products and sets of services for basic social and demographic groups of population" dated 14.04.2000 No. 656. However, the de-industrialisation of agriculture became more threatening, the volume of fixed capital in which decreased in 1996–2005 by 1.7 times (in agricultural enterprises it decreased three-fold), its share in the main capital of the economy reduced from 24 % to 6 %, the level of provision with tractors, combines and other agricultural machinery made up 45–50 % of the need, and 90 % of the applied technical means required immediate replacement due to their physical wear and tear and 99 % functional depreciation.

Due to the significant reduction in the number of subsidiary farms of the population (in 2010, they produced 64.6 % of the total gross output of the industry, while covering only 16.8 % of the total area of agricultural land in Ukraine [3; 12–14]), insufficiently elaborated fiscal and budgetary policy to boost their development in this institutional framework of agrarian reform by Leonid Kuchma, there is no real incentives for the development of social and industrial infrastructure (including through their mono-specialisation – vegetables, berries, potatoes, focusing mainly on manual labour), and in fact there is a rapid process of individual civil construction in the countryside (but in 50m zones away from the powerful urban areas). In contrast, the new institutional and economic structure in the form of agricultural holdings, on the one hand, begins to play the parts of a provider of rural construction, upgrading at this stage technological, production and technical branches of its production, and on the other hand, hampers sustainable development of rural areas, exacerbates the issue of human and social capital degradation of the Ukrainian village.

The third, strategic stage (mid-2000s – present days), assumes the maximum possible harmonisation (including the national economic and food interests) of the Ukrainian model of rural development with the methodological leverage of Common Agricultural Policy

of the EU member countries (adapted to the new programming period of 2014–2020), development of institutional and organisational coordination foundation of growing manufacture (in terms of urbanisation, according to UN estimates [29], by 2030, the urban population will increase by 2.5 billion people) of agricultural products with high added value, to strengthen the Ukraine's position in the global food market, introduction of irrigation systems, construction of up-to-date eco-farms and the development of a network of rural construction as a response to the challenges and threats generated by the ongoing decentralisation reforming.

For the period from 2010 to 2016, manufacture of agricultural products increased by 35.8 %, including the agricultural enterprises where it increased by 59.8 %, but 43 % of the gross output of agriculture today remains the prerogative of the households that, on the one hand, established extremely low rate of technical and technological renovation of agricultural production, which increased the cost in the structure of non-renewable natural resources with a simultaneous increase of the dependence of agricultural production on natural climatic conditions, and on the other hand, the role of agricultural estates to restore and increase rural construction on the basis of the affiliated or controlled construction and design organisations.

Also, the most significant events of this stage for rural development are the completion of modification of the organisational and productive structure of agricultural production through the 'transfer' of the capital from the financial sector and mainstream industrial set of branches to the agrarian sector of the economy, a complete transformation of the socio-economic orientations of the self-employed population in rural areas, which provides the final adaptation of rural society to the mechanisms of the market economy, sector's operation under conditions of the deep and comprehensive free trade area between Ukraine and the EU.

At the same time, current advances in the area of deregulation (initiated by the Cabinet of Ministers of Ukraine "Action Plan on the deregulation of economic activity" of 18.03.2015 No. 357-p) in the agricultural sector of the economy, infrastructure industries and in the agriculture building sector using the Jacobs and Associates company's patented principle of Regulatory Guillotine™, which enables to provide a "prompt abolition of a large number of unnecessary regulations based on the results of a systematic review and creation of their unified registry" [6]) have provided substantial progress in the global ranking of ease of doing business by the World Bank (in general, from 2014 to 2018, Ukraine has moved up to 41 position, mainly in respect of the components 'international trade', 'contracts enforcement', 'investors protection', 'obtaining construction permits', 'settlement of insolvency' and

'property registration' [28]). However, we need a radical revision and partial reassessment from the point of view of rural construction development. So, a comprehensive deregulation of the agricultural sector, construction sector and related industries: 1) caused the discrepancy between the ultimate goals of deregulation of the domestic laws of market development of the national economic system and its structural and functional branch, that is rural construction; 2) unbalanced economic and social interests of economic entities and the state (its local entities) in the field of rural development; 3) established the effect of 'internal differences' in the field of the national economic policy implementation, and decentralisation reform through the presence of multidirectional views and economic interests, differences in the mental sense of reality in the food and construction markets, the results of the implementation of agricultural policy and strategic priorities of the construction complex of Ukraine at the new stage of socio-economic development of the state (approved by Decision of Board of the State Building and Architecture Committee of Ukraine of 22.04.2005 No. 22).

In the course of the stage development of rural construction, two main adaptation models of the agricultural sector of the economy, the construction complex and the rural society to the changing socio-economic processes have taken definite shape:

the first 'symbiotic-passive-adaptative' model, localised mainly in agricultural and/or forest and agriculture zones, is based on the resources of large farms and the financial performance of private households, a high degree of marketability of the rural economy. This model prevailed in the agricultural sector of the national economy during the transition to a market system of management, and its relative stability is due to the availability of access of households (both in the form of assignment and preferential supply) to the resources of the backbone agricultural enterprise that, in fact, retains social functions of the former collective farms and/or state farms, acquiring the status of quasi-lawful institutional and regulatory centre of rural power;

the second 'innovative and adaptative' model is characterised by a high degree of socio-economic and construction behaviour of rural residents, which is based on the principle of finding the optimum between the form of life and the impact of agricultural holdings on the socio-economic environment in a particular rural location. The quintessence of the model is formed by focusing on maximising the financial and economic results of the work of farmers and large agricultural enterprises integrated with financial capital and distributed, as a rule, in agricultural zones.

Summing up the above, and having systematised the views of Ukrainian researchers of the agricultural sector and the construction industry, we will develop the

author's vision of the 'rural development' category as a combination of survey, design and construction organisations and construction industry enterprises, experts who understand the specifics of the agrarian sector functioning of the national economy and rural areas, specialising in infrastructure development of wholesale food markets aiming to create favourable socio-economic conditions for the implementation by village in general and rural society in particular its production and other local, regional and national functions, including focused on the development of food sovereignty and ensuring food security.

Conclusions and prospects for further research

Further stabilisation and sustainable dynamics of rural development are impossible without establishing a clear hierarchical system of state regulation of the triad 'the agricultural sector of the economy (together with rural areas and in a few cases with depressed development territories) – infrastructure industries – construction complex', which must conform to the following principles: 1) prioritisation in programs of budget support of the micro and medium enterprises, manufacturers of agricultural products, taking into account regional specific features of their functioning and the existing local network of mounting and construction organisations; 2) strengthening regulatory state focusing on social, ecological and economic issues of the village and architecture of the system of institutional regulations to support stabilisation of construction quantitative and qualitative parameters on the depressed development rural territories; 3) integration of predictability and stability elements of the rural development on the principles of institutional memory in the state agrarian policy through the revision of the draft law of Ukraine "On the main principles of state agrarian policy and the state policy for rural development" (registration No. 9162 of 04.10.2018); 4) entry into the institutional system of rural construction of the service functions for the needs of the agricultural sector of the economy, which is able to perform a full scope of works on development and maintenance of rural areas: designing, coordination, financing, construction and maintenance of industrial, residential, social, communal and other facilities, in accordance with the optimum parameters "price – time – execution – quality", as well as the network of rural roads. In this context, the experience of the EU Member States and the Republic of Belarus in the formation of sustainable rural development model and the construction of so-called agro-cities can become a relevant basis for the scientific justification of the new stage of the national model of rural construction development.

References

1. Baranovska, V.P. (1992). *Could the Food Program in the USSR be implemented (Reflections of the historian)*. *Ukrainian Historical Journal*, 6, 14–26. Retrieved from <http://history.org.ua/JournALL/journal/1992/6/3.pdf> [in Ukrainian].
2. Bilorus, O. (2016). *Economic Globalistics. The global system of globalism*. Kyiv: University 'Ukraine' [in Ukrainian].
3. Bulavka, L.V. (n. d.). *Functioning of private auxiliary households in the conditions of market transformation*. Retrieved from <http://intkonf.org/bulavka-lv-funktsionuvannya-osobistih-pidsobnih-gospodarstv-naselennya-v-umovah-rinkovoyi-transformatsiyi/> [in Ukrainian].
4. Yatsenyuk, A. (2014). *Opening remarks by the Prime Minister of Ukraine at a meeting of the Cabinet of Ministers of Ukraine*. Retrieved from <https://www.kmu.gov.ua/ua/news/247683268> [in Ukrainian].
5. Vydyborets, A.V., Rogozhyn, G.N. (1973). *Prospects for the development of rural settlements*. Moscow: Economy [in Russian].
6. Holovan, V. (n.d.). *Deregulation in Europe and Ukraine*. Retrieved from <https://radaprogram.org/sites/default/files/infocenter/publications/69.pdf> [in Ukrainian].
7. Sorokina, L.V., Hoyko, A.F. (Eds.) (2017). *Econometric toolkit for financial security management of construction companies*. Kyiv: Kyiv National University of Construction and Architecture [in Ukrainian].
8. Smoliy, V.A. (Ed.) (2011). *Economic History of Ukraine: Historical and Economic Research (in 2 Vols)*. Kyiv: Nika-Tsentr [in Ukrainian].
9. Al-Prom. (n.d.). *The history of the development of elevators*. Retrieved from <http://www.alp-prom.com.ua/history.html> [in Ukrainian].
10. Kovpak, L.V. (2013). *Virgin land development*. In: Smoliy, V. A. et al. *Encyclopedia of Ukrainian history (in 10 Vols)*, 10, 481. Kyiv: Naukova dumka [in Ukrainian].
11. Kusnir, I. (n. d.). *USSR Gross Domestic Product, 1970–1990*. Retrieved from <http://be5.biz/makroekonomika/gdp/su.html#main> [in Russian].
12. *Official website of the State Statistics Service of Ukraine*. (n. d.). Retrieved from www.ukrstat.gov.ua [in Ukrainian].
13. Petruha, S.V. (2018). *State anti-crisis regulation of agrarian sector of economy of Ukraine*. Drohobych: Kolo [in Ukrainian].
14. Petruha, S.V. (2018). *Market transformation of agricultural sector of Ukraine's economy: from agricultural crisis to formation the basis for achievement the global sustainable development goals*. *Agrosvit*, 18, 3–46 [in Ukrainian].
15. *Cabinet of Ministers of Ukraine*. (2015). *On approval of the State Target Program for the Development of the Ukrainian Village for the period up to 2015 (Decree No. 1158, September 19)*. Retrieved from <https://zakon2.rada.gov.ua/laws/show/1158-2007-%EF> [in Ukrainian].
16. *Verkhovna Rada of Ukraine*. (2005). *On stimulating the development of regions (Law No. 2850-IV, September 8)*. Retrieved from <https://zakon.rada.gov.ua/laws/show/2850-15/ed20121202/find?text=%C4%E5%EF%F0%E5%F1%E8%E2%ED%E0+%F2%E5%F0%E8%F2%EE%F0%B3%FF#w11> [in Ukrainian].
17. *Ministry of Agrarian Policy and Food of Ukraine*. (2015). *On the establishment of the Council for the Development of the Draft Integrated Strategy for the development of agriculture and rural territories in Ukraine for 2015-2020 (Order No. 31, January 28)*. Retrieved from <https://minagro.gov.ua/ua/npa/nakaz-minagropolitiki-ukraini-pro-utvorennya-radi-z-pitan-rozrobki-proektu-edinoi-kompleksnoi-strategii-rozvitku-silskogo-gospodarstva-i-silskikh-teritoriy-v-ukraini-na-2015-2020-roki> [in Ukrainian].
18. Ryzhakova, G.M., Malykhina, O.M., Ryzhakov, D.A., Loktionov, Ya.F., Lugyna, T.S., Koval, T.S. (2018). *Risk-management in the system of management of integration processes as a component of modernization of Ukrainian economy*. *Management of complex systems development*, 36, 113 – 119 [in Ukrainian].
19. *Statistics of the Russian Empire, USSR and Russian Federation*. (n.d.). Retrieved from <http://istmat.info/statistics> [in Russian].
20. Tymochko, N.O. (2005). *Economic History of Ukraine*. Kyiv: KNEU [in Ukrainian].
21. Trubarov, S.V. (1984). *The agro-industrial complex of the USSR in the economic system of a developed socialist society (PhD thesis)*. Moscow. Retrieved from <https://www.dissercat.com/content/agropromyshlenni-kompleks-sssr-v-ekonomicheskoi-sisteme-razvitogo-sotsialisticheskogo-obshc> [in Russian].
22. Heiets, V.M., Borodina, O.M., Prokopa, I.V. (Eds.) (2012). *Ukrainian model of agrarian development and its socio-economic reorientation*. Kyiv [in Ukrainian].
23. Tsurupa, V.A. (1986). *Memory bells*. Moscow: Politizdat [in Russian].
24. Chernyshev, D.O. (2018). *Scientific and methodological tools for organization of construction on the basis of biosphere compatibility (PhD thesis)*. Dnipro. Retrieved from https://pgasa.dp.ua/wp-content/uploads/2019/01/dis_chernyshev.pdf [in Ukrainian].
25. *The Boston Consulting Group*. (2013). *Bridging The Gap. Meeting The Infrastructure Challenge with PPPs*. Retrieved from <https://www.bcg.com/documents/file128534.pdf>.
26. Holubnychy, V. (1971). *The Soviet Economic System in Ukraine*. In: *Ukraine: A Concise Encyclopaedia*, 2.
27. Marx, K. (2013). *Capital. A Critical Analysis of Capitalist Production (Vol. 1 & 2)*. Hertfordshire: Wordsworth Editions.
28. *World Bank*. (n.d.). *Rankings & Ease of Doing Business Score*. Retrieved from <https://www.doingbusiness.org/en/rankings>.
29. *United Nations*. (2018). *Sustainable cities, human mobility and international migration*. Retrieved from <https://www.un.org/en/development/desa/population/commission/sessions/2018/index.asp>.

The article came to the Editorial Board 16.11.2019

Рижакова Галина Михайлівна

Завідувач кафедри менеджменту в будівництві, доктор економічних наук, професор, заслужений економіст України, відмінник освіти України, orcid.org/0000-0002-7875-9768

Київський національний університет будівництва і архітектури, Київ

Петруха Сергій Валерійович

Член групи експертів Продовольчої та сільськогосподарської організації ООН (ФАО) з питань сільськогосподарської і торгівельної політики в країнах СНД, orcid.org/0000-0002-8859-0724

Куницький Костянтин Сергійович

Здобувач, orcid.org/0000-0002-6234-9836

Київський національний університет будівництва і архітектури, Київ

**ІНСТИТУЦІОНАЛЬНІ ЗАСАДИ ТА РЕГУЛЯТОРНІ ВАЖІЛІ РОЗВИТКУ АГРОБУДІВНИЦТВА
В УМОВАХ СИСТЕМНОЇ ЕКОНОМІЧНОЇ ТРАНСФОРМАЦІЇ**

Анотація. Встановлено, що в умовах глобалізації рівень розвитку інфраструктурних галузей є визначальним для конкурентоспроможності аграрного сектору економіки країни, формуючи основу для забезпечення сталої динаміки агропродовольчих ланцюгів створення доданої вартості: в одних країнах проблеми інфраструктури пов'язані із завданнями вдосконалення наявної аграрної структури, в інших – підвищення рівня інфраструктурної оснащеності, а Україна абсорбує ці два підходи. Систематизовано понятійно-термінологічний апарат, зокрема поняття «інфраструктура», «соціальна інфраструктура», «капітальне будівництво» тощо, та запропоновано авторське визначення «сільського будівництва» як сукупності вишукувальних, проєктних і будівельних організацій, а також підприємств будівельної індустрії, фахівців, які обізнані зі специфікою функціонування аграрного сектору національної економіки та сільських територій, спеціалізуються на інфраструктурному забезпеченні розвитку оптово-продовольчих ринків з метою створення сприятливих соціально-економічних умов для виконання селом у цілому та сільським соціумом зокрема його виробничої й інших локальних, регіональних та загальнодержавних функцій, у т. ч. орієнтованих на формування продовольчого суверенітету, забезпечення продовольчої безпеки. Доведено доцільність використання історіографічного принципу в дослідженні сільського будівництва в контексті трансформаційних процесів, що відбуваються в аграрному секторі економіки й розвитку сільських територій в умовах модернізації економічної політики та нової економічної реальності. Сформовано авторське бачення стадійності еволюціонування сільського будівництва в сучасній Україні: перша (90-ті – початок 2000-х рр.) «стабілізаційна», друга – (початок 2000-х – середина 2000-х рр.) «відновна» і третя – (середина 2000-х рр. – дотепер) – «стратегічна» та охарактеризовані окремі еволюційні поступуни як усередині них, так і між ними. Це дало змогу обґрунтувати дві основні адаптаційні моделі аграрного сектору економіки, будівельного комплексу й сільського соціуму до мінливих соціально-економічних процесів, іменованих «симбіотико-пасивно-адаптаційною» та «інноваційно-адаптаційною», а також сформулювати ключові принципи державного регулювання тріади «аграрний сектор економіки (разом із сільськими територіями та в поодиноких випадках з територіями депресивного розвитку) – інфраструктурні галузі – будівельний комплекс» для подальшої стабілізації та забезпечення сталої динаміки сільського будівництва.

Ключові слова: аграрний сектор економіки; сільське господарство; сільське будівництво; будівельний комплекс; інфраструктурні галузі; глобалізація; продовольча безпека; сільські території

Link to publication

APA Ryzhakova, Galyna, Petrukha, Serhii & Kunitskyi, Kostyantyn. (2019). Institutional foundations and regulatory levers for the development of agricultural construction under conditions of systemic economic transformation. *Management of Development of Complex Systems*, 40, 171–178; [dx.doi.org/10.6084/m9.figshare.11969082](https://doi.org/10.6084/m9.figshare.11969082).

ДСТУ Рижакова Г.М. Інституціональні засади та регуляторні важілі розвитку агробудівництва в умовах системної економічної трансформації [Текст] / Г.М. Рижакова, С.В. Петруха, К.С. Куницький // Управління розвитком складних систем. – № 40. – 2019. – С. 147 – 155; [dx.doi.org/10.6084/m9.figshare.11969082](https://doi.org/10.6084/m9.figshare.11969082).