Optimization of Small Agricultural Producer's Taxation by Creating Innovative-Integrated Structures

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Abstract. Issues of tax optimisation of business entities have always been in the centre of attention of taxpayers. Solving this issue requires strong human, technical, and other types of support. There are substantial features of the functioning of small-scale agricultural producers, which make it difficult to optimise their taxation. Presently, it is possible to solve this issue by creating innovative and integrated structures. The purpose of this study was to substantiate the feasibility of creating innovative and integrated structures in the agro-industrial complex, which should lead to optimisation of taxation of Ukrainian small-scale agricultural producers. Both general scientific and special research methods were used in the preparation of this study, namely: logical generalisation – for theoretical justification of the need to create innovative and integrated structures to optimise the functioning of small-scale agricultural producers; mathematical and system analysis – to justify the feasibility of creating integrated structures to optimise the taxation of small-scale agricultural producers, etc. The study of the theoretical foundations and practices of taxation of Ukrainian small-scale agricultural producers allowed substantiating the feasibility of creating innovative and integrated structures in the agricultural sector of the economy. It was found that in the structure of agricultural enterprises, the largest share belongs to small enterprises that, according to the specifics of their activities, are geographically remote from the centres of civilisation (labour market, tax services, internet resources, etc.) and do not have the opportunity to have highly qualified employees in their staff. It was proved that it is possible to optimise the taxation of small-scale agricultural producers by creating innovative and integrated structures. It is proposed to create integration structures by involving small-scale agricultural producers and employees of advisory services in accounting and analytical work. Delegating complex and variable tasks to a highly qualified specialist would substantially optimise the tax policy of an agricultural enterprise. Further research should be carried out towards developing a mechanism for optimising the functioning of agricultural producers in the context of the development of digital technologies.

Keywords: consulting, digital technologies, agricultural advisory services, agro-industrial complex
INTRODUCTION

The current stage of economic development is characterised by the processes of creating innovative and integrated structures that comprise interrelated objects that perform various functions. An objective prerequisite for the development of these structures in the agro-industrial complex is a balanced system of financial and industrial relations, both between all participants of innovative and integrated structures and with external entities. Among external entities, a special place is occupied by the state tax service bodies.

Creating integrated structures is a global trend. Developed countries are currently undergoing processes of agro-industrial cooperation and integration, which allows these countries to ensure high socio-economic development.

Agro-industrial integration unites agricultural producers, processing, trade, and service entities, as well as financial, insurance, and other organisations (Hrosul et al., 2021). The main purpose of combining these objects is to achieve a positive synergistic effect, to form an optimal system of socio-economic relations. However, when creating innovative and integrated structures in the agro-industrial complex, it is necessary to consider the uneven conditions for the development of interrelated industries and the disparity in the distribution of added value between them. Furthermore, in the context of the development of digital technologies, there is a transformation of industries (Bentley, 2019), including agricultural ones.

The evolution of humanity is always a wave-like development, where "waves" are associated with technological leaps (Toffler, 1980). In agriculture, development is also mainly driven by technological revolutions, the introduction of achievements of which allowed considerably increasing the level of production efficiency. Presently, humanity is on the brink of the Fourth Industrial (digital) revolution, the achievement of which will substantially increase the profitability of agriculture, optimise management, ensure the functioning of the system in real time, achieve full control over processes, etc. The main goal of introducing digital innovations in agriculture is to increase productivity and quality of labour, to increase economic efficiency. Even today, digitalisation is actively penetrating all areas of agriculture (especially those that are easily automated), including accounting and monetary (Schwab, 2017). However, digitalisation requires considerable financial investment and strong human resources, which leads to the active implementation of digital solutions mainly by large holdings.

The existence of any business entity is associated with the payment of taxes during its entire life cycle. Therewith, business entities strive to minimise (optimise) the amount of these deductions. Digitalisation is transforming tax processes. The issues of tax optimisation with digital technologies are so significant that they have aroused the interest of the “Big Four” companies (PwC, KPMG, E&Y, Deloitte). Deloitte’s team of consulting companies deals with tax technologies. They consider tax transformation as a holistic, closely intertwined system of evolution of business operations and strategies based on the use of digital technologies. The employees of consulting companies include professionals with extensive experience in both tax and digital technologies. This allows developing and implementing an individual tax strategy, considering the specific features of the taxpayer’s activities. Specialists of consulting companies provide advice on tax legislation and obligations on real-time tax reporting; assessment of tax policy and strategy, etc. Global shifts towards digital transformation and cloud applications provide unprecedented opportunities for tax optimisation (Deloitte, N.d.; Ernst & Young, n.d.). However, digitalisation affects several subjects: taxpayers and tax authorities. The transformation of a typical average tax service into a modern high-tech one requires a certain time and considerable effort. The introduction of technologies that are really significant involves the application of strategic changes that lead to time savings, costs, increased efficiency, etc. Therewith, digital technologies is merely one (albeit mandatory) component of tax service transformation (KPMG, 2018). Digital technologies are constantly developing, which leads to constant transformations in all spheres of life, including in the tax process. Furthermore, COVID-19 forced people to work on-line, which led to an acceleration in the development and introduction of digital technologies (Spotlight: robotic process..., 2017).

There are certain features of optimising the taxation of agricultural producers, which is primarily associated with elevated risks of agricultural activities (due to dependence on natural and climatic conditions, with the specifics of the use of biological assets), the variety of biological objects, the complexity of technological processes, the distribution of controlled parameters over a large area. The digital revolution affects the optimisation of the tax process. Small-scale agricultural producers, apart from the above-mentioned problems, also face problems of limited human, financial, and other resources. The problem is compounded by the fact that the current system of taxation of agriculture in Ukraine is mainly focused on large businesses. The issues of taxation of small businesses are not given due attention, and therefore the procedure for their taxation is still undeveloped, which complicates its implementation. Under these conditions, it is possible to ensure efficient production and optimal tax burden for small-scale agricultural producers by creating innovatively integrated structures. It is these circumstances that determine the relevance of research on tax optimisation of Ukrainian small-scale agricultural producers by creating innovative and integrated structures.

The purpose of this study was to develop a mechanism for optimising taxation of Ukrainian small-scale agricultural producers by creating innovative and integrated structures.
LITERATURE REVIEW

Issues of optimising the tax burden are constantly at the centre of scientific research. Thus, A.G. Karantounias (2018) studies optimal fiscal policy with recursive preferences. The study found that optimal policies require more active use of debt obligations as a fiscal absorber. D. Bentley (2019) investigates the process of adapting taxation to the conditions of using digital technologies. Bentley concludes that digital transformation leads to changes in the tax procedure, which was developed for the conditions of previous centuries.

S.M. Chaudhry et al. (2015) studies the issues of tax optimisation of banking activities. Chaudhry’s study proved that the tax on financial transactions is economically inefficient and potentially costly for the economy and cannot protect taxpayers; the bank fee, which is used to finance deposit guarantees and banking resolution mechanisms, is potentially useful for financial stability, but poses a risk of double taxation. The authors support the abolition of value-added tax (VAT) for financial services. A. Hansford & J. Hasseldine (2012) investigated issues related to taxation of small and medium-sized businesses. These scientists have proved the need to reform the taxation system of small and medium-sized businesses due to its excessive burdensome nature.

S. Eichfelder & F. Hechtner (2016) investigate the costs of tax collection procedures. As a result of their study, it was found that the cost of compliance with tax collection procedures is too high for private entrepreneurs.

N. Shalimova (2019) investigated regional development priorities in taxation of agricultural producers. Her paper proves the need to expand the powers of local self-government bodies, local authorities, and territorial communities to establish local taxes and fees, develop a mechanism for tax incentives that would contribute to the activation of innovation activities and the development of agriculture. The paper also notes the need to correct the procedure for allocating budget funds for national support to agricultural producers.

V.M. Savchenko et al. (2018) studies the impact of the quality of information support on tax efficiency. Savchenko’s study found that the effectiveness of tax management primarily depends on the quality of its information support.

N.G. Mankiw et al. (2009) considered theoretical and practical aspects of tax optimisation. In this paper, the authors define how the main taxes should be formed. N.N. Stern (1986) investigated models of optimal income taxation. This scientist calculated the rate of optimal income taxation. A. Maksymenko & V. Kozak (2021) researched the issues of tax asymmetry of multinational corporations in the context of uneven economic development. As a result of their study, these authors found that in underdeveloped countries, the tax system encourages business activity to a lesser extent.

O. Sarapina & O. Yeremian (2015) studied the specific features and issues of taxation in the agricultural sector. In this paper, the authors, based on the analysis of the advantages and disadvantages of applying a single tax of Group IV, developed vectors for optimising the taxation mechanism of agricultural enterprises.

Nesterenko et al. (2021) studied general issues of development and functioning of the Ukrainian tax system. The authors define the features of the evolution of the tax system of Ukraine at the present stage. These researchers focused on the necessity of adapting progressive international practices to Ukrainian realities and the expediency of continuing tax reforms towards their liberalisation.

The scientific developments of S.M. Homovij et al. (2018) are aimed at research and improvement of organisational and managerial aspects of taxation of agricultural enterprises. As a result of the conducted research, scientists based on the DEA analysis carried out formed the main articles that allow optimising the indicator of the tax burden of an agricultural enterprise.

Recently, many researchers have been concerned about the creation and functioning of integrated structures. Thus, V. Hrosul et al. (2021) considered the processes of integration of enterprises in the field of nutrition. These scientists have established that in the future there may be further integration of food enterprises in the context of the regions of Ukraine. Furthermore, it was concluded that the priority of creating a cluster based on agricultural enterprises (or enterprises where agriculture is the main type of economic activity) is given.

A. Sumets et al. (2021) investigated the development of agricultural clusters. They have developed methodological approaches to choosing options for ensuring the competitiveness of agricultural enterprises during their integration. During their study, the authors found that the problem of choosing the best option should be reduced to finding the distribution of investment resources that is the most optimal.

O. Popelo et al. (2021) focus on the formation and development of innovatively integrated agro-industrial structures. Researchers have developed a conceptual model for their creation and development. This model is based on structural modernisation of the economic space, solving issues of ensuring sustainable development based on the effective use of available spatial resources.

Z. Rakhmetulina et al. (2020) investigated the issues related to optimising the structure of an innovation cluster. Therewith, scientists paid considerable attention to competitive principles. As a result of their study, the authors constructed a simulation model of the optimal cluster (the model is focused on choosing the rational composition of cluster participants, its structure and activity goals).

V. Khmurova et al. (2021) researched the development of public-private partnerships. As a result of their
study, researchers have established a general trend towards the decentralisation of power. This trend leads to the transfer of more powers to local self-government bodies.

**MATERIALS AND METHODS**

When preparing this paper, both general scientific and special research methods were employed, namely: logical generalisation – for theoretical justification of the need to create innovative integrated structures to optimise the functioning of small-commodity agricultural producers; mathematical and system analysis – to justify the feasibility of creating integrated structures to optimise the taxation of small-commodity agricultural producers. The initial basis of this study included the regulatory documents of the Ministry of Labour and Social Policy (2003), data from the State Statistics Service of Ukraine (2020).

Upon calculating the effectiveness of integration of small-scale agricultural producers and advisory services, the authors of this paper used the standards for calculating the number of accountants and the norms of their working time at Ukrainian enterprises, which are governed by intersectoral standards for the number of accounting employees, approved by Order No. 269 of the Ministry of Labour and Social Policy of Ukraine (2003) of September 26, 2003. According to this document, the time standards planned for an accountant of a small-scale agricultural producer at the stage of accounting and working on methodology and calculations with the budget are presented in Table 1.

| Item No. | Name of the type of accounting work | Units of measurement | Time standards, hours |
|----------|------------------------------------|----------------------|----------------------|
| 1        | Analytical accounting of settlements with tax payments and fees and verification of these settlements by regulatory authorities (State Tax Service) | Statement            | 0.2                  |
| 2        | Keeping a Purchase and Sale Book    | Book                 | 0.1                  |
| 3        | Study of accounting (methodological support provision) | Consultation | 0.25                 |
| 4        | Conducting financial and legal analysis of accounting policies applied at the enterprise | Event                | 12.0                 |
| 5        | Formation of methodological documentation on accounting issues based on scientific and methodological sources | Letter (A4 format)  | 2.00                 |
| 6        | Visiting institutions and organisations (Tax Service, bank, State Treasury, etc.) | Visit               | 1.3                  |
|          | **Total**                          |                      | **15.85**            |

*Source: grouped based on Order No. 269 of the Ministry of Labour and Social Policy of Ukraine “Intersectoral standards for the number of accounting employees” dated 26.09.2003 (2003)*

According to the current intersectoral standards for the number of accounting employees, the norms of an accountant’s working time at the stage of working on methodology and calculations with the budget do not depend on the number of structural divisions of the enterprise and on the number of employees in it (unlike other norms of this document). Thus, upon delegating these procedures to an agricultural adviser on accounting and taxation issues, most of these items will not formally save time. However, the authors of this paper believe that in reality there will still be time savings.

Items 3 “Study of accounting (methodological support provision)” and 6 “Visit to institutions and organisations (Tax Service, bank, State Treasury, etc.)” under the conditions of delegation of authority will allow the adviser to considerably reduce the time spent on the formation and submission of tax reporting. Therewith, it is possible to extrapolate the amount of time savings from attracting an agricultural adviser on accounting and taxation from approaches to calculating equivalent income from public use (in most cases, it is estimated within 30% for each subject) (Kisil, 2007). Therefore, under these conditions, the following correlation is correct (1):

\[
\sum_{i=1}^{n} OPDST_i \times 0.3 \leq \sum_{i=1}^{n} OPSGOO_i
\]  

(1)

where \(\sum_{i=1}^{n} OPDST_i\) is the amount of labour costs for an employee of the accounting department of small-scale agricultural producers; \(\sum_{i=1}^{n} OPSGOO_i\) is the amount of payment for the services of an agricultural adviser on accounting and taxation issues; \(m\) is the lower limit of summation; \(n\) is the number of farms.

Thus, the effectiveness of cooperation in the system of small-scale agricultural producers and the advisory service in this case will be determined according to the following formula (2):

\[
E = \sum_{i=1}^{n} OPSGOO_i - \sum_{i=1}^{n} OPDST_i \times 0.3
\]  

(2)

where \(E\) is the economic effects of cooperation in the system.

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*Scientific Horizons, 2022, Vol. 25, No. 6*
RESULTS AND DISCUSSION

In the structure of innovative and integrated systems of the agro-industrial complex, agricultural producers occupy the key position. Research by a group of scientists led by V. Hrosul (2021) proves that “the most promising for the formation of clusters is the creation of an integrated structure based on enterprises whose main economic activity is agriculture.” In Ukraine, agricultural producers are mainly represented by small business entities (Table 2, Fig. 1).

Table 2. Dynamics of the share of agricultural, forestry and fisheries enterprises depending on the size for 2015-2020 (%)

| No. seq. | Size of the business entity | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|---------|-----------------------------|-------|-------|-------|-------|-------|-------|
| 1       | Large                       | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   |
| 2       | Average                     | 3.2   | 3.4   | 3.1   | 3.0   | 3.0   | 2.9   |
| 3       | Small                       | 96.8  | 96.6  | 96.9  | 97.0  | 96.9  | 93.3  |

Source: grouped based on information from the State Statistics Service of Ukraine (2020)

Figure 1. Dynamics of the number of agricultural, forestry and fishing enterprises depending on their size for 2015-2020

Source: built by the authors based on information from the State Statistics Service of Ukraine (2020)

The information presented in Table 2 illustrates the fact that from 2015 to 2020, the share of small enterprises in agriculture, forestry, and fisheries exceeded 95%. Figure 1 clearly shows that the dynamics of the number of agricultural, forestry, and fisheries enterprises depending on the size for 2015-2020 is not observed. Unlike large agricultural formations, the Ukrainian small-scale agricultural producer is focused on the domestic market, which means that it is at the present stage that ensures the country’s food security and raises living standards in rural areas. However, it is these producers who have substantial problems with material and technical support, personnel support, elevated production costs, lack of sales markets, etc.

In Ukraine, in the component of the system of support for agricultural producers, a large share belongs to the tax system (through the mechanism of tax incentives). However, in relation to small-scale agricultural producers, this mechanism is currently quite undeveloped. Thus, O. Sarapina and O. Yeremian (2021) note in their study that “the system of taxation of agricultural enterprises necessitates reformation to equalise the competitive environment, eliminate imbalances in the structure of the agricultural sector of the economy in favour of small and medium-sized socially oriented agricultural businesses, increase the competitiveness of small forms of management…” (Sarapina, & Yeremian, 2021).

As of 01/01/2022, agricultural producers had the right to independently choose whether to apply the simplified taxation system in the form of a single Group IV tax or pay taxes under the general system (Table 3).
Table 3. List of basic taxes to be paid by agricultural producers as of 01/01/2022

| No. seq. | Tax name | Rate (%) | Added taxation terms |
|----------|----------|----------|----------------------|
| 1.       | Land tax |          |                      |
|          |          |          |                      |
|          |          | Land plots|                      |
|          | The standard monetary valuation of which has been carried out|          | Forest lands          |
|          | Up to 0.1% (of the standard monetary valuation of land) |          |                      |
|          | From 0.3% to 1% (of the standard monetary valuation of land) |          | Agricultural lands    |
|          | Up to 1% (of the standard monetary valuation of land) |          | Public land           |
|          | Up to 3% (of the standard monetary valuation of land) |          |                      |
|          | Up to 12% (of the standard monetary valuation of land) |          | Land plots permanently used by business entities (except for state and municipal property entities) |
|          | The standard monetary valuation of which has not been carried out|          |                      |
|          | Up to 0.1% (of the standard monetary valuation of land established in the region) |          | Forest lands          |
|          | From 0.3% to 5% (of the standard monetary valuation of arable land established in the region) |          | Agricultural lands    |
|          | Up to 5% (of the standard monetary valuation of land established in the region) |          | Land located within or outside localities |
| 2.       | Single tax|          |                      |
|          | 10% (of the subsistence level) | Group I |                      |
|          | 20% (of the minimum wage) | Group II |                      |
|          | 3% (of income) | Group III | In case of payment of value-added tax (VAT) |
|          | 5% (of income) | Group III | If VAT is included in the single tax |
|          | 0.95% (to the standard monetary valuation of land) | Hayfields, pastures, and arable land |
|          | 0.57% (to the standard monetary valuation of land) | Hayfields, pastures, and arable land located in the Polissia territories and in mountainous areas |
|          | 0.19% (to the standard monetary valuation of land) | Perennial plantings located in Polissia territories and mountainous areas |
|          | 2.43% (to the standard monetary valuation of land) | Water fund lands |
|          | 6.33% (to the standard monetary valuation of land) | Agricultural land used in closed ground conditions |
| 3.       | Income tax | 18% | – |
| 4.       | VAT       | 20% | – |
|          |          | 14% | Certain types of agricultural products |
|          |          | 0% | Export |

Source: summarised by the authors based on (Tax Code of Ukraine, 2010)

An agricultural producer can choose the optimal tax policy only based on complex calculations. This requires the involvement of a highly qualified specialist, which not all farms can afford. Thus, for a small-scale producer, the procedure and choice of the optimal tax system (as well as the tax procedure itself) are quite
complex issues. Presently, the Ukrainian tax policy is focused on performing control functions. In its reports, the State Tax Service of Ukraine notes the increase in the number of control inspections with the increase in the use of punitive (financial) sanctions as a positive fact. Thus, the report of the State Tax Service of Ukraine for 2020 indicates that the tax audit units of Ukraine conducted 16.6 thousand factual inspections, and UAH 565.0 million in fine (financial) sanctions were applied to violators. Accordingly, the report of the State Tax Service of Ukraine for 2021 indicates that the number of factual inspections increased by 62% and amounted to 26.8 thousand inspections. Accordingly, in 2021, “fine (financial) sanctions in the amount of UAH 878 million were applied to business entities, which is 55% (or UAH 313 million) more than in 2020” (Tax Service of Ukraine, 2022). In other words, the growth rate of the number of inspections is higher than the growth rate of the application of punitive (financial) sanctions. However, the amount of paid fines (financial) sanctions, in percentage terms, is ahead of the increase in the number of factual inspections carried out. Thus, in 2021, according to the materials of factual inspections, 203 million UAH were received, which is 88% or 95 million UAH more than in the same period of 2020 (Tax Service of Ukraine, 2022). Global trends in the formation of tax policy and tax administration indicate that factors that allow transforming the tax process into a public service are becoming increasingly important. With such approach, certain economic incentives start working, the work of tax authorities becomes optimised, and the tax culture changes. However, as James Alm (2012) noted, some unresolved issues stay regarding the measurement, explanation, and control of tax evasion. As for the system of Ukrainian taxation (including agricultural producers), it is advisable to apply foreign practices, namely: simplify the tax system (number of taxes, rates, reporting, and payment procedures); introduce a mechanism to help the taxpayer in filing declarations and paying taxes; create media campaigns that link taxes with public services and motivate ethical behaviour (tax culture) (Alm, 2012). All this can be achieved by creating innovative and integrated structures with the involvement of consulting (advisory) services.

Due to the relatively small amount of tax revenues to the budget, the issues of taxation of small enterprises at the present stage in Ukraine are not given the necessary attention. The economic operations of a small-scale agricultural producer are diverse and cover the entire production cycle, which causes the complexity and multidimensional nature of accounting and analytical work (albeit small in volume). In this regard, the issues of calculating and paying tax payments are handled by an accountant (who, as a rule, is alone and works as the chief) or directly by the director (owner), who does not have the physical (and sometimes qualification and practical) opportunity to thoroughly study the features of taxation of their farm, monitor changes in legislation, and choose the best tax system at the given stage. The authors of this paper support the opinions expressed by O. Kilnitska, et al regarding unsatisfactory staffing in the agricultural sector. Thus, these scientists note that agricultural enterprises generally have a “shortage of labour resources and a prominent level of personnel danger” (Kilnitska et al., 2020). Furthermore, according to the reports of the State Tax Service of Ukraine, the mechanism of appealed tax notifications-decisions is currently working effectively. Thus, in 2021, the share of appeals against monetary obligations that were cancelled does not exceed 17% (Tax Service of Ukraine, 2022). Therewith, “the main reasons for cancellations are as follows: – ambiguous interpretation of tax legislation – 35.6%; – provision of added documents by the payer during the administrative appeal procedure – 31.8%; – incorrect determination of the amount and application of the amount of punitive (financial) sanctions – 17.7%; – poor-quality inspection and failure to prove established violations – 11.0%; – other – 3.9% (Tax Service of Ukraine, 2022).

However, the implementation of the mechanism of appealed tax notices-decisions of the State Tax Service of Ukraine also requires the presence of highly qualified employees of the corresponding speciality.

Starting from 2021, the procedure for taxation of small-scale agricultural producers was complicated by the fact that taxpayers could use a single account to pay monetary obligations or tax debt on taxes and fees and other payments. Therewith, the taxpayer must submit an electronic notice about the use of a single account and receive a receipt for the Register of Payers Using a Single Account (Tax Service of Ukraine, 2022).

For VAT payers, the State Tax Service of Ukraine has implemented opportunities for accepting and processing tax invoices and calculating adjustments to cost and quantitative indicators for tax invoices. These invoices are drafted according to new forms, which make provision for the application of a rate of 14%, which directly affects agricultural producers. In addition, in 2021, the information and technological support (ITS) “Tax block” of the State Tax Service of Ukraine implemented the entry of data on persons related to the agricultural commodity producer to the Register of recipients of budget subsidies based on the application form No. 1-ROBD (Tax Service of Ukraine, 2022). All these innovations were designed to optimise cooperation between taxpayers and the tax service. However, their implementation requires some support (technical, qualification-related). Small-scale agricultural producers generally do not have access to high-quality Internet, to the services of IT specialists, etc. The most problematic situation has developed with small businesses, as evidenced by the data presented in Table 4.
Modern society is characterised by digitalisation processes that cover all spheres of human life, including agricultural production. Presently, ecosystems of market participants have begun to be created in Ukraine, and new types of partnerships are emerging (Khmurova et al., 2021). Therewith, there is an integration of digital platforms of many market participants. These processes are available to large agricultural producers (classical holdings, etc.), while small-scale agricultural producers face many issues. Furthermore, the Fourth Industrial Revolution (like any other) is not smooth and gradual, but wave-like (Toffler, 1980). This necessitates swift assimilation of new knowledge and technologies, adaptation to permanently improving technologies. There is a need for a specialist capable of correctly and quickly adapting new digital solutions, solve tasks, and understand modern digital equipment. In general, digitalisation is considerably influenced by the human factor. Thus, the average age of the rural population of Ukraine as of January 01, 2022 was 41.5 years. This, to some extent, causes some resistance and concerns about the transition to digital solutions.

Notably, the regulatory framework leaves such a category of agricultural producers as households out of the legal field. They are not taxpayers, but they do not have the opportunity to use national support programmes and count on social protection.

Currently, in most countries of the world, small agricultural enterprises widely exercise the support of agricultural advisory services (“extension”). Employees of advisory services provide advice on analysing and resolving issues by providing the necessary information, take actions to encourage innovation, etc. In modern conditions in developed countries, advisory services place a substantial emphasis on ensuring long-term well-being (Bloody, 2017). Substantial differences between advisory services and other consulting services are that: first, they give advice on a fairly wide range of issues, and secondly, for the most part, these consultations are free for the client. The staffing of these services comprises highly qualified employees in various fields. Therefore, the authors of this study consider it appropriate to cooperate with regional advisory services to optimise accounting work (including tax optimisation). Therewith, it is advisable to create an active-adaptive model of the company’s accounting service with two-way information communication channels (Fig. 2).

Table 4. Level and dynamics of the share of enterprises that used digital technologies depending on the number of employees (individuals) in 2018-2020 (%)

| No. seq. | Size of the business entity depending on the number of employees, individuals | had access to the Internet | have hired specialists in the field of ICT |
|---------|--------------------------------------------------------------------------------|---------------------------|------------------------------------------|
|         |                                                                                | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 |
| 1       | 2                                                                              | 3    | 4    | 5    | 6    | 7    | 8    |
| 1       | 10-49                                                                          | 86.3 | 84.4 | 84.5 | 15.1 | 14.5 | 14.2 |
| 2       | 50-249                                                                         | 93.5 | 93.0 | 93.8 | 40.1 | 39.1 | 42.0 |
| 3       | over 250                                                                       | 95.9 | 94.8 | 94.5 | 75.1 | 73.9 | 74.1 |

Source: compiled by the authors based on the data from the State Statistics Service of Ukraine (2020)

Figure 2. Structure of relationships between small-scale agricultural producers – advisory service – State Tax Service

Note: DST is an accounting and analytical service (accountant) of a small-scale agricultural producer

Source: compiled by the authors
Delegating complex and variable tasks will allow the specialist to substantially optimise the tax policy of an agricultural enterprise. One of the areas of tax optimisation at the level of a business entity is tax planning, which is part of corporate planning. Tax planning involves the use of tax incentives, digital technologies, planning forms of contractual relations, pricing policies, agreements, etc. Furthermore, ways to optimise the tax burden include creating a simulated financial model, developing effective tax control, etc. (Olikhovskyi, 2018).

In any case, optimisation of the tax burden involves the development of an active-adaptive model that considers permanent changes in tax legislation and responds accordingly to them.

The implementation of the specified model requires powerful personnel, information and technological support, the implementation of which, for a small-scale agricultural producer, is possible with the involvement of an agricultural consultant. The current stage of development is characterised by the active introduction of digital technologies in all spheres of life, including in tax payment administration (Schwab, 2017). This creates opportunities to optimise collecting and analysing tax information, building a model for assessing tax risks, improving tax planning, more efficient formation and submission of tax reports, etc.

The use of digital technologies in corporate tax processes ensures the efficiency and transparency of these processes. However, in Ukraine, the state of digitalisation of the tax sector considerably falls behind the developed countries of the world. As for small-scale agricultural producers, the situation is much worse than generally in the country. This once again underlines the expediency of attracting an agricultural adviser on accounting and paying tax payments to optimise the taxation of small-scale agricultural producers, which would efficiently organise a tax planning system, reduce the cost of paying tax payments, and consider the specifics of the activities of each small-scale agricultural producer.

CONCLUSIONS

Agricultural enterprises occupy a key position in the structure of innovative and integrated systems of the agro-industrial complex. Among these enterprises in Ukraine, the small-scale manufacturer prevails, which in its functioning faces many problems due to the specifics of its activity, size, and location. In modern conditions, such a business entity needs certain support. In the component of the system of this support, the largest share belongs to the tax system. However, currently the mechanism of this system for small-scale agricultural producers needs to be finalised. The declared possibility of choosing the optimal tax system for a particular enterprise requires the involvement of a highly qualified specialist, who cannot always afford the farm. Moreover, the current tax legal framework is ambiguous and unstable, and the processes of implementing digital technologies increase the requirements for the qualification of employees.

Under any circumstances, the primary task in optimising the taxation of small-scale agricultural producers (as well as any other) has been compliance with the norms of tax legislation. Therewith, a highly qualified specialist in accounting and taxation can take advantage of gaps in the current legislation. Furthermore, one of the key factors in preventing errors in calculating tax payments is the use of modern digital technologies. The use of a single software integrated into the software of fiscal authorities allows automatically and remotely checking the correctness and timeliness of calculating and paying tax payments. To optimise the taxation of small agricultural producers, especially in the context of transformations caused by the Fourth Industrial Revolution, it is necessary to use fundamentally new approaches by creating innovative and integrated structures with the involvement of an agricultural adviser on accounting and taxation. Delegating complex and variable tasks to the adviser will substantially optimise the tax policy of an agricultural enterprise, improve work with fiscal authorities, make better use of the capabilities of digital technologies and yield a positive synergistic effect.

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Оптимизация оподаткования дрібнотоварного сільськогосподарського виробника шляхом створення інноваційно-інтегрованих структур

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Анотація. Питання оптимізації оподаткування суб’єктів господарювання завжди знаходились у центрі уваги платників податків. Вирішення цього питання потребує потужного кадрового, технічного та інших видів забезпечення. Існують суттєві особливості функціонування дрібнотоварних сільськогосподарських виробників, які зумовлюють складність оптимізації їх оподаткування. Вирішити це питання на сьогодні можливо шляхом створення інноваційно-інтегрованих структур. Метою проведеного дослідження є обґрунтування доцільності створення інноваційно-інтегрованих структур у агропромисловому комплексі, що повинно привести до оптимізації оподаткування українських дрібнотоварних сільськогосподарських виробників. При підготовці статті було використано як загальнонаукові так і спеціальні методи дослідження, а саме: логічного узагальнення – для теоретичного обґрунтування необхідності створення інноваційно – інтегрованих структур з метою оптимізації функціонування дрібнотоварних сільськогосподарських виробників; математичного та системного аналізу – для обґрунтування доцільності створення інтегрованих структур з метою оптимізації оподаткування дрібнотоварних сільськогосподарських виробників тощо. Дослідження теоретичних засад та практичного досвіду оподаткування українських дрібнотоварних сільськогосподарських виробників дало змогу обґрунтувати доцільність створення інноваційно-інтегрованих структур в аграрному секторі економіки. Визначено, що у структурі сільськогосподарських підприємств найбільша питома вага відноситься до малих підприємств, які за способом імплементації відрізняються від інших підприємств. Обґрунтовано, що оптимізувати оподаткування дрібнотоварних сільськогосподарських виробників можливо шляхом створення інноваційної інтеграції структур. Запропоновано створення інтеграційних структур шляхом запровадження інноваційних технологій, що є найдієвішою схемою оптимізації оподаткування дрібнотоварних сільськогосподарських виробників. Подальші дослідження доцільно проводити у напрямку розробки механізму оптимізації функціонування сільськогосподарських товариств шляхом використання інноваційної інтеграції структур.

Ключові слова: консультація, digital-технологія, сільськогосподарські дорадчі служби, агропромисловий комплекс.

Оптимизация оподаткования дрібнотоварного сільськогосподарського виробника шляхом створення інноваційно-інтегрованих структур

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