

Envisioning the future of agri-tourism in Ukraine: from minor role to viable farm households and sustainable regional economies

Journal Article**Author(s):**

[Ohorodnyk, Vira](#) ; [Finger, Robert](#) 

Publication date:

2024-05

Permanent link:

<https://doi.org/10.3929/ethz-b-000669370>

Rights / license:

[Creative Commons Attribution 4.0 International](#)

Originally published in:

Journal of Rural Studies 108, <https://doi.org/10.1016/j.jrurstud.2024.103283>

Funding acknowledgement:

200918 - Assessment of formal, natural and social insurances: how to cope best with impacts of extreme events on grasslands for sustainable farming systems? (SNF)



Envisioning the future of agri-tourism in Ukraine: from minor role to viable farm households and sustainable regional economies

Vira Ohorodnyk^{a,b,*}, Robert Finger^a

^a Agricultural Economics and Policy Group, ETH Zurich, Sonneggstrasse 33, 8006, Zurich, Switzerland

^b Kyiv National Economic University named after Vadym Hetman, Beresteysky Avenue 54/1, Kyiv, Ukraine

ARTICLE INFO

Keywords:

Agritourism
Tourism
Agriculture
Sustainable regional development
Rural region
Farm

ABSTRACT

Agritourism is known to play a pivotal role when providing diversification of farm activities, making in such way for sustainable regional and local development. However, it should be stated that in Ukraine agritourism has not received proper attention in the pre-war and current period. This paper explores the landscape of agritourism in Ukraine across pre-war and current periods, assessing its potential for the country advancement. The research involves the analysis of data on agriculture and tourism obtained from the World Bank, Ukrainian authorities, and agritourism association leaders. We also delve into 62 Ukrainian legislative and program documents to highlight institutional barriers and existing issues. The findings reveal that agritourism occupies minor position within robust agricultural sector in Ukraine, accompanied by notable regulatory gaps, nevertheless it possesses significant institutional and policy implications. We demonstrate that fostering agritourism in Ukraine can play a vital role in enhancing the sustainability of farms by broadening their range of activities. This holds particular importance in the context of the post-war economic recovery in Ukraine. Agritourism, operating at the intersection of agriculture and tourism, has high potential to generate positive effects in Ukraine not only on the agricultural sector but also on the country sustainable development. As a result of the investigation, the paper substantiates possible institutional changes (at the macro-, regional, and local levels) necessary to relaunch agritourism in Ukraine successfully.

1. Introduction

Ukraine and Ukrainian agriculture and food systems face dramatic challenges due to the Russian invasion and will require re-building and re-structuring after the war. Farms and rural entrepreneurs can be a major backbone of regional economies and development and social systems. Agritourism activities (including gastronomy, accommodation, renting out facilities and recreational activities, e.g. Meraner et al., 2018, Abadi and Khakzand, 2022, Perez-Olmos and Aguilar-Rivera 2021, Spiegel et al., 2021) can be a key element to ensure the economic and social viability of small and medium sized farms and regional development, especially for post-war period. Agritourism is a type of tourism activity carried out by local people (mainly private farm households) in rural areas, which involves hosting tourists in existing buildings (Roman and Grudzień 2021; Galluzzo 2018), using local products and materials, and providing leisure activities for tourists with additional activities in rural areas (Lazarijeva 2017; Pérez-Olmos and Aguilar-Rivera 2021). The advantage of agritourism is that it encourages

the survival and sharing of cultural, social values and traditions of rural communities (Abadi and Khakzand, 2022). In addition, agritourism creates various benefits for private farm households and provides a source of increased diversification and sustainability in rural areas (Ciolac et al., 2019; Adamov et al., 2020, Karampela and Kizos, 2018). This activity can provide an additional source of income for farms, allow to reduce farms' exposure to risk, and to create jobs opportunities and multifunctional production systems providing various benefits for society. In addition, agritourism can be one of the factors contributing to sustainable development (e.g., Ciolac et al., 2019) and is of large and increasing policy relevance all over Europe (e.g., Streifeneder and Dax 2020). Agritourism is widely acknowledged to be highly developed in Austria (Dax et al., 2019), Italy (Galluzzo 2018), Poland (Germinario et al., 2023), Romania (Adamov et al., 2020), Switzerland (Lal et al., 2023), and various other countries (Grillini et al., 2022; Hegarty and Przeborska 2005). In Ukraine, however, agritourism legislation and supporting policies has not been well developed (Shevchenko et al., 2016). As a result, the level of agritourism in Ukraine before the war

* Corresponding author. Sonneggstrasse 33, 8092, Zurich, Switzerland.

E-mail addresses: ohorodnyk.vira@kneu.edu.ua (V. Ohorodnyk), rofinger@ethz.ch (R. Finger).

<https://doi.org/10.1016/j.jrurstud.2024.103283>

Received 25 August 2023; Received in revised form 5 April 2024; Accepted 11 April 2024

Available online 17 April 2024

0743-0167/© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

(before the full-scale invasion in February 24, 2022) is considered to be quite low, also limiting the possibility for post-war periods. Such steps are however needed to untap agritourism's potential role in post-war development of the agricultural sector and regional development.

Previous research revealed large potential of agritourism activities to strengthen farms, regional economies and create social networks (e.g. Meraner et al., 2018; Haugen and Vik 2008; Perez-Olmos and Aguilar-Rivera 2021; Shevchenko and Petrushenko 2021). The diversification of farm activities is often found to be linked with the customers' immediate involvement in the farm everyday life through agritourism (e.g. Meraner et al., 2015, 2018; Knapp et al., 2021). Various farming systems may benefit from agritourism opportunities, especially grassland-based production systems, which are believed to be of key relevance for these activities (e.g. Vroege et al., 2020; Parente and Bovolenta 2012). The agricultural sector is reaping the benefits of expanding its activities through agritourism (e.g. Karampela and Kizos, 2018). In addition, on global scale agritourism is one of the ways of supporting economic viability of farm households and food security (Addinsall et al., 2017).

There are several literature gaps we aim to contribute to. There are only a few studies addressing the potential future development of Ukrainian agriculture for post-war periods (e.g. Khodakivska 2023, Hrynevych et al., 2022, Shubravskaya and Prokopenko, 2022; Kravchenko et al., 2020, Rexhaj et al., 2023). These studies so far have focused on the development of the core agricultural production, mostly on large farms and focussed on exports from Ukraine and world food security (e.g. Dyson et al., 2023; Lin et al., 2023; Al-Saidi Mohammad, 2023; Glauben et al., 2022; Dovbischuk 2023). Russia's full-scale invasion of Ukraine in 2022 has negatively impacted Ukrainian people, infrastructure, economy and also the country's agricultural sector, causing logistics issues and reducing international demand for agricultural products, which has also contributed to an increase in global hunger and a slowdown in the development of Ukraine's agricultural sector and related industries (Rexhaj et al., 2023). The close integration of agricultural activities and regional development remained so far unexploited. Notably, no study has yet investigated the potential of the interlinkage between agricultural and rural development (e.g. via agritourism) in Ukraine as an integral part of the country agricultural sector in the context of resilience and the diversification of farm activities. Furthermore, the lack of attention to potential of agritourism for post-war Ukrainian agricultural, economic, and rural development presents an important research gap.

This paper aims to contribute filling these research gaps and investigating whether and how agritourism can contribute to the viability of farm households and regional development in Ukraine. We aim to identify the potential relevance of agritourism in Ukraine during the pre-war, current wartime, and the post-war reconstruction period. Moreover, we aim to develop a framework that allows to identify entry points for efficient policy support.¹ It can also help to overcome the institutional barriers and effectively use agritourism for diversification of the farm activities in Ukraine. We analyse the pre-war, current, and possible post-war agritourism in Ukrainian agriculture. We use five steps to address the problem. First, we synthesize the scientific literature to identify scholarly gaps on agritourism in the context of the agricultural sector. Secondly, we collect information on the pre-war (mainly from 2019 until the full-scale invasion of Russia into Ukraine on February 24, 2022) and current period (after February 24, 2022) indicators in the agricultural sector, agritourism, rural and urban population in Ukraine. Thirdly, we analyse Ukrainian existing legal framework and program

¹ The topic is also closely interlinked to Ukraine integration to the European Union due to the necessity to coordinate Ukrainian standards, requirements, and regulations in the agriculture and tourism sector with those in the EU. The above is predetermined by high relevance of timely reforms implementation against the background of the fact that Ukraine acquired a candidate status for the EU membership on June 22, 2022 (European Council 2022).

documents related to agritourism. Fourth, we outline the potential of agritourism in the post-war recovery of the agricultural sector and the country economy. Fifth, we propose how institutional changes on the local, regional, and national levels can be improved to enable successful development of agritourism in Ukraine.

The remainder of this article is structured as follows: section 2 introduces the theoretical background on agritourism and sustainable development (regional and local), agricultural sector, the correlation between urban and rural population in Ukraine; section 3 describes methods and the approach involved into our research; section 4 presents the analysis of agritourism in Ukraine (pre-war and current period) and institutional settings; section 5 contains the overview of agritourism potential for post-war Ukrainian agricultural, economic, and rural development; section 6 provides discussion which is followed by conclusion in section 7.

2. Background

2.1. Agritourism and sustainable regional development

The literature (Meraner et al., 2015, 2018; Germinario et al., 2023; Knapp et al., 2021) highlights that agritourism diversifies farm activities, reducing risks and increasing profitability. In developing economies, small farms, susceptible to climate change, face potential issues with yield, investment, and competition from agricultural holdings (Addinsall et al., 2017). Also, diversified farms are more flexible in responding to future consumer needs in order to maximize profits (Meraner et al., 2015).

A farm is considered diversified if its main resources are also used for activities other than core agricultural production (Meraner and Finger, 2019). In addition, agritourism (along with the provision of certain social services by farms, services for the production of energy from alternative sources, horse business and direct sales of produced products) is one of the directions of diversification of farm activities (Meraner et al., 2018). At the same time, agritourism (as well as the rental of land and buildings) is classified as structural diversification (Van der Ploeg and Roep 2003). Farm diversification is an important aspect of agricultural and rural development policy in Europe (Vroege et al., 2020).

Factors that influence the non-agricultural diversification of farms identified in the literature include environmental considerations, the characteristics of the farmer and the farm itself, the type of farm, and the consideration of risk (Meraner et al., 2018). In addition, a higher diversification of farms in a specific region can be favourable for the development of agritourism at other farms in the region too as there are positive spillover effects (Vroege et al., 2020).

We can obtain a positive result for the country agricultural development through achieving the goals of sustainable development by combining the efforts of various sectors of the country economy, in particular agriculture and tourism (Ambelu et al., 2018). In its turn, agritourism is considered to be one of the most affordable types of tourism (Lazarieva 2017). Overall, tourism ranks among the most profitable global industries and is a key driver of socio-economic development, also in rural regions.

Agritourism is known to produce a positive impact on the economic development of rural areas (Santeramo and Barbieri, 2017), attracting internal/external investment and boosting the diversification of farms' activities (Vroege et al., 2020; Knapp et al., 2021). The Schengen Agreement (June 14, 1985) (AEUL 2023) proved to be one of the main factors maintaining agritourism sustainable development in Europe. It gave tourists more possibilities to travel between European countries which led to an increase in the number of foreign tourists on farms (WTO 2002).

The scholarly community has demonstrated considerable interest in the growing potential of the agricultural sector as a means of achieving sustainable development goals in regions worldwide (Ciolac et al., 2019, Abadi and Khakzand, 2022). The world's most popular agritourism

regions are Taiwan, Tuscany, Mallorca, Brazil, Hawaii, Grenada, California, and the Philippines (AAW, 2023). Notably, Ukraine is not among the above listed regions, however for further sustainable regional development it is crucial to support the agricultural sector in general and agritourism in particular (Shevchenko and Petrusenko 2021). Sustainable agriculture development environmental, economic, and social dimensions, including sector's interaction with local ecosystems, resource efficiency for rural development, and employment opportunities for local population (Ammirato and Felicetti 2014). In this context, it is vital to establish mutually beneficial cooperation between local authorities and farmers for further sustainable regional development (see Fig. 1).

Agritourism functions on the intersection of touristic and agricultural sectors of economy (Mahmoodi et al., 2022, Abadi and Khakzand, 2022). In the realm of agritourism, involvement spans various stakeholders, including local, regional, and state authorities, businesses, NGOs, and both rural and urban population (Plzakova 2022; ART 2022).

Globally, agritourism encompasses diverse activities, including various types of accommodation like farm stays, camping, cabins (Hegarty and Przezborska 2005; Pérez-Olmos and Aguilar-Rivera 2021). It also involves educational experiences such as farming activities, caring for domestic animals, local craft workshops, classes, and guided tours (Dax et al., 2019; Mahmoodi et al., 2022). Entertainment options like harvest festivals, farm dinners, and special events are common (Grillini et al., 2022; SATD 2023), also with outdoor pursuits such as boating, rafting, picnicking, swimming, hunting, picking forest mushrooms and berries, fishing, photo shootings, horseback riding (Dax et al., 2019, Abadi and Khakzand, 2022). Additionally, agritourism often includes on-farm direct sales of products like local crafts, including traditional food, clothes, pottery, and souvenirs (Adamov et al., 2020; ART 2022).

It is vital to establish mutually beneficial cooperation between authorities and farmers which provide agritourism for further sustainable regional development, improving local infrastructure among other benefits (Ivanushyn et al., 2022; Mahmoodi et al., 2022). In rural areas, agritourism provides possibility of employment for local residents and is seen as a profitable channel to sell local agricultural products, craft goods, and services. It also promotes cultural heritage, directly involving tourists into the farm everyday activities, in such way raising awareness of urban population (Grillini et al., 2022; Pérez-Olmos and Aguilar-Rivera 2021; ART 2022).

One of the main factors enhancing sustainable development in regions is the value attached to cultural and natural heritage of rural areas which in its turn can encourage rational and systematic use of agricultural resources. In rural areas, agritourism is seen as an opportunity to diversify farm activities, a profitable channel to sell local agricultural produce/craft goods/services, and a possibility of employment on the farm for local residents, which contributes to the restoration of sustainable rural development (Ammirato and Felicetti 2014). The Tourism as a multidisciplinary industry is one of the key drivers of regional development (Plzakova 2022).

2.1.1. Linking agritourism to Ukrainian agriculture

Regions of Ukraine demonstrate significant potential as objects of tourism activities which involve the use of natural and cultural resources of rural areas (Kalchenko et al., 2021). There are numerous family farms and private households in all regions of Ukraine that provide seasonal agricultural activities (USDA 2022). Thus, the issue of diversifying their activities becomes quite topical. One of the efficient solutions which can help to achieve the above is to expand the activities performed by the family farms and private households through agritourism (Vroege et al., 2020). It can offer them the opportunity to generate income not only during the agricultural season, but throughout the whole year. In addition, touristic activities can allow the farmers to distribute labour resources already available on the farm more consistently and plan a more sustainable use of their farming land, material and technical

recourses (Kalchenko et al., 2021).

With the outbreak of the global covid-19 pandemic in 2019, many countries around the world have imposed significant restrictions on outbound tourism (WTO 2021). It was at this time that domestic tourism (Roman and Grudzień 2021, Brune et al., 2023) began to develop actively, with agritourism being one of its varieties.

Although agritourism increasingly impacts rural development (Shevchenko and Petrusenko 2021; Hegarty and Przezborska 2005; Germinario et al., 2023; Adamov et al., 2020), further investigation is required to understand its role diversifying farm activities, fostering economic development in rural areas, and promoting sustainable regional development.

2.2. Agriculture in Ukraine

Agricultural sector in Ukraine is one of the most promising economic spheres from the point of view of its economic relevance and development potential (Hrynevych et al., 2022; Kravchenko et al., 2020, Shubravskaya and Prokopenko, 2022). At the end of 2021, the share of agricultural products in exports amounted to 40.7% or 27.7 billion USD which is 25% more than in 2020 (MAPFU 2022a). In 2022, Ukraine's agricultural exports accounted for 53% of the country's total exports worth more than 23 billion USD (MAPFU 2023a).

In terms of agritourism activities the structure of agriculture in Ukraine and Western European countries is dramatically different (Statistisches Bundesamt 2022). For example, a larger share of land in Ukraine is used for agriculture, and grassland-based farming systems are less relevant. Specifically, Ukraine has the highest share of the actively used agricultural lands in Europe, comprising over 70% of all agricultural lands in the country (VRU 2022). Moreover, in Ukraine there is a minimum share of grassland-based farming which is mainly located in the Carpathian Mountains and consisting mainly of private households or small farms (Holovachko et al., 2021).

Based on the World Bank estimates (Fig. 2), Ukraine's share of actively utilized agricultural land surpasses that of other country groups, including EU countries, high income countries, lower middle income countries, low income countries.²

Fig 2 also demonstrates that over the period from 1990 to 2020 the share of land used for agriculture in Ukraine has decreased by 1.07%. Cf. it decreased in EU (by 7.33%) and high income countries (by 3.51%), it increased in lower middle income countries (by 1.68%), and low income countries (by 0.57%) (WB 2022). Such distribution allows to claim that Ukraine's agricultural sector is much larger than in other countries. This means that the agricultural sphere in Ukraine has all necessary potential to play a crucial role in the country's further economic recovery and regional development.

The structure of businesses is also very different from Western European countries. There are both small family farms and very large agricultural holdings³ in all sectors of agriculture (SSSU 2021a). Agricultural holdings produce 55% of gross agricultural products (SSSU 2021a), whereas small farms produce 45% of the products (about 4.7 mln private households each cultivating an average of 1.23 ha of land)

² The World Bank classification of countries, based on the country income (WB 2019).

³ Agricultural holdings are an association of legal entities, primarily in the agricultural sector, operating in the national and international markets, consisting of parent and subsidiaries that carry out joint economic and financial activities and are linked by a system of participation that allows the parent company to develop and control the main management, financial and business activities of the member companies (Khodakivska 2023). Global agricultural holdings (Kidman & Co Ltd, Australian Agricultural Company, Consolidated Pastoral Company (CPC), Beidahuang Group, Cresud, NCH Capital) and Ukrainian holdings (Kernel, UkrLandFarming, MHP, NCH, Continental farming group, Epicentr agro, Harvest, Nibulon) are widely represented in Ukraine (Khodakivska 2023; AR 2019).

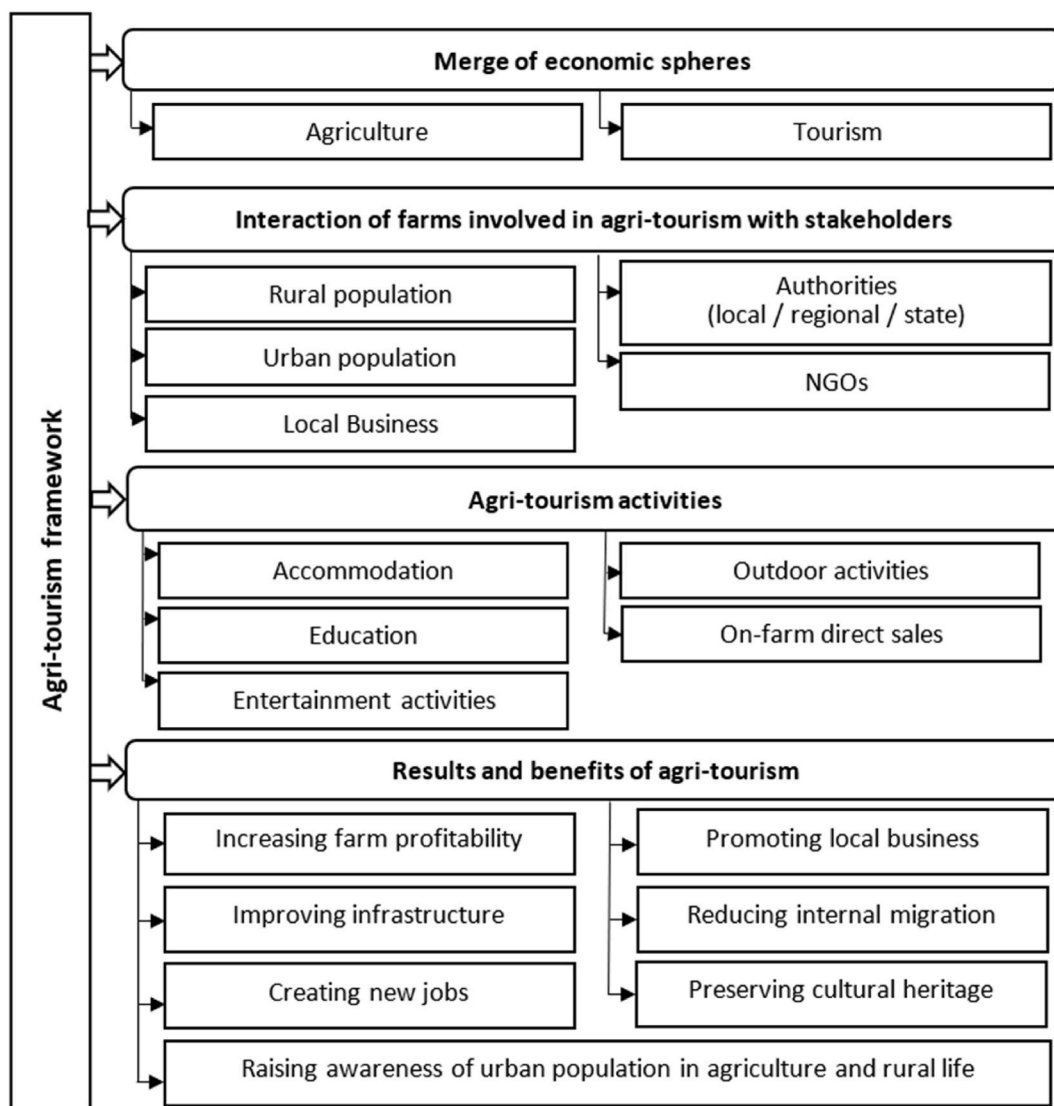


Fig. 1. Agritourism framework. Note: the figure was created based on various sources, i.e. Mahmoodi et al., (2022), Grillini et al., (2022), Pérez-Olmos and Aguilar-Rivera (2021), Abadi and Khakzand, 2022, BCMA 2017, Plzakova (2022), Ivanyshyn et al., (2022), SATD 2023, Union of RGTD, 2023, UAETA 2022.

(USDA 2022; SSSU, 2021d).

Overall, agricultural sector in Ukraine is dominated by plant production, i.e. 73% of all agricultural products (gross value) produced in agricultural sector (SSSU 2021a): mainly wheat, sunflower, corn, rape-seed, etc. (USDA, 2023a). At the same time, Ukrainian agricultural sector has a resource-based and non-homogeneous structure with large agricultural holdings specializing in highly profitable plant production and small farms concentrating on more labour-intensive agricultural products, such as animal produce, vegetables, fruit, and berries (SSSU 2021b).

Ukrainian agricultural sector has generally adapted to the current ongoing war. In 2022 during the spring seeding season, Ukrainian agricultural sector sowed 14.16 mln ha of land, or 83.7% of 2021 total of 16.92 mln ha (MAPFU 2022b). At the same time, there were changes in the structure of crops grains and oilseeds. Namely, in 2022 agricultural season farmers preferred spring wheat as a less demanding crop which is more important in terms of local and global food security (the acreage of this crop amounted to 0.2 mln ha, which is 8 thousand ha more compared to 2021) and soybeans as an undemanding crop to mineral fertilizers (the acreage of this crop in 2022 amounted to 1.25 mln ha, which is 50 thousand ha less compared to 2021) (USA 2022). The acreage of sunflower is 4.7 mln ha and corn is 4.6 mln ha which is

respectively 1.8 mln and 0.9 mln ha less than in 2021 (GP 2022). Also, in 2022 Ukrainian agricultural sector sowed 0.95 mln ha of spring barley, 0.15 mln ha of oats, 0.13 mln ha of peas, 0.18 mln ha of sugar beets, 1.1 mln ha of potatoes (MAPFU 2022b).

However, according to the Ukrainian Government forecast (issued at the end of 2022), in 2023 Ukraine expects to harvest 70–75% of 2022 indicators on the territories controlled by Ukraine (IU 2022). The priority will be given to oilseeds, as a result the sown area of grain crops may decrease by 45% compared to 2021 (IU 2022). It is also estimated that Ukraine's sown area in 2023 will decrease by 7 mln ha (compared to the pre-war 29 mln ha) (MAPFU 2023c). At the same time, the fact that as of 16 March 2023, 10 regions of Ukraine have already started the seeding campaign, although in the previous year, no planting had been done at this time, can be considered a positive signal regarding food security and the overall state of the agricultural sector of Ukraine (MAPFU 2023d). In addition, according to Taras Vysotskyi, First Deputy of the Ministry of Agrarian Policy and Food, Ukraine has all the pre-requisites to seed the same amount of acreage as in 2022, which will allow to grow twice as much as is needed for domestic consumption (MAPFU 2023e). This forecast seems realistic because the previous year's forecast did not take into account the large de-occupied territories of Mykolaiv, Kharkiv and Kherson regions, as well as the support of

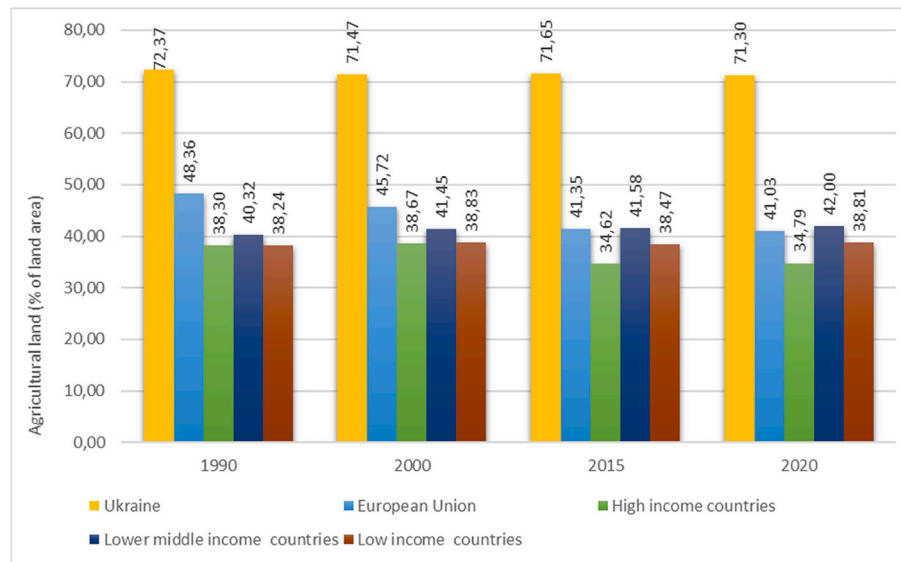


Fig. 2. Comparison of agricultural land from 1990 to 2020 (% of land area).
Source: WB 2022.

international partners (in the frontline regions, farmers are receiving free seed and mineral fertilisers) (AgroPortal 2023).

The above distribution of farm lands allowed to ensure food security in Ukraine and keep the high level of agricultural exports (MAPFU 2023a). In 2022, most of the revenue was received from exports of agricultural products which compared to 2021 grew by 43% for soybeans (862 mln USD), 19% for poultry (852 mln USD), 1% for corn (5.94 billion USD); and dropped by 44.7% for wheat (2.6 billion USD), 14.4% for oil for (5.46 billion USD), 8.6% for rapeseed (1.54 billion USD) (FB 2023). In total, more than 50 mln tonnes of agricultural products were exported from Ukraine in 2022 (MAPFU 2023b). At the same time, from the beginning of the war to the end of 2022, Ukraine exported 38.94 mln tonnes of grains, legumes, oilseeds, and their products (IU 2023). These are one of the best indicators of agricultural exports in recent years (GP 2023).

Nevertheless, presently the existing model of agricultural sector in Ukraine naturally demonstrates certain vulnerabilities which are predetermined by impossibility of conducting field works in the area of active military actions, difficulties in performing agricultural works on post-war territories due to massive distribution of explosives. One more vulnerability is the Russian military blockade of Ukrainian seaports which traditionally provide more than 60% of agricultural produce export. Finally, a significant part of agricultural equipment and infrastructure (production, processing, and storage of agricultural products) has been damaged or destroyed (Rusan 2022).

2.3. Significance of rural population for regional development in Ukraine

The development of Ukrainian regions is an important strategic task for Ukraine, especially in the current and post-war period. In 2020, the government formed 1470 territorial communities within the decentralization reform in Ukraine (including 410 urban, 433 village, and 627 rural communities) (Local communities, 2020). These communities include 443 cities, 1960 settlements, and 26 261 villages (GP 2021). At the same time, notably, for more than thirty years (since 1990) in Ukraine the urban population dominates (see Fig. 3).

The World Bank estimates that as of 2020 the share of the rural population in Ukraine is 30.4% (the share of the rural population in Ukraine has decreased by 2.8% since 1990), which is comparable to the distribution of rural and urban population in the EU countries, 25% (WB 2021). At the same time, when compared to the group of lower middle

income countries, which Ukraine enters, the share of the rural population in these countries is 57.5% on average as of 2020 (rural population has decreased by 12.1 % since 1990). In general, the share of rural population in low income countries is significantly higher than in other groups (see Fig. 3).

A more detailed description of the distribution between rural and urban populations can be provided using the available data from The State Statistics Service of Ukraine for 2016–2022 (see Appendix A). The data provided in Appendix A substantiates that overall in 25 regions of Ukraine urban population prevails, i.e. 69.7% as of 01 January 2022 (SSSU 2021c). Nonetheless, there are 4 regions with a predominantly rural population (Zakarpattia – 62.8%, Chernivtsi – 56.7%, Ternopil – 53.9%, Rivne – 52.5%). There are also 5 regions where the share of rural population is more than 40%, i.e. Volyn – 47.8%, Vinnytsya – 47.7%, Cherkasy – 42.7%, Khmelnytskyi – 42%, Zhytomyr – 40.4%. As of the end of 2021, 2.69 mln people were employed in the agricultural sector of Ukraine, which is 17.2% of the employed population (SSSU 2021a). The largest number of people employed in agriculture was in the following regions Vinnytsya (198 800 employees), Lviv (175 300 employees), Kharkiv (153 300 employees), Ivano-Frankivsk (151 100 employees), and Zakarpattia (133 200 employees) (SSSU 2021a). The above data (see Fig. 3 and Appendix A) demonstrate the significance of Ukrainian rural area and agricultural sector for sustainable regional development. Agritourism, as one of the ways to reduce unemployment in rural areas, has high potential in regions with intensive use of agricultural resources and a significant share of rural population. Notably, from January 1, 2016 to January 1, 2022, the structure of population distribution in Ukraine did not change significantly. As of January 1, 2022, a total of 41.2 mln people lived in Ukraine, of which 28.7 mln (69.7%) were urban population and 12.5 mln (30.3%) were rural population (SSSU 2022). The situation changed dramatically after February 24, 2022. The United Nations High Commissioner for Refugees estimates that 7.96 mln people have been displaced from Ukraine to other countries (as of January 24, 2023) with 5.91 mln internally displaced people within Ukraine (The United Nations High Commissioner for Refugees, 2023).

The military conflict, provoking a wave of refugees to other countries, has also created a dramatic wave of internally displaced people within Ukraine, mainly from urban to rural areas (MSP 2023). Those people – victims of military actions – require additional social protection and high quality physical and psychological recreation (ROSA 2022) in a safe place. Private households or single little farms (sadyba in

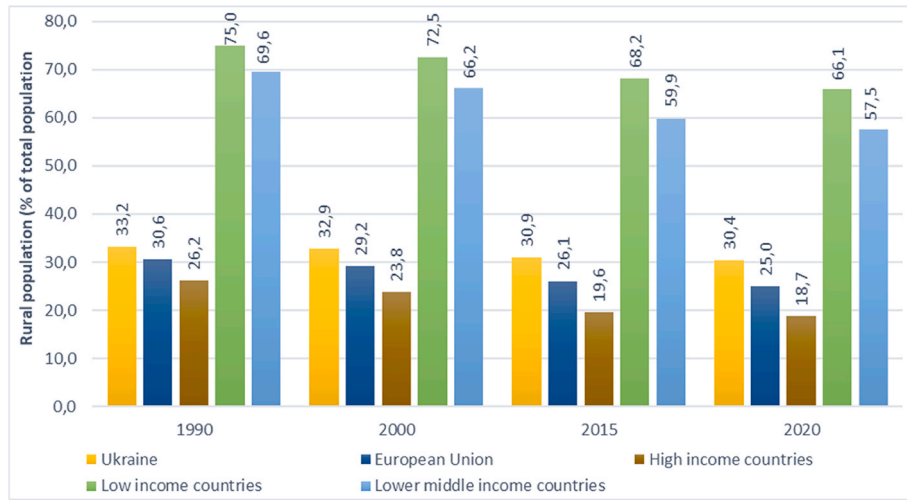


Fig. 3. Comparison of rural population from 1990 to 2020 (% of total population). Source: WB 2021.

Ukrainian) located in rural areas in regions of Ukraine remote from active military actions have become such places.

3. Methods

Our methodological framework consists of five stages (Fig. 4). First, literature analysis has been conducted to synthesize the existing scholarly literature and highlight the relevance and the role of

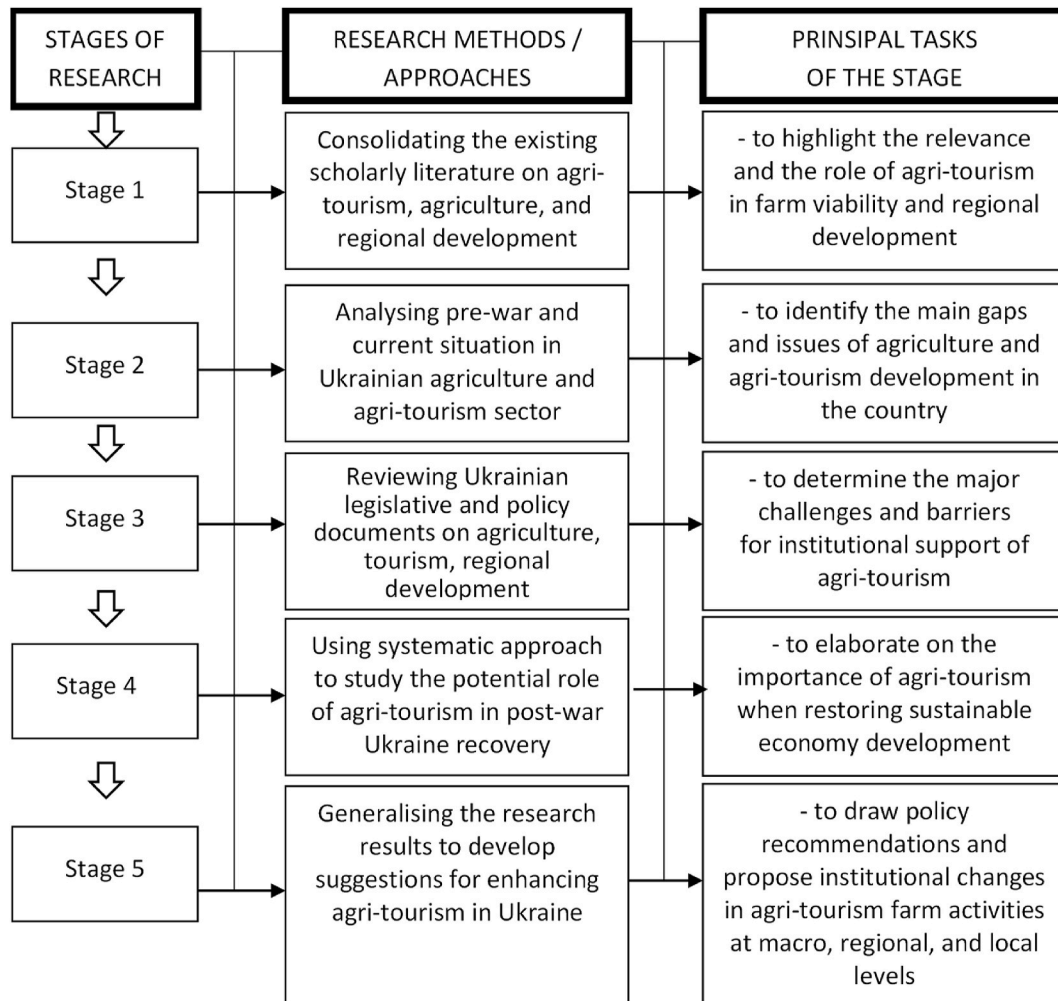


Fig. 4. Research methods and approaches exercised in the study.

agritourism in farm viability and regional development (Appendix B). To this end, a selection of literature sources collected since May 2022 has been utilized. A consistent literature review has been carried out to explore the interconnections between the agricultural sector, agritourism, and sustainable regional/local development.⁴ Our review involved collecting and analysing scholarly articles, research papers, and relevant publications that examine various factors, including economic, social, and environmental aspects, related to the topic. Additionally, an investigation has been undertaken into the potential roles that rural communities can play in promoting rural regional/local development through the implementation of agritourism initiatives. The literature review serves as the basis for further investigation of scholarly evidence on the issue studied.

Second, the pre-war (mainly from 2019 until February 24, 2022) and current state (after February 24, 2022) of Ukrainian agriculture and agritourism sector are outlined. This stage involves the methodology for assessing agritourism suggested by Grillini et al., (2022)⁵. In addition, the following questions are addressed: What is the current condition of agricultural sector in Ukraine, its challenges and perspectives? How was tourism and agritourism evolving in the pre-war period in Ukraine and in its regions in particular? What are the recent tendencies in Ukrainian agritourism sector (from 24 February 2022 to 31 December 2022)? To answer these questions, secondary data from the State Statistics Service of Ukraine (SSSU 2021a, 2021b, 2021c, 2021d, 2022), The World Bank (WB 2022), United States Department of Agriculture (USDA 2022), State Agency for Tourism Development of Ukraine (TTU 2022; TTIU 2022), World Tourism Organisation (WTO 2002, 2021, 2022), Union of Rural Green Tourism Development in Ukraine (Union of RGTD 2023), etc., are utilized. The interview method (e.g., government officials and heads of associations related to agritourism) is also employed. The goal is to analyse the dynamics in numbers of certified agritourism households on macro and regional levels, the number of tourists, their age and gender, the length of their stay in household, taxes received from agritourism, and activities offered to tourists on agritourism households.

Third, relevant Ukrainian legislative and policy documents (issued during the period from September 1995 to March 2023) are reviewed to identify the main institutional gaps and issues of agritourism development in the country. To achieve this goal, policy documents by The Verkhovna Rada of Ukraine (VRU 2022), The State Agency for Tourism Development of Ukraine (TTU 2022; TTIU 2022), The Ministry of Agrarian Policy and Food (MAPFU 2022a, 2023a, 2023b), The Ministry of Infrastructure (SMI 2015), The Ministry of Communities and Territories Development (MCT 2022) are analysed. In addition, strategies and policy documents at macro and regional levels, e.g. Regional Development Strategies for 25 oblasts of Ukraine (Supplementary material. Appendix C) and regulatory and administrative plans at different levels, e.g. Implementation Plan of the Region Development Strategy for all oblasts of Ukraine (Supplementary material. Appendix D) are examined.

On the fourth stage, the importance of agritourism in enhancing the country's sustainable economy development is elaborated upon. The main question addressed is the place and role of agritourism in post-war recovery of agricultural sector and rural regional development. This part

⁴ When reviewing current scholarly approaches, we focus on the following questions: What are the interconnections between agricultural sector, agritourism, and sustainable regional/local development? What are the possible roles, a rural community can play, in boosting rural regional/local development?.

⁵ To determine the level of agritourism development in Ukraine, we use the methodology applied for agritourism research in Italy, the USA, and South Africa (Grillini et al., 2022). This methodology aims to tackle the following questions: Is there a list of permitted activities in agritourism? Is there any political regulation of agritourism (at macro and regional levels)? Are there any instruments to support agritourism activities of private households and farms (at macro and regional levels)? Are there any government subsidies to support agritourism? What are the growth rates of agritourism?.

of our research is based on analytical materials and reports (Supplementary material. Appendix E) by World Economic Forum in 2022 and 2023 (DPZ 2022; TTDI 2022; SAVZ 2023; UHEPIO 2023), plans of the National Council for Recovery of Ukraine from the War (PNCRU 2022), conference materials 'Ukraine Recovery Conference 2022 in Lugano' (URC 2022), and other relevant papers from this period.

On the last fifth stage, policy conclusions are drawn, and important directions of institutional changes in reforming approaches to agritourism at the macro-, regional, and local level are suggested.

The main limitations of this study include the lack of a large dataset for analysing agritourism in Ukraine and the difficulty in communicating with the authorities to access plans/reports on agriculture, agritourism, and regional development. Limited data on agritourism in Ukraine during the pre-war period (before February 24, 2022) is due to the fact that Ukrainian regulations do not require farms to submit relevant reports. In the current period of active military actions in Ukraine since February 2022, accessing relevant data is significantly difficult due to the restrictions on free access to many data, which could potentially disturb state security. Also, during the period of active hostilities since the full-scale invasion, it is challenging to establish efficient communication with state/regional/local authorities. Another factor hampering the research process is the war-related removal of materials on the official site of the Ministry of Communities and Territories Development, which has slowed down the accessibility of strategies and policies, regulatory and administrative plans.

4. Agritourism in Ukraine: Current state

4.1. Pre-war period (mainly from 2019 until February 24, 2022)

Before the full-scale Russian invasion of Ukraine, the tourism sector in the country was gradually developing after the COVID-19 pandemic lockdown. For example, there was an increase in the number of foreign tourists who visited Ukraine in 2021 amounting to nearly 4.3 mln people which is by 26.3% more compared with 2020 (SATD 2023). The total of tourist tax collected made 244 mln UAH in 2021 (1UAH = 0,0322Euro as of 01.01.2022), which is 86.8% more than in 2020 (130.6 mln UAH), and 20% higher than in 2019 (196 mln UAH) (Fig. 5). The leaders in the payment of tourist tax were Kyiv city, Odesa, Lviv, Zakarpattia, Ivano-Frankivsk and Kyiv region.

As Fig. 5 demonstrates Kyiv, Odesa, Lviv, Zakarpattia, and Ivano-Frankivsk regions are considered to be the most visited tourist areas in Ukraine, while other regions are much less popular with tourists. The key to the pre-war development of tourism in Ukraine was the availability of historical and cultural sights, established touristic and local infrastructure, and favourable natural and climate conditions.

Each of the above popular touristic regions has its specific advantages. For Kyiv and Lviv regions these are historical and cultural sights. For example, Kyiv region has nearly 4000 historical and cultural heritage sites, including 2067 archaeological monuments and sites, 1571 historical monuments, 219 architectural monuments, 15 monuments of landscape art, and 89 science and technology sites (KRDS, 2021). At the same time Lviv region, having numerous historical and cultural sights (IPLRD 2021), also attracts visitors through food tourism. Lviv region has an impressive system of recreational centres: 133 health resorts (including those based on rich natural and recreational resources Velykyi Lubin, Morshyn, Nemyrov, Rozdol, Skhidnytsia, Truskavets, Shklo), 82 hotel facilities, and about 500 private households engaged in rural tourism (LRDS, 2020). To compare, the number of rural tourism households in Chernihiv Oblast is only 36 (CSDS 2021), and in Dnipropetrovsk Oblast there are 14 rural green tourism households (DRDS 2021). For Odesa region, the advantages are the warm climate (close to subtropical) and the Black Sea which encourages recreational sea tourism. Mountainous and rural regions of Zakarpattia and Ivano-Frankivsk are known for different kinds of green tourism, agritourism included.

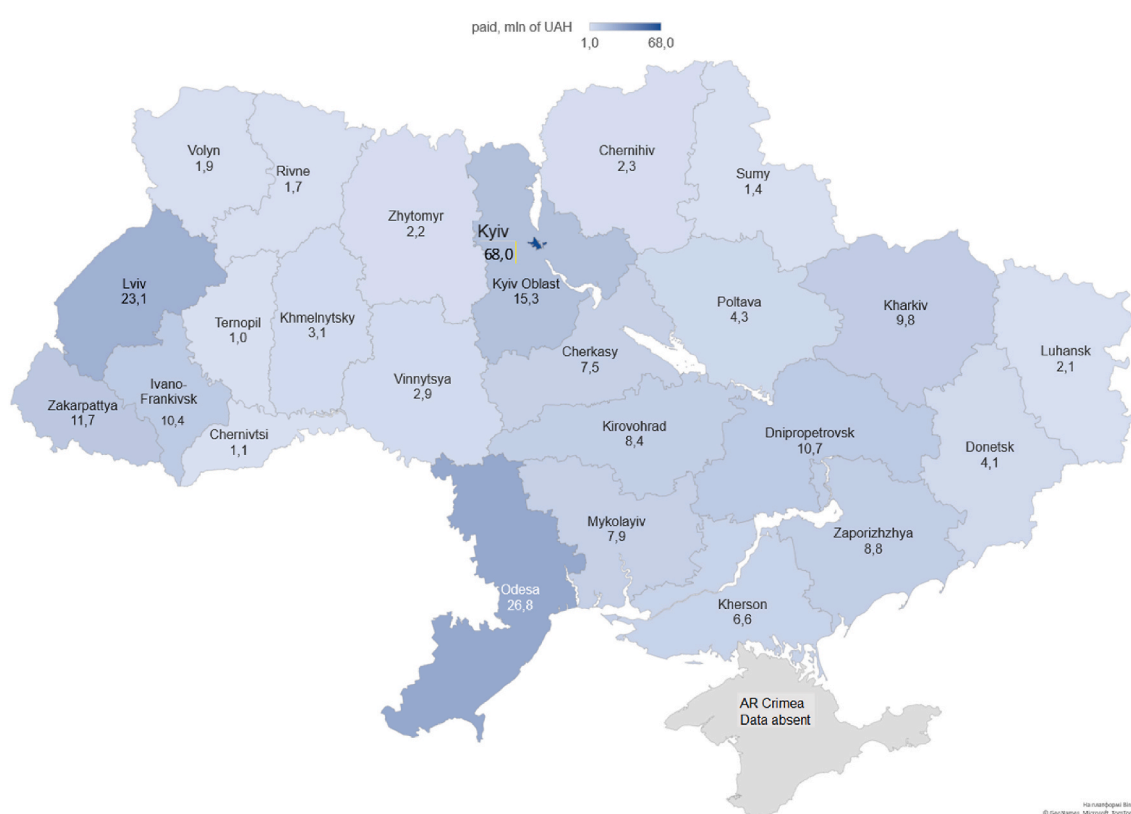


Fig. 5. Tourist tax that regions of Ukraine received in 2021 (mln of UAH).
Source: [Tourist tax report, 2023](#)

Before the full-scale Russian invasion of Ukraine, agritourism played a minor role. For example, only 5% of tourists prefer agritourism to other types of internal tourism (RRS 2021). The interest in agritourism is largest in specific age groups with older people being more interested.⁶

The Zakarpattia and Ivano-Frankivsk regions are considered to be the most developed in terms of agritourism. Zakarpattia and Ivano-Frankivsk require special attention in the context of the potential for agritourism development as regions where 2/3 of the territory is mountainous. This is related not only to the fact that these regions have a majority of rural population (the share of rural population is 62.8% in Zakarpattia and 55.4% in Ivano-Frankivsk region) and poorly industrialised urban areas (ZARDS 2019). The climate in the regions is temperate and continental, which allows them to provide a good tourist destination throughout the calendar year. All of this combines to make agritourism one of the main activities for the rural population.

At the same time, the Zakarpattia region's authorities clearly realise the importance of rural development and the transformation of the approach to agriculture - with a change in the vector from a mono-sectoral structure to multifunctionality and the creation of conditions for expanding the sources of income of the rural population (ZARDS 2019). Since 2020, the region has been implementing steps to stimulate economic activity in rural mountainous areas, in particular by developing regional infrastructure, improving the standard of public services, and reducing the negative impact on the natural environment (SPDUCR 2020).

The Ivano-Frankivsk region is also actively developing agritourism,

⁶ For example, it is most popular among the age group of 55–70 years - 6% of respondents chose this type of tourism in 2021. Age groups 25–34 years, 35–44 years and 45–54 years chose agritourism 5% of each of these groups. The youngest age group of respondents from 15 to 24 years old preferred agritourism the least - only 4%.

with the number of rural households hosting tourists in 2020 amounting to 800 (IFRDS 2020). At the same time, from 2014 to 2018, the number of individual entrepreneurs registered in the field of rural tourism increased from 163 to 306 (IFRDS 2020). The focus of tourism development in the region is not so much on Ukrainian as on foreign tourists.

Notably, both Zakarpattia and Ivano-Frankivsk regions focus on the development of agritourism in combination with the production of local organic food, a synthesis of new technologies and traditions in production, the providing of various related services, and the growth of ethno-gastronomic tourism (SPDUCR 2020; ZARDS 2019; IFRDS 2020). All this will help reduce unemployment in rural areas and boost regional development.

A data gap which prevents us from providing comprehensive analysis of agritourism in Ukraine is the lack of official data collected by state and local institutions on the number of agritourism households, the touristic services they offer, the amount of taxes they paid, etc. A bright example of the above statement is the Statistical Report on Tourism 'Collective accommodation facilities in Ukraine' issued by the State Statistics Service of Ukraine (CAFU 2020). From 2011 to 2017, the list of accommodation facilities includes agri-hotels (along with regular hotels, motels, hostels, and campsites), though their number and location are not defined (ESEAT 2020). From 2018 to 2020, the report provided data on regular hotels only (CAFU 2020). Since 2021 the report has not been issued.

4.2. Current period (Ukraine at war)

The situation on the Ukrainian tourism market has changed significantly since the beginning of the full-scale war between Russia and Ukraine in February 2022. Currently, it is possible to give a provisional assessment of the negative consequences caused by the war in Ukraine for various spheres of local and regional economic development.

The map below visualises the amount of the tourist tax collected in

Ukraine (by regions) in 2022, see Fig. 6.

The total amount of tourist tax collected during 2022 is 178,9 mln UAH, which is 24% less than in 2021 (UTS 2022). In general, the tourism activities increased in Lviv, Zakarpattya, and Ivano-Frankivsk regions. Compared to 2021, the growth was 79%, 22% and 32.2% in the previously mentioned regions (TTU 2022). While in other regions (places of active military actions closer to the borders with Russia and Belarus), there is a significant decrease in the amount of the tourist tax collected (e.g., in Kherson region 95% less, Mykolaiv region 90% less, Zaporizhzhya region 78% less, Luhansk region 80% less, Sumy region 58% less (UTS 2022)).

Overall, Ukrainian tourism sector suffered dramatic losses during 2022 as taxes paid by the entire tourism sector are 31% less than those in 2021 (TTIU 2022). At the same time, the number of legal entities taxpayers decreased by 24.5% and physical entities taxpayers by 13.8% compared to the 2021 (TTIU 2022). The largest share of tax revenues from the tourism sector to the state budget was paid by hotels and resorts – 898.4 mln UAH, which is 30.3% less than in 2021 (SATD 2023). On the other hand, accommodation facilities in agritourism sector and hostels demonstrated an increase in tax payments by 45.9% compared to the same period of 2021, which is 137.4 mln UAH (TTIU 2022).

From the first days of the war starting on February 24, 2022 private households or single little farms in Western and Central Ukraine have been hosting internally displaced people from the temporarily occupied territories of the country and places of active military actions. When residing in agritourism households, internally displaced people have been actively involved in agricultural works and participated in the life of the host families and the local communities.

On the other hand, while internally displaced people live in families (the owners of private households or single little farms), they are happy to share a common life, learn local traditions and customs, study local habits, which differ significantly in rural areas from urban and vary from

region to region.

At the same time, it must be pointed out that agritourism (as one of the most inexpensive types of internal tourism) is becoming more affordable and desirable to Ukrainian citizens who, due to martial law and general mobilisation of the male population, are subject to restrictions on travelling abroad.

During the full-scale invasion of Ukraine (as in the pre-war period), at the state level no official statistical information has been collected on the activities of agritourism households and the number of hosted tourists. At the same time, the data collected by non-governmental organizations is available (RTDB 2023; Union of RGTD 2023), which demonstrates that as of December 2022 the number of households involved in agritourism in Ukraine decreased by 17 % (compared to 2020).

Such data may indicate a substantial slowdown in the development of agritourism during the war in Ukraine, as well as a significant further potential for the development of this type of activity in rural communities, and a lack of understanding of the feasibility and benefits of official certification by households' owners.

At the same time, during a detailed interview with the management of a relevant NGO (the Union of Rural Green Tourism Development in Ukraine), we identified many other related reasons for the lack of initiative among representatives of the agritourism business. The main reasons for such a small number of the officially registered active members is the fact that a significant part of the households are located in the areas of active military actions or occupied by Russian troops; a large number of households provide accommodation for displaced people (internal refugees); some owners of agritourism households have changed their residence and completely stopped their farming activities; some farmers lost connection with the NGO so data is not available.

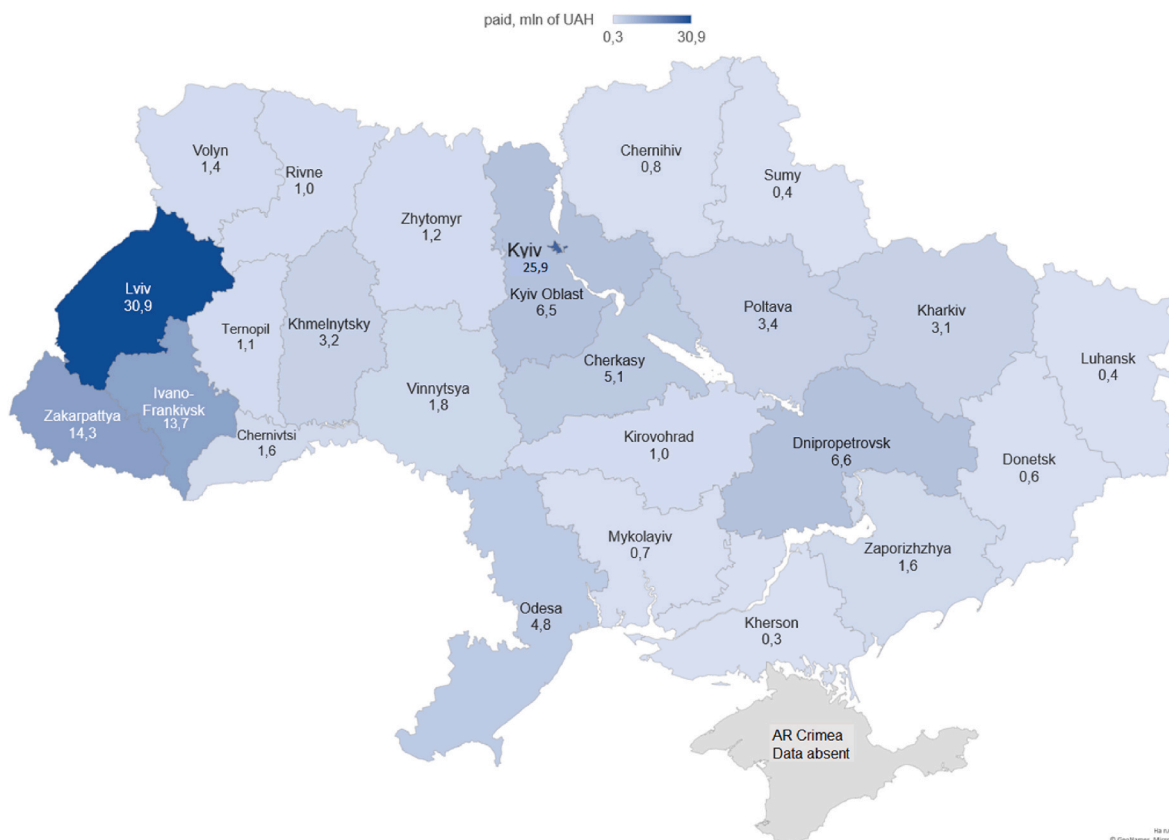


Fig. 6. Tourist tax that regions of Ukraine received in 2022 (mln of UAH).
Source: Tourist tax report, 2023

4.3. Institutional settings for agritourism in Ukraine

There are noteworthy institutional gaps in the regulation of both the touristic sector in general and agritourism in particular. Currently the legislation of Ukraine offers no valid interpretation of agritourism. The Law of Ukraine 'On Tourism' of 15.09.1995 (LAUT 1995) is restricted to a list of types of tourism (including ecological, green, and rural tourism), but it contains no definition of these terms. At the same time, adjacent terms such as 'rural tourism' and 'ecological/green tourism' are defined. The interpretation of these concepts first appeared in 2003 in the Law of Ukraine 'On Private Farming' (LAUPF 2003). By now, no other valid definitions were introduced. However, all the above said does not signify that tourism in rural areas has not been provided.

As a result of the above, the gaps in the legislative framework led to blurred regulations of agritourism business activities and led to a general lack of clarity on the definition and scope of agritourism in the context of diversifying private farms activities. This ambiguity hinders the growth and development of agritourism enterprises, resulting in lost opportunities to increase local budgets, create additional jobs, and contribute to regional social and economic development. It is therefore crucial to address these gaps to ensure a clear and specific regulatory framework for agritourism. These processes, on the other hand, could serve as a basis for farms development and rational use of rural areas touristic resources.

On the other hand, agritourism business activities belong to the sphere of responsibilities of three Ministries: The Ministry of Agricultural Policy and Food, The Ministry of Infrastructure, The Ministry of Communities and Territories Development. Each Ministry declares their own priorities and as a result envisions their own vectors of agritourism development (Table 1). Consequently, prescriptions issued by different Ministries are often incompatible, frequently do not put emphasis on agritourism, and seldom have full implementation (on both regional and local levels). This leads to misunderstandings and misinterpretations of agritourism regulations and business activities on all the levels.

In 2015, Ukrainian Government worked out the 'Concept of Rural Development' (CRD 2015). The document aimed to improve the quality of life among the country rural population; protect and preserve natural resources in rural areas; diversify and support the country economic viability in rural communities; improve the system of rural management; provide education and business consulting to local entrepreneurs. To implement the concept, a Plan of Actions has been adopted for the macro level (PACRD 2017). At the same time, there are no measures to develop agri-touristic activities in rural local communities.

In 2019, the Ministry of Agriculture Policy and Food of Ukraine worked out a prescription 'The Plan of Actions for the Rural Green Tourism Development in Rural Areas for 2020' (PARGTD 2019). The

Table 1
Ministries in Ukraine and their areas of interest in agritourism activities^a.

The Ministry	Mission of the Ministry	Areas of Interest in Agritourism Activities
The Ministry of Agricultural Policy and Food	Creation and implementation of the state agricultural policy	Development of agricultural entrepreneurship
The Ministry of Infrastructure	Implementation of the state policy in the sphere of transport and road facilities, tourism and resorts	Development of various tourism activities; popularization of Ukraine and Ukrainian culture
The Ministry of Communities and Territories Development	Reconstruction of Ukrainian regions and communities, support of local self-government and territorial organization of authorities	Development of rural areas and entrepreneurial activities; replenishing local budgets

^a as of 01 November 2022.

Source: The Ministry of Agricultural Policy and Food (MSMA 2022), The Ministry of Infrastructure (SMI 2015), The Ministry of Communities and Territories Development (MCT 2022)

plan focuses on proposals for the agritourism promotion; establishment of agritourism entities data base; training small business representatives in rural communities providing them with information on how to organize agritourism activities; supporting sustainable development of rural areas; and creating a model of public-private partnership for the development of agritourism in rural areas. At the same time, there was no effective mechanism how to implement this plan (Bezuhla 2020). Furthermore, after 2020 the plan was suspended.

In 2021, a draft 'Concept for Stimulating the Development of Entrepreneurship in Rural Areas until 2030' was developed (CSDERA 2021). However, it does not pay much attention to the development of tourism activities and of December 2022 has not been adopted. These may result from the lack of coordination and consistency in the legislative basis and gaps in communication between authorities on different levels.

In September 2019, the Ministry of Agricultural Policy and Food merged with the Ministry Economic Development and Trade and became the Ministry of Economic Development, Trade, and Agriculture of Ukraine. This resulted in new strategy for the united Ministry where less attention was attached to the agricultural on the whole and agritourism in particular. In December 2020, this reform proved to be unsuccessful, and The Ministry of Agricultural Policy and Food was created. However, the updated structure of the Ministry no longer includes the Department for Support of Farming and Rural Development which had functioned before 2019. Although a sign that the promotion of agritourism falls within the competence of this ministry is the fact that one of its tasks is to participate in the provision of rural tourism services.

It should be noted that the central body of the executive power, which implements state policy in the field of tourism and resorts in Ukraine, is the State Tourism Development Agency (SATD). Until now, SATD has not cooperated with the Ministry of Agricultural Policy and Food in any way regarding the development of agritourism in Ukraine. At the same time, the management of SATD confirms the importance of this tourism direction, however emphasizing that it will be done only after the war. SATD is more focused on marketing projects and the development of certain tourist destinations, especially those related to craft production.

Against the inconsistent legislative basis, there are also breaches and even contradictions in state strategies, plans and programs related to agritourism (for the list of the documents and their analysis see Supplementary material, Appendices C and D). The study of Ukrainian legal documents related to agritourism makes it possible to stratify them into two major groups: a) strategies and policies (macro and regional level), b) regulatory and administrative plans (macro and regional level). In total, we analysed 51 institutional documents: 2 macro-level strategies and 24 regional development strategies (corresponding to each territorial unit of Ukraine); 1 implementation plan of the state strategy for regional development and 24 implementation plans of the regional development strategies (corresponding to each territorial unit of Ukraine).

Reviewing the regional development strategies showed that tourism in general is viewed merely as subsidiary instrument for regional social and economic development of local communities in rural areas, mainly putting emphasis on green, eco-, and rural tourism. The documents under study declare that tourism can boost the development of local infrastructure (stated in 25 documents) and encourage economic development of the regions (16 documents). For example, the strategic documents of Lviv region (LRDS 2020) declare tourism as an alternative source of income; in Poltava region (PRDS 2020) tourism is viewed as an additional instrument of employment; in Luhansk region (LuRDS 2020) tourism is stated to provide extra support for small and medium-sized enterprises; in Kherson (KhRDS 2020), Vinnytsya (ViRDS 2020), and Volyn (VoRDS 2020) regions tourism is to increase the competitiveness of local private enterprises; in Ivano-Frankivsk region (IFRDS 2020) touristic activities are supposed to promote start-ups and increase the number of small agricultural producers; in Zhytomyr region (ZHRDS

2021) tourism is expected to transform into one of the most dynamic sectors of regional economy.

The analysis of the above institutional documents demonstrates that there is no consistent approach to the strategic vision of agritourism, which is first and foremost reflected in the fact that only 16 documents (out of 51) mention agritourism among many other types of tourism. In these documents agritourism is viewed as a peripheral instrument to support local communities and their infrastructure. There is a lack of vision of how agritourism can encourage regional employment, decrease internal migration, preserve historical heritage, and promote Ukrainian cultural identity.

The analysis of all the above legislative and institutional documents regulating agritourism activities in Ukraine allows to identify the following gaps in institutional settings (Fig. 7).

First of all, the notion of agritourism is not clearly defined in legislation documents, and there is no formulated distinction between agritourism and related types of tourism (rural, green, eco-tourism). Secondly, the legislation documents reviewed demonstrate blurred understanding of what type of business scope the agritourism activities of farmers and owners of private households belong to. Moreover, legislation does not identify the concept of the agritourism household, and as a result there are no criteria defining agritourism households. This leads to the absence of an executive body that would supervise and control agritourism activities. Furthermore, in Ukraine there is no state strategy outlining the development of agritourism in the country. Also, Ukraine demonstrates the absence of an official state database and registration procedure of private households and farmers engaged in agritourism, lack of subsidising mechanism and financial support of agritourism business activities. In addition, Ukraine does not have a state-approved quality standard to provide agritourism services and an insurance mechanism to protect the owners of agritourism households and tourists involved in agritourism activities.

The current legal framework is not synchronized with global practices and is not coordinated with EU directives; there is no single strategy for the development of tourism on the state and regional level; there are no effective interaction mechanisms for all stakeholders involved in tourism activities.

5. Potential of agritourism for post-war Ukrainian agricultural, economic, and rural development

Agritourism is an alternative way to diversify farm activities, which

can help to increase their profitability (Ciolac et al., 2019; Pérez-Olmos and Aguilar-Rivera 2021; Meraner et al., 2015, 2018). At the same time, agritourism has the potential to offer additional economic benefits for local communities by involving stakeholders in the development of various local businesses in rural areas and touristic infrastructure (Abadi and Khakzand, 2022; Lal et al., 2023; Hegarty and Przezborska 2005). Pérez-Olmos and Aguilar-Rivera (2021) argue that prioritising activities in rural areas has changed over the recent decades, shifting from food production only to saving communities which ensure sustainable use of agricultural lands, preserve local biodiversity, and provide resilience and viability of local population. Thus, agritourism as an instrument of sustainable regional and local development can become a powerful tool for economic and social development in countries with a significant share of the agricultural sector in GDP (Streifeneder and Dax 2020; Hegarty and Przezborska 2005).

All major types of tourism are available for internal tourists in Ukraine, the most popular out of which are sea, mountain, historical, regional tourism, etc. (RRS 2021). However, all kinds of tourism in rural areas based on agricultural activities play minor role. Nevertheless, Ukrainian touristic market offers all modern variants of tourism in rural areas, functioning in close interconnection (see Fig. 8).

Notwithstanding their secondary role, private households, involved

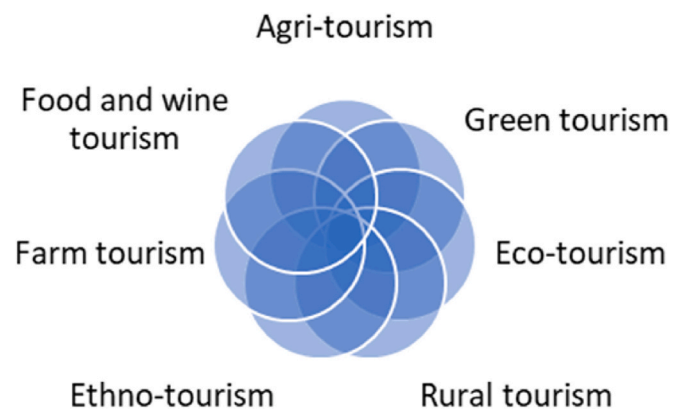


Fig. 8. Correlation of agritourism in Ukraine with other related types of tourism in rural areas. Source: based on Shvediuk (2023), Union of RGTD (2023), Voloshynskyi et al., (2019).

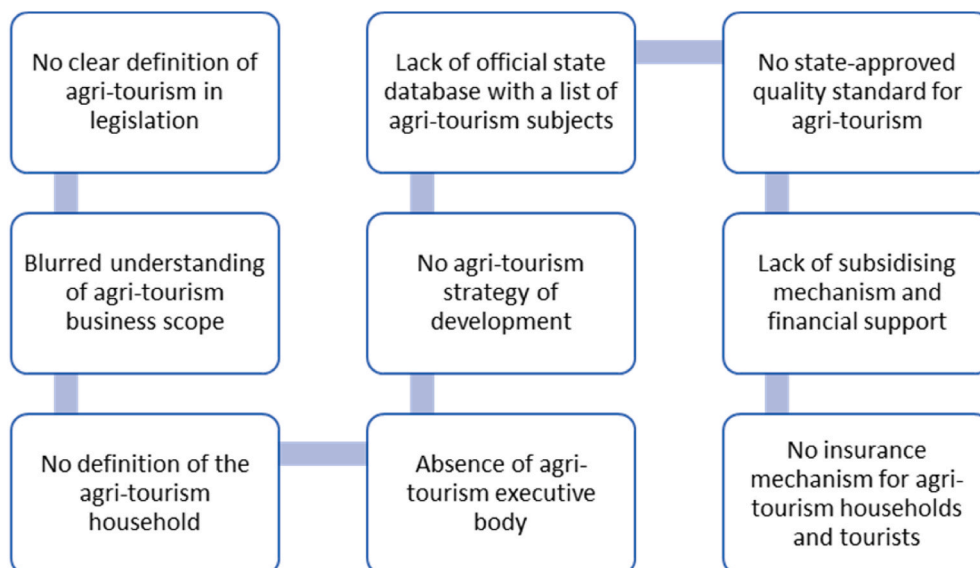


Fig. 7. Identified institutional gaps for agritourism in Ukraine.

in agritourism in Ukraine, provide their guests not only with accommodation but also a wide range of additional services. These include authentic/traditional meals, excursions, local crafts workshops, gardening activities, cycling and horseback riding, boating/rafting, fishing, picking forest mushrooms and berries (Ivanyshyn et al., 2022).

Currently, under the conditions of active military actions on the territory of Ukraine, the country faces multiple impediments when securing its existing economic potential (agricultural sector, local business, and touristic industry in particular). Understanding the vitality of the expeditious post war economic recovery of the country, Ukrainian government in close cooperation with international partners have been creating a plan for future sustainable social and economic recovery of Ukraine (PNCRU 2022; URC 2022). 'Plan of the National Council for Recovery of Ukraine from the War', which was presented at the international Ukraine Recovery Conference in Lugano, Switzerland, July 4–5, 2022 (URC 2022), is intended to contribute to the revival of Ukraine's social and economic development. Following the decree issued by the President of Ukraine, 24 working groups have developed a draft of the reconstruction plan (Supplementary material. Appendix E). These working groups have created their lists of proposals to prioritise reforms and strategic initiatives. Additionally, they offered changes necessary to introduce into legislation data base to achieve the post-war reconstruction goals.

All materials issued by working groups after this conference have been analysed, and we find that 6 out of 24 documents concentrate on issues related to agritourism such as agriculture, tourism, infrastructure in rural communities, local economy, natural resources and cultural identity. We scrutinised the 6 documents (see below) which allowed to identify potential of agritourism for post-war agricultural, economic, and rural development in Ukraine.

The document 'New Agricultural Policy' (PNCRU AP, 2022) focuses on preserving the economic potential of the agricultural sector in Ukraine. Such result is sought to be achieved primarily by providing possibilities for agricultural sector to use all available infrastructure: fully unblocking ports, creating alternative export routes. The document also puts emphasis on restoring safe environmental conditions of agricultural fields in Ukraine (e.g. demining lands) to provide the country food security. Reviving the agricultural sector in Ukraine is claimed to become possible when linked to industrial engineering, chemical industry, transport infrastructure, trade, and services. On the other hand, tourism does not appear on the list of adjacent industries able to co-develop with agriculture. As a result, the plan does not contain recommendations on diversification of agricultural activities, agritourism in particular.

In the materials of the working group 'Reconstruction and Development of Infrastructure' (PNCRU RDI 2022), one of the seven areas discussed is devoted to tourism and resorts infrastructure. The document draws attention to the necessity of reconstructing the existing local touristic infrastructure. The working group declares tourism a potentially highly profitable sector of Ukrainian economy which can attract both national and foreign investments. The group also emphasizes that it is vital to create tourism development programs on regional and local levels. At the same time, no special attention is paid to agritourism in Ukraine.

Another working group 'Economic Recovery and Development' (PNCRU ERD 2022) concentrates on the efficiency of the war-time economy in Ukraine, its reconstruction and full integration into the EU economic environment by 2032. The focus is attached to simplification of the regulatory documents and elimination of institutional barriers for medium-sized and small businesses, in rural areas in particular. Considerable attention is also paid to future reconstruction of destroyed or damaged enterprise capacities with the use of local workforce and regional raw materials. The group claims that this approach will contribute to the increase of value chains produced by local businesses where state financial support plays crucial role and is achieved through preferential bank loans, micro-grants, decrease of taxes. All the

above is expected to promote economic and social development of local communities. Nevertheless, despite significant attention devoted to local entrepreneurs' support, tourism in general is not viewed as an instrument to promote the development of local communities.

In the materials produced by the working group 'Construction, Urban Planning, Modernization of Cities and Regions' (PNCRU CUP 2022), one of the priorities outlined is the development of rural communities, which is expected to be achieved through the elimination of institutional barriers hampering rural tourism. It is especially emphasised how important it is to offer support to legal entities and individuals who create tourist products in regions and local communities. Alongside special attention attached to rural tourism, agritourism is not considered to have potential for development of rural communities.

The document 'Culture and Information Policy' (PNCRU CIP 2022) claims that it is vital to implement governmental projects preserving Ukrainian history, culture, and traditions, keeping in mind significant damage caused to national memory by military actions currently unfolding on the territory of Ukraine. The plan presumes that it must be based on sustainable mechanisms promoting Ukrainian cultural identity, achieved through revival of internal tourism and the hospitality sector, creation of new touristic routes to historical heritage sights, promotion of religious tourism, which can also attract international tourists. However, rural customs and traditions are not listed among objects of historical and cultural heritage in Ukraine, as a result of which all types of tourism located in rural areas are not prioritised.

Aspects adjacent to agritourism, which are covered by 'Environmental Safety' working group (PNCRU ES 2022), include conservation of nature ecosystems and preservation of biodiversity in rural areas, revival and maintenance of nature reserves and national parks in Ukraine, backed up by their recreational use in the framework of eco-tourism. Particular focus is attached to recovery of ecosystems damaged or destroyed by military actions which require special attention in terms of their further safe involvement in touristic activities. It is noteworthy that the majority of nature reserves and national parks in Ukraine border with agricultural lands and rural communities which can potentially be involved in revival, preservation, and use of local biodiversity. Yet, the document puts emphasis exclusively on eco-tourism, ignoring the potential of other related types of tourism, e.g. rural and agritourism.

Alongside, officially issued recovery plans presented at the Lugano conference (URC 2022), Ukrainian government initiated and supported discussions about the country post-war revival at international forums, e.g. the World Economic Forum in Davos in 2022 (DPZ, 2022; TTDI 2022) and 2023 (SAVZ 2023; UHEPIO 2023). The study of the forum reports and materials suggests that tourism is seen as a secondary tool of social and economic development of the country which can be effectively used only after the post-war economic stabilisation.

The analysis of all the above papers and materials on the post-war social and economic recovery of Ukraine allows to conclude that among the issues adjacent to agritourism the documents mainly address activities related to agriculture, infrastructure, tourism, and regional development. However, none of the papers covers questions on the strategic vision of agritourism for the post-war development of Ukraine.

At the same time, international economic data (WTO 2021, 2022) demonstrate that tourism plays a significant role in the development of local communities and regions, enhancing infrastructure and human capital, promoting unique local products, preserving cultural and historical heritage. Based on these data scholars argue that tourism can provide sustainable economic and social development in regions (Shevchenko et al., 2016; Haugen and Vik 2008), in its turn agritourism has the potential to ensure diversification of farm activities and support the growth of rural communities (Germinario et al., 2023).

Currently, the state authorities in Ukraine demonstrate a certain lack of attention to increasing the profitability of the tourism industry, agritourism activities in particular. Such approach may slow down the social and economic development of Ukraine and hamper adaptation of

the country agricultural sector to the requirements and standards of the EU. However, agritourism has a potential to provide not only a way to diversify the activities of small farms and increase their profits, but also can serve as a powerful instrument for further sustainable regional and local development contributing to viability of agricultural sector in Ukraine.

6. Discussion

The discussion focuses on potential policy measures to integrate agritourism in post-war agricultural and rural development in Ukraine. Previous research indicates that the development of tourism in general and agritourism in particular are significant elements which can boost the local and regional economic growth in rural areas (Grillini et al., 2022; Hegarty and Przezborska 2005). Moreover, in many countries around the world, agritourism is viewed in terms of its positive impact on reducing rural population migration, increasing employment rates in rural areas, enhancing their economic attractiveness, and serving as a means of preserving cultural heritage and traditions (Germinario et al., 2023; Lal et al., 2023; Galluzzo 2018; Adamov et al., 2020). Policy can support that these opportunities are untapped. For example, Austria and other regions of the Alps supported successfully the widespread uptake of agritourism activities (Dax et al., 2019).

Comparing existing studies on agritourism development in various countries and Ukraine, we can note the following differences: lack of a holistic vision of agritourism in institutional documents and post-war reconstruction plans; low awareness of how urgent it is to preserve Ukrainian cultural and historical heritage in rural areas; absence of systematic support provided for private households involved in agritourism. Therefore, it is advisable to consider foreign experience in agritourism development, while also considering the specific characteristics of Ukraine. This will allow for the development of the most effective measures and the advancement of agritourism to a qualitatively new level in Ukraine.

Reconstructing Ukrainian economic potential is defined in the institutional documents analysed above as a major goal for the post-war period. The above analysis of the Plan for Recovery of Ukraine from the

War demonstrates a visible lack of attention to agritourism. Since agritourism is one of the most efficient mechanisms for farm activities diversification, it can secure resilience and viability of the country agricultural sector in current war and post-war period.

To achieve the above, it is necessary to provide effective consistent interaction between all stakeholders, i.e. authorities on all levels, international partners, local communities and businesses, whose attention should be attracted to all spheres of regional economy including agritourism (Fig. 9).

This approach partially aligns with previous literature, as exemplified by initiatives, for example, proposed for agritourism development in remote mountainous regions of China (Dax et al., 2019): supporting initiatives for agricultural development, which serve as auxiliary to agritourism advancement; establishing an integrated network of connections among local authorities, all residents, diversified farming enterprises, and potential tourists; leveraging local tourist attractions to diversify agritourism activities; facilitating the economic transformation of agritourism estates (particularly through craft production). However, in the case of Ukraine, such measures alone are insufficient. To foster sustainable agritourism development, we propose interlinked interventions at the macro, regional, and local levels.

We believe that the following institutional changes on the national level can be relevant, i.e. unshadowing agritourism business activities; consolidating a list of agritourism business entities; establishing a mechanism of targeted touristic funding; introducing various insurance compensations for internal tourists including compulsory force majeure insurance; developing national strategy for supporting and promoting Ukrainian cultural identity and its customs and traditions on international arena.

On the other hand, measures on local and regional level cannot be neglected as they may have a plausible impact on the post-war development of agritourism in Ukraine. These include creating opportunities for agritourism local financial support programs; categorizing private households or single farms which are involved in agritourism; developing local and regional touristic infrastructure; closely controlling quality and safety of services provided to tourists; creating and developing brands of Ukrainian regions which will demonstrate the country



Fig. 9. Vision of future sustainable social and economic recovery of Ukraine.

cultural diversity targeting both internal and external tourists.

In addition to the measures on the national and regional levels presented above, we consider it essential to perform reforms on the level of private households and single farms which offer agritourism services. These comprise adapting the services to the needs and requirements of external tourists; enhancing the variety and quality of the services offered; improving the knowledge of foreign languages for those who provide the services; exploring international expertise (EU background in particular). The development of agritourism activities potential by private households and single little farms can support the increase of the related industries (e.g. transport infrastructure, trading, food industry, etc.), in such way significantly contributing to local and regional economy.

However, providing those reforms in the sphere of Ukrainian agritourism on all the levels requires international political and financial support which should not be underestimated. At the moment, during the active phase of the military conflict, such international organizations and agencies as UNDP, US AID, UK AID, which currently operate actively in Ukraine, do not focus on the development of tourism in general and agritourism in particular. At the same moment, they pay close attention to agriculture support programs to provide for international food security. In the post-war recovery and reconstruction period, those organizations should extend their involvement in advisory services and financial support of touristic industry, including agritourism.

Currently, the main obstacle hampering agritourism activities in Ukraine is active military actions. The following factors presumably can become significant impediments for sustainable development of agritourism in Ukraine in the post-war period: prioritising governmental support of agricultural holdings and inconsistent touristic infrastructure in local communities.

7. Conclusion

In this article, we investigated agritourism in Ukraine, i.e., pre-war (mainly from 2019 until the full-scale invasion at February 24, 2022) and current period, its potential for the country further sustainable economic and social development. We studied available data on agriculture and tourism in Ukraine which included statistical data provided by the World Bank and Ukrainian authorities, and interviews held with government officials and heads of associations related to agritourism. Next, we analysed institutional background which regulates agritourism activities within the framework of the country regional development and future recovery of Ukraine, in total 62 documents were examined. The results obtained demonstrate that agritourism in Ukraine, against the background of powerful agricultural sector, plays a minor role; institutional regulations show significant gaps, ranging from the lack of agritourism definition to blurred understanding of agritourism role in the economic and social recovery of Ukraine.

The results of this study have institutional and policy implications. We show that the development of agritourism in Ukraine can significantly contribute to viability of farms through diversification of their activities. This is especially crucial for the post-war economic recovery of Ukraine as agritourism, functioning at the intersection of agriculture and tourism, can provide positive impact not only on the country agricultural sector, but also its sustainable regional and local development. To achieve the above it is first and foremost necessary to clarify the status and role of agritourism within the country legal framework, putting emphasis on world best practises and EU directives. This will make possible to implement institutional changes on macro-, regional, and local levels. The mentioned policy changes regarding the

development of agritourism may involve the inclusion in the updated State Strategy of Regional Development, Regional and Local Development Strategies, as well as in specific implementation plans of these strategies at various levels. In its turn, viable farms can allow all stakeholders to benefit from their touristic activities by improving regional and local infrastructure, preserving national identity, sharing cultural and historical heritage, reducing internal migration. Moreover, local and regional level policies shall be fostered to create and enabling environment and opportunities for agritourism, e.g. via local financial support programs, targeted education and advisory services, development of regional touristic infrastructure, and brands and advertisement. Finally, policies fostering agritourism shall become part of general post-war recovery and reconstruction policies of Ukraine (at all levels – macro, regional, and local).

Our study also has implications for further research. More research is needed to clarify peculiarities of international experience and EU legal standards regulating agritourism activities in the development in Ukraine. Another point to consider is a dynamically changing situation in Ukraine which makes it necessary to systematically monitor agricultural and touristic sectors, regional and local development. We particularly emphasise the need to place greater focus on agritourism in the context of further sustainable regional development in and post-war recovery and reconstruction of Ukraine. Such measures may include the specification of the developed and accepted strategies for the economic recovery of the country and regions in the context of agritourism development. Also, their revision and improvement in the long term, and potentially the development of a separate agritourism support strategy. In addition, more detailed surveys within the target stakeholder groups are needed to better understand the current role and future perspectives of agritourism in Ukraine. This approach will help to understand whether agritourism development measures in the country are effective or whether agritourism farms can be more effective. Finally, the role of the development of agriculture, regional development and agritourism for the recovery and reconstruction in other countries a war can be addressed.

CRediT authorship contribution statement

Vira Ohorodnyk: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Robert Finger:** Writing – review & editing, Supervision, Project administration, Funding acquisition, Conceptualization.

Declaration of competing interest

The authors Vira Ohorodnyk and Robert Finger declare that they have no conflict of interest.

Data availability

Data will be made available on request.

Acknowledgments

We thank reviewers and editors for valuable feedback on earlier versions of this paper. This study was supported by the Swiss National Science Foundation, within the project 'Assessment of formal, natural and social insurances: how to cope best with impacts of extreme events on grasslands for sustainable farming systems?' (100018L_200918).

Appendix C. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jrurstud.2024.103283>.

Appendix A

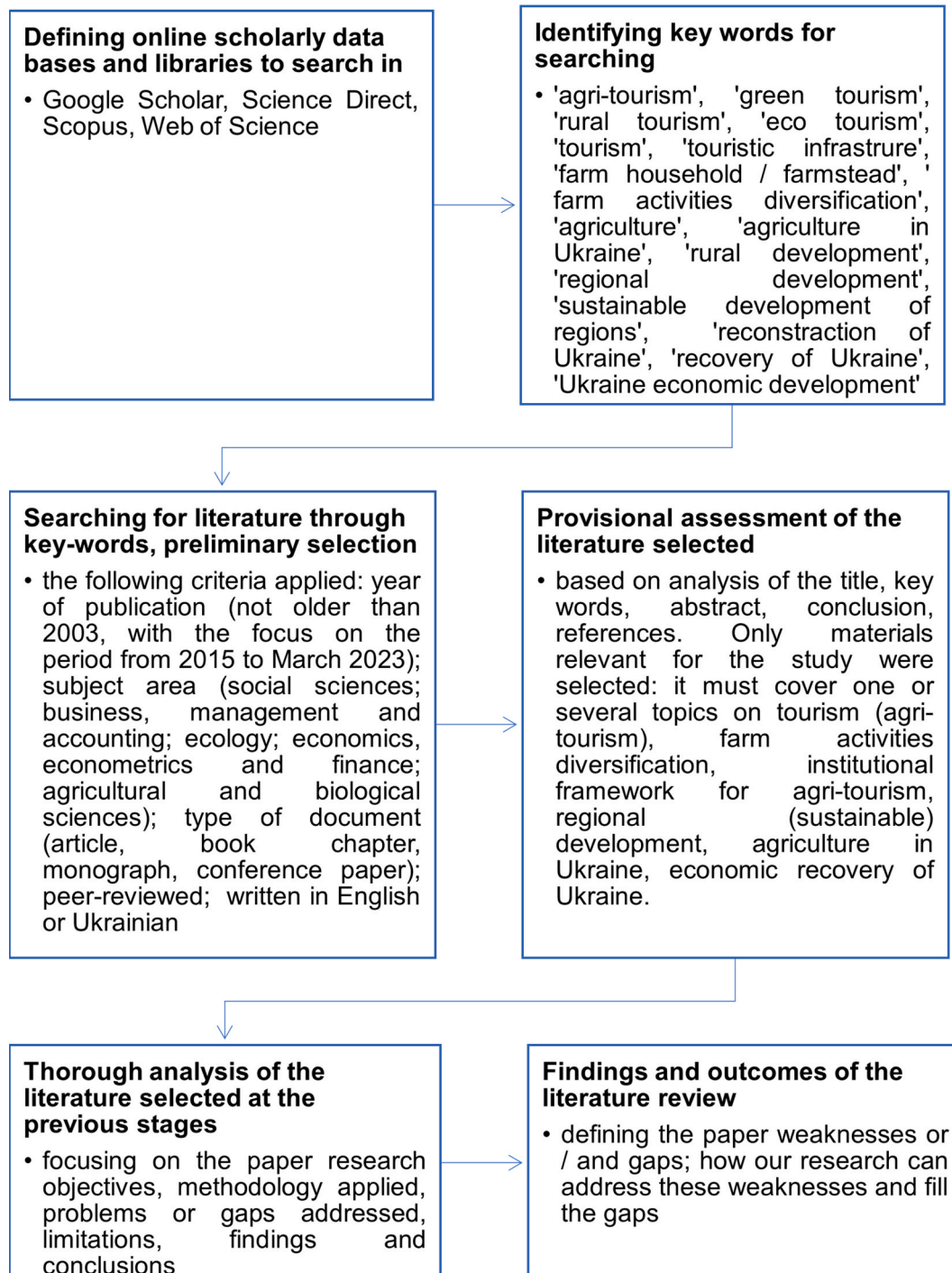
Distribution of Urban and Rural Population in Ukraine by Regions (as of January 1, 2022), %

Region of Ukraine	2016		2018		2019		2020		2021		2022	
	urban	rural	urban	rural	urban	rural	urban	rural	urban	rural	urban	rural
Ukraine	69,20	30,80	69,30	30,70	69,40	30,60	69,50	30,50	69,60	30,40	69,70	30,30
Vinnitsya	50,8	49,2	51,2	48,8	51,4	48,6	51,7	48,3	52,0	48,0	52,3	47,7
Volyn	52,3	47,7	52,3	47,7	52,2	47,8	52,3	47,7	52,3	47,7	52,2	47,8
Dnipropetrovsk	83,6	16,4	83,8	16,2	83,9	16,1	84,0	16,0	84,1	15,9	84,2	15,8
Donetsk	90,7	9,3	90,8	9,2	90,8	9,2	90,9	9,1	90,9	9,1	91,0	9,0
Zhytomyr	58,8	41,2	59,0	41,0	59,1	40,9	59,3	40,7	59,5	40,5	59,6	40,4
Zakarpattya	37,1	62,9	37,0	63,0	37,1	62,9	37,2	62,8	37,2	62,8	37,2	62,8
Zaporizhzhya	77,2	22,8	77,3	22,7	77,3	22,7	77,4	22,6	77,5	22,5	77,5	22,5
Ivano-Frankivsk	43,7	56,3	44,0	56,0	44,2	55,8	44,4	55,6	44,5	55,5	44,6	55,4
Kyiv	62,2	37,8	62,1	37,9	62,1	37,9	62,1	37,9	62,0	38,0	61,8	38,2
Kirovohrad	62,9	37,1	63,1	36,9	63,2	36,8	63,4	36,6	63,6	36,4	63,7	36,3
Luhansk	86,9	13,1	86,9	13,1	87,0	13,0	87,1	12,9	87,1	12,9	87,2	12,8
Lviv	61,0	39,0	61,0	39,0	61,0	39,0	61,1	38,9	61,1	38,9	61,2	38,8
Mykolayiv	68,3	31,7	68,3	31,7	68,4	31,6	68,6	31,4	68,7	31,3	68,8	31,2
Odesa	66,8	33,2	66,9	33,1	67,0	33,0	67,2	32,8	67,2	32,8	67,3	32,7
Poltava	62,0	38,0	62,2	37,8	62,4	37,6	62,5	37,5	62,6	37,4	62,7	37,3
Rivne	47,6	52,4	47,5	52,5	47,5	52,5	47,5	52,5	47,5	52,5	47,5	52,5
Sumy	68,6	31,4	68,9	31,1	69,2	30,8	69,4	30,6	69,6	30,4	69,8	30,2
Ternopyl	44,6	55,4	44,9	55,1	45,3	54,7	45,6	54,4	45,9	54,1	46,1	53,9
Kharkiv	80,6	19,4	80,9	19,1	81,0	19,0	81,2	18,8	81,3	18,7	81,4	18,6
Kherson	61,2	38,8	61,3	38,7	61,3	38,7	61,4	38,6	61,4	38,6	61,4	38,6
Khmelnyskiy	56,4	43,6	56,7	43,3	57,1	42,9	57,4	42,6	57,7	42,3	58,0	42,0
Cherkasy	56,8	43,2	56,5	43,5	56,7	43,3	56,9	43,1	57,2	42,8	57,3	42,7
Chernivtsi	43,1	56,9	43,1	56,9	43,2	56,8	43,3	56,7	43,3	56,7	43,3	56,7
Chernihiv	64,6	35,4	64,9	35,1	65,2	34,8	65,5	34,5	65,8	34,2	66,0	34,0
AR Crimea	Data absent											

Source: The State Statistics Service of Ukraine https://ukrstat.gov.ua/druk/publicat/kat_u/publnasel_u.htm

Appendix B

The algorithm used to review the scholarly literature.



References

- AAW, 2023. Agritourism around the world. Top 8 Agritourism Destinations in the World [WWW Document]. URL. <http://agritourismdestinations.bksites.net/>. (Accessed 10 March 2023).
- Abadi, A., Khakzand, M., 2022. Extracting the qualitative dimensions of agritourism for the sustainable development of Charqoli village in Iran: the promotion of vernacular entrepreneurship and environment-oriented preservation perspectives. *Environ. Dev. Sustain.* 24, 12609–12671. <https://doi.org/10.1007/s10668-021-01958-0>.
- Adamov, T., Ciolac, R., Iancu, T., Brad, I., Peț, E., Popescu, G., Șmuleac, L., 2020. Sustainability of agritourism activity. Initiatives and challenges in Romanian mountain rural regions. *Sustainability* 12 (6), 2502. <https://doi.org/10.3390/su12062502>.
- Addinsall, Cherise, Scherrer, Pascal, Weiler, Betty, Glencross, Kevin, 2017. An ecologically and socially inclusive model of agritourism to support smallholder livelihoods in the South Pacific, Asia Pacific. *Journal of Tourism Research* 22 (3), 301–315. <https://doi.org/10.1080/10941665.2016.1250793>.
- AEUL, 2023. Access to European union law. 2023. The Schengen acquis - Convention implementing the Schengen Agreement of 14 June 1985 between the governments of the states of the Benelux economic union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders [WWW Document]. URL. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A42000A0922%2802%29>. (Accessed 8 March 2023).

- AgroPortal, 2023. USAID to provide Ukrainian farmers with seeds and fertilisers: applications are being accepted at DAR. AgroPortal [WWW Document]. URL <https://agroportal.ua/news/rasteniyevodstvo/usa-id-nadast-ukrajinskim-agrariyam-nasi-nyia-ta-dobriiva-zayavki-priymayut-u-dar>. (Accessed 3 March 2023).
- Al-Saidi Mohammad, 2023. Caught off guard and beaten: the Ukraine war and food security in the Middle East. *Front. Nutr.* 10 <https://doi.org/10.3389/fnut.2023.983346>.
- Ambelu, G., Lovelock, B., Tucker, H., 2018. Empty bowls: conceptualising the role of tourism in contributing to sustainable rural food security. *J. Sustain. Tourism* 26 (10), 1749–1765. <https://doi.org/10.1080/09669582.2018.1511719>.
- Ammirato, Salvatore, Felicetti, Alberto, 2014. The Agritourism as a means of sustainable development for rural communities: research from the field. *Int. J. Interdiscipl. Environ. Stud.* 8, 17–29. <https://doi.org/10.18848/2329-1621/CGP/v08i01/53305>.
- AR, 2019. Who owns the world's biggest agricultural holdings. *Agroreview* [WWW Document]. URL <https://agroreview.com/content/komu-prynadlezhat-krupnejshye-ahrohodynny-myra/>. (Accessed 7 August 2022).
- ART, 2022. Australian Regional Tourism. Agritourism Strategy Released (2022). Agritourism 2030. National Agritourism Strategy Framework [WWW Document]. URL <https://www.rdaep.org.au/australian-regional-tourism-agritourism-strategy-released/>. (Accessed 25 November 2022).
- BCMA, 2017. British Columbia ministry of agriculture. A Manual to Guide agri-tourism development in British Columbia: January, 2017 [WWW Document]. URL https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/farm-management/farm-business-management/business-planning-guides/agritourism_guide_2017.pdf. (Accessed 10 December 2022).
- Bezuhla, L., 2020. Legal regulation of Ecotourism infrastructure development in the region. *Economic Bulletin of Donbas* 3 (61), 160–165. [https://doi.org/10.12958/1817-3772-2020-3\(61\)-160-165](https://doi.org/10.12958/1817-3772-2020-3(61)-160-165).
- Brune, S., Knollenberg, W., Vilá, O., 2023. Agritourism resilience during the COVID-19 crisis. *Ann. Tourism Res.* <https://doi.org/10.1016/j.annals.2023.103538>.
- CAFU, 2020. Collective accommodation facilities in Ukraine. The State Statistics Service of Ukraine [WWW Document]. URL https://ukrstat.gov.ua/operativ/operativ2019/tyr/kol_zas_ukr/arch_kol_zas_ukr.htm. (Accessed 7 September 2022).
- Ciolac, R., Adamov, T., Iancu, T., Popescu, G., Lile, R., Rujescu, C., Marin, D., 2019. Agritourism-A sustainable development factor for improving the 'health' of rural settlements. Case study Apuseni mountains area. *Sustainability* 11 (5), 1467. <https://doi.org/10.3390/su11051467>.
- CRD, 2015. Concept of rural development (2015). Cabinet of Ministers of Ukraine order No 995-p dated 23 September, 2015 [WWW Document]. URL <https://zakon.rada.gov.ua/laws/show/en/995-2015-%D1%80?lang=en#Text>. (Accessed 3 October 2022).
- CSDERA, 2021. Concept for stimulating the development of entrepreneurship in rural areas until 2030 [WWW Document]. URL Ministry of Agrarian Policy and Food of Ukraine. Cabinet of Ministers of Ukraine draft order of 22 September, 2021. <https://minagro.gov.ua/npa/pro-shvalennya-koncepciyi-stimulyuvannya-rozvitku-priyemnictva-na-silskih-teritoriyah-do-2030-roku>. (Accessed 3 December 2022).
- CSDS, 2021. Chernihiv oblast sustainable development strategy for the period up to 2027 [WWW Document]. URL <https://cg.gov.ua/index.php?id=28101&tp=1>. (Accessed 3 April 2023).
- Dax, T., Zhang, D., Chen, Y., 2019. Agritourism initiatives in the context of continuous out-migration: Comparative perspectives for the Alps and Chinese mountain regions. *Sustainability* 11 (16), 4418. <https://doi.org/10.3390/su11164418>.
- Dovbischuk, I., 2023. Sustainability in logistics service quality: evidence from agri-food supply chain in Ukraine. *Sustainability* 15 (4), 3534. <https://doi.org/10.3390/su15043534>.
- DPZ, 2022. Davos 2022: President Zelenskyy on 'new Precedents' and a Call for Global Help 'as Fast as Possible'. *World Economic Forum*. May 2022. [WWW Document]. URL <https://www.weforum.org/agenda/2022/05/davos-2022-special-address-by-volodymyr-zelenskyy-president-of-ukraine/>. (Accessed 1 March 2023).
- DRDS, 2021. Dnipro regional development strategy for the period up to 2027 [WWW Document]. URL <https://adm.dp.gov.ua/pro-oblast/rozvitok-regionu/strategiya-rozvitku/proekt-strategiyi-rozvitku-dnipropetrovskoyi-oblasti-na-period-do-2027-roku>. (Accessed 15 March 2023).
- Dyson, E., Helbig, R., Avermaete, T., Halliwell, K., Calder, P.C., Brown, L.R., Ingram, J., Popping, B., Verhagen, H., Boobis, A.R., Guelinckx, I., Dye, L., Boyle, N., 2023. Impacts of the Ukraine–Russia conflict on the global food supply chain and building future resilience. *EuroChoices* 22 (Issue 1). <https://doi.org/10.1111/1746-692X.12380>.
- ESEAT, 2020. Economic statistics. Economic activity. Tourism. The state statistics service of Ukraine [WWW Document]. URL https://ukrstat.gov.ua/operativ/menu/menu_u/tur.htm. (Accessed 11 July 2022).
- European Council, 2022. Council of the European union. Ukraine. EU relations with Ukraine [WWW Document]. URL <https://www.consilium.europa.eu/en/policies/enlargement/ukraine/>. (Accessed 10 August 2022).
- FB, 2023. The export of agricultural products in 2022 fell by half - to \$20 billion, - the minister 2023. *Finbalance* [WWW Document]. URL <https://finbalance.com.ua/news/eksport-ahroproduktiv-v-2022-rotsi-vpav-udvichi-do-20-mlrd-ministr>. (Accessed 15 January 2023).
- Galluzzo, N., 2018. Analysis of staying time in Italian agritourism using a quantitative methodology: the case of Latium region. *Journal of Rural Social Sciences* 33 (1). <https://egrove.olemiss.edu/jrss/vol33/iss1/3>.
- Germinario, G.D., Drejerska, N., Fiore, M., 2023. Agritourism in the context of sustainable rural development. Cases studies of Italian and polish Wineries. *conf GTU*. <https://fair.unifg.it/handle/11369/428107>.
- Glauben, T., Svanidze, M., Götz, L., et al., 2022. The war in Ukraine, agricultural trade and risks to global food security. *Intereconomics* 57, 157–163. <https://doi.org/10.1007/s10272-022-1052-7>.
- GP, 2021. Decentralisation Reform. Government, portal Ukraine [WWW Document]. URL <https://www.kmu.gov.ua/diyalnist/reformi/efektivne-vryaduvannya/reforma-decentralizaciyi>. (Accessed 7 November 2022).
- GP, 2022. The 2022 Planting Campaign Has Been Completed in Ukraine. Government, portal Ukraine [WWW Document]. URL <https://www.kmu.gov.ua/news/v-ukrayini-zavershena-posivna-kampaniya-2022>. (Accessed 2 August 2022).
- GP, 2023. As part of the grain initiative, Ukraine has already sent more than 25 mln tons of agricultural products, - Prime Minister. Government portal. [WWW Document]. URL <https://www.kmu.gov.ua/news/premier-ministr-u-mezhkhk-zernovoi-initsiyaty-vy-ukraina-vidpravyla-vzhe-ponad-25-mln-tonn-ahroproduktii>. (Accessed 2 April 2023).
- Grillini, G., Sacchi, G., Chase, L., Taylor, J., Van Zyl, C.C., Van Der Merwe, P., Streifeneder, T., Fischer, C., 2022. Qualitative assessment of agritourism development support Schemes in Italy, the USA and South Africa. *Sustainability* 14 (13), 7903. <https://doi.org/10.3390/su14137903>.
- Haugen, M.S., Vik, J., 2008. Farmers as entrepreneurs: the case of farm-based tourism. *Int. J. Enterpren. Small Bus.* 6 (3), 321–336. <https://doi.org/10.1504/IJESB.2008.019130>.
- Hegarty, C., Przeborska, L., 2005. Rural and agri-tourism as a tool for reorganising rural areas in old and new member states - a comparison study of Ireland and Poland. *Int. J. Tourism Res.* 7 (2), 63–77. <https://doi.org/10.1002/jtr.513>.
- Holovachko, V., Liba, N., Vyber, E., 2021. Agricultural development opportunities analysis in Ukraine. *Econ. Soc.* 27 <https://doi.org/10.32782/2524-0072/2021-27-45>.
- Hrynevych, O., Blanco Canto, Miguel, Jiménez García, Mercedes, 2022. Tendencies of Precision agriculture in Ukraine: Disruptive Smart farming tools as cooperation drivers. *Agriculture* 12 (5), 698. <https://doi.org/10.3390/agriculture12050698>.
- IFRDS, 2020. Ivano-frankivsk region development strategy for 2021-2027 [WWW Document]. URL <https://www.if.gov.ua/strategiya-rozvitku-ivano-frankivskoy-i-oblasti>. (Accessed 11 March 2023).
- IPLRD, 2021. Implementation plan of Lviv region development strategy for 2021-2027 [WWW Document]. URL <https://loda.gov.ua/documents/50002>. (Accessed 12 March 2023).
- IU, 2022. Interfax-Ukraine. 2023, Ukraine Expects Gross Harvest in the Government-Controlled Territories to Reach 70-75% of This Year's Figures - Prime Minister of Ukraine [WWW Document]. URL <https://interfax.com.ua/news/economic/879979.html>. (Accessed 10 January 2023).
- IU, 2023. Interfax-Ukraine. Ukraine exported almost 40 mln tons of agricultural products during the war in 2022 - ministry of Agrarian Policy [WWW Document]. URL <https://interfax.com.ua/news/economic/882668.html>. (Accessed 20 January 2023).
- Ivanishyn, V., Bialkowska, O., Chaikovskiy, O., Semenyshyna, I., 2022. Assessment of reserved areas for sustainable Ecotourism in Khmelnytskyi region, Ukraine. *Grassroots Journal of Natural Resources* 5 (4), 52–65. <https://doi.org/10.33002/nr2581.6853.050404>.
- Kalchenko, S.V., Huturov, A.O., Bezuhla, L.S., Leushina, O.A., Popova, T.V., Dorokhov, O.V., 2021. Managing the socio-economic development of small forms of green tourism. *Bulletin of the Transilvania University of Brasov. Series II: forestry, Wood industry. Agricultural Food Engineering* 141–152. <https://doi.org/10.31926/but.fwiafe.2021.14.63.1.13>.
- Karampela, S., Kizos, T., 2018. Agritourism and local development: evidence from two case studies in Greece. *Int. J. Tourism Res.* 20 (5) <https://doi.org/10.1002/jtr.2206>.
- Khodakivska, O., 2023. How competitive are Ukrainian agricultural holdings? *Int. J. Environ. Stud.* <https://doi.org/10.1080/00207233.2023.2179759>.
- KhrDS, 2020. Kherson region development strategy for 2021-2027 [WWW Document]. URL <https://khoda.gov.ua/strateg%D1%96ja-rozvitku-2021-2027>. (Accessed 23 March 2023).
- Knapp, L., Dalhaus, T., Wüpper, D., Finger, R., 2021. Revisiting the diversification and insurance relationship: differences between on- and off-farm strategies. *Climate Risk Management* 32, 100315. <https://doi.org/10.33929/ethz-b-000483024>.
- Kravchenko, O., Kucher, A., Heldak, M., Kucher, L., Wyszumek, J., 2020. Socio-economic transformations in Ukraine towards the sustainable development of agriculture. *Sustainability* 12 (13), 5441. <https://doi.org/10.3390/su12135441>.
- KRDS, 2021. Kyiv region development strategy for 2021-2027, approved by the Kyiv regional Council on 19.12.2019 [WWW Document]. URL <https://koda.gov.ua/kiivshhina/rozvytok-regionu/strategiya-rozvytku/>. (Accessed 25 March 2023).
- Lal, S.P., Mahendra, A., Rozi, A., Verma, M., 2023. Origin and history of integrated farming system: few Grassroots experiences and its revival through agro-tourism. *Entrepreneurship in Integrated Farming System*. Publisher: Daya Publishing House. https://www.researchgate.net/publication/368026557-Origin_and_History_of_Integrated_Farming_System_Few_Grassroots_Experiences_and_its_Revival_through_Agro-tourism.
- LAUPF, 2003. Law of Ukraine 'on private farming'. *Verkhovna Rada of Ukraine*. Document 742-IV, valid, current version. Revision on August 15, 2020, on the basis - 819-IX [WWW Document]. URL <https://zakon.rada.gov.ua/laws/main/742-15#Text>. (Accessed 25 September 2022).
- LAUT, 1995. Law of Ukraine 'on tourism'. *Verkhovna Rada of Ukraine*. Document 324/95-BP, valid, current version. Revision on April 1, 2023, on the basis - 1441-IX [WWW Document]. URL <https://zakon.rada.gov.ua/laws/show/324/95-%D0%B2%D1%80>. (Accessed 29 September 2022).
- Lazarieva, O., 2017. Key aspects of agro-tourism development in Ukraine. *Herald of Agrarian Science of the Black Sea Region* 4, 25–35. <https://visnyk.mnau.edu.ua/statti/2017/n96v4r2017lazarieva.pdf>.

- Lin, F., Li, X., Jia, N., Feng, F., Huang, H., Huang, J., Song, X.P., 2023. The impact of Russia-Ukraine conflict on global food security. *Global Food Secur.* 36, 100661 <https://doi.org/10.1016/j.gfs.2022.100661>.
- Local communities, 2020. Decentralisation portal [WWW Document]. URL. <https://decentralization.gov.ua/newgromada>. (Accessed 29 November 2022).
- LRDS, 2020. Lviv region development strategy for 2021-2027 [WWW Document]. URL. <https://loda.gov.ua/documents/49999>. (Accessed 3 April 2023).
- LuRDS, 2020. Luhansk region development strategy for 2021-2027 [WWW Document]. URL. http://loga.gov.ua/oda/about/depart/economy/se_state/str_dev_src. (Accessed 5 April 2023).
- Mahmoodi, M., Roman, M., Prus, P., 2022. Features and challenges of agritourism: evidence from Iran and Poland. *Sustainability* 14 (8), 4555. <https://doi.org/10.3390/su14084555>.
- MAPFU, 2022a. Ukraine increased foreign trade turnover of agricultural products and food products in 2021, - Roman Leshchenko. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/za-2021-rik-ukrayi-na-zbilshila-zovnishnotorgovelnij-obig-sg-produkciyi-ta-prodovolchih-tovariv-roma-n-leshchenko>. (Accessed 15 December 2022).
- MAPFU, 2022b. The 2022 planting campaign has been completed in Ukraine Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/v-ukrayini-zavershena-posivna-kampaniya-2022>. (Accessed 10 December 2022).
- MAPFU, 2023a. Ukraine has an absolute record for exporting dairy products to Europe, - Taras Vysotskiy 2023. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/ukrayina-maye-absolyutnij-rekord-za-eksportom-molochnoyi-produkciyi-v-yevropu-taras-visockij>. (Accessed 10 February 2023).
- MAPFU, 2023b. Despite the war, in terms of export indicators. 2022 was one of the best for Ukraine in recent years, - Taras Vysotskiy. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/taras-visockij-po-pri-vijnju-za-eksportnimi-pokaznikami-2022-ij-dlya-ukrayini-buv-odnim-iz-k-rashchih-za-ostanni-roki>. (Accessed 20 January 2023).
- MAPFU, 2023c. Sown areas in Ukraine will decrease by 7 mln ha. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/posivni-ploshchi-v-ukrayini-zmenschatsya-na-7-mln-ga>. (Accessed 21 February 2023).
- MAPFU, 2023d. 10 regions have started the planting season. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/10-obl-astej-rozpochali-posivnu>. (Accessed 25 March 2023).
- MAPFU, 2023e. This year's exports of agricultural products can maintain last year's figure of more than \$20 billion, - Taras Vysotskiy. Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/news/cogo-roku-eksport-agroprodukciyi-mozhe-zberesti-minulorichnij-pokaznik-u-ponad-20-mlrd-taras-visockij>. (Accessed 27 March 2023).
- MCT, 2022. The ministry of communities and territories development of Ukraine [WWW Document]. URL. <https://www.minregion.gov.ua/legislation/>. (Accessed 25 September 2022).
- Meraner, M., Finger, R., 2019. Risk perceptions, preferences and management strategies: evidence from a case study using German livestock farmers. *J. Risk Res.* 22 (1), 110–135. <https://doi.org/10.1080/13669877.2017.1351476>.
- Meraner, M., Heijman, W., Kuhlman, T., Finger, R., 2015. Determinants of farm diversification in The Netherlands. *Land Use Pol.* 42, 767–780. <https://doi.org/10.1016/j.landusepol.2014.10.013>.
- Meraner, M., Pölling, B., Finger, R., 2018. Diversification in peri-urban agriculture: a case study in the Ruhr metropolitan region. *J. Land Use Sci.* 13 (3), 284–300. <https://doi.org/10.1080/1747423X.2018.1529830>.
- MSMA, 2022. Mission and Strategy Ministry of agrarian policy and food of Ukraine [WWW Document]. URL. <https://minagro.gov.ua/en/pro-nas/mission-and-strategy>. (Accessed 30 September 2022).
- MSP, 2023. Internally displaced people. Ministry of social policy [WWW Document]. URL. <https://www.msp.gov.ua/timeline/Vnutrishno-peremishcheni-osobi.html>. (Accessed 20 November 2022).
- PACRD, 2017. Plan of action for the concept of rural development (2017). Cabinet of Ministers of Ukraine Directions No489-p dated 19 June, 2017 [WWW Document]. URL. <https://zakon.rada.gov.ua/laws/show/489-2017-%D1%80?lang=en#Text>. (Accessed 18 November 2022).
- Parente, G., Bovolenta, S., 2012. The role of grassland in rural tourism and recreation in Europe. In: Parente, G., Bovolenta, S. (Eds.), *Grassland—A European Resource? Grassland Science in Europe*, vol. 17. Polish Grassland Society, pp. 733–743.
- PARGTD, 2019. Plan of actions for the rural green tourism development in rural areas for 2020. Ministry of Agrarian Policy and Food of Ukraine. Order No. 216 dated 17 April 2019. [WWW Document]. URL. <https://minagro.gov.ua/npa/pro-zatverdzhennya-planu-zahodiv-ministerstva-agrarnoyi-politiki-ta-prodovolstva-ukrayini-shchodo-roz-vitku-silskogo-zelenogo>. (Accessed 17 November 2022).
- Pérez-Olmos, K.N., Aguilar-Rivera, N., 2021. Agritourism and sustainable local development in Mexico: a systematic review. *Environ. Dev. Sustain.* 23, 17180–17200. <https://doi.org/10.1007/s10668-021-01413-0>.
- Pizakova, L., 2022. Evaluation of investments in the tourism sector with a local focus. *Eval. Progr. Plann.* 94 <https://doi.org/10.1016/j.evalprogplan.2022.102151>. (Accessed 20 October 2022).
- PNCRU, E.R.D., 2022. Economic recovery and development, plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/economic-recovery-and-development-eng.pdf>. (Accessed 20 August 2022).
- PNCRU, E.S., 2022. Environmental safety, plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/ecosafety-eng.pdf>. (Accessed 21 August 2022).
- PNCRU, R.D.I., 2022. Reconstruction and development of infrastructure, plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine. 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/recovery-and-development-of-infrastructure-eng.pdf>. (Accessed 22 August 2022).
- PNCRU, 2022. Plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/diyalnist/nacionalna-rada-z-vidnovlennya-ukrayini-vid-naslid-kiv-vijni/robochi-grupi>. (Accessed 19 August 2022).
- PNCRU AP, 2022. New agricultural policy, plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/new-agrarian-policy-eng.pdf>. (Accessed 19 August 2022).
- PNCRU CIP, 2022. Culture and information policy, plan of the national Council for recovery of Ukraine from the war. National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/culture-and-information-policy-eng.pdf>. (Accessed 17 August 2022).
- PNCRU CUP, 2022. Construction, urban Planning, Modernization of cities and regions. Plan of the National Council for Recovery of Ukraine from the War, National Council for Recovery of Ukraine., 2022 [WWW Document]. URL. <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/construction-urban-planning-modernization-of-cities-and-regions-eng.pdf>. (Accessed 16 August 2022).
- PRDS, 2020. Poltava Region Development Strategy [WWW Document]. URL. <https://poda.gov.ua/documents/138471>. (Accessed 13 April 2023).
- Rexhaj, F., Vilks, A., Sirenko, N., Dubinina, Ma, Melnyk, O., Bodnar, O., 2023. Participation of international organisations in solving the problems of the agricultural sector of Ukraine. *Int. J. Environ. Stud.* 80 (Issue 2) <https://doi.org/10.1080/00207233.2023.2170572>.
- Roman, M., Grudziń, P., 2021. The essence of agritourism and its profitability during the Coronavirus (COVID-19) pandemic. *Agriculture* 11 (5), 458. <https://doi.org/10.3390/agriculture11050458>.
- ROSA, 2022. Ukraine conducted a large-scale study of the psychological state of Ukrainians during the war. Rivne Oblast State Administration [WWW Document]. URL. <https://www.rv.gov.ua/news/v-ukrayini-proveli-mashtabne-doslidzhennya-a-psihologichnogo-stanu-ukrayinciv-pid-chas-vijni>. (Accessed 12 November 2022).
- RRS, 2021. Report on the results of the survey 'Conducting a study of domestic and outbound tourism of Ukrainians'. the State Agency for Tourism Development of Ukraine, 2021 [WWW Document]. URL. <https://www.tourism.gov.ua/statistic>. (Accessed 15 October 2022).
- RTDB, 2023. The Rural tourism data bank in Ukraine in 2020 [WWW Document]. URL. <http://ruraltourism.com.ua/>. (Accessed 10 May 2023).
- Rusan, V., 2022. Peculiarities of functioning of the agricultural sector of the Ukrainian economy during the war. *Intellect XXI* 2. <https://doi.org/10.32782/2415-8801/2022-2.3>.
- Santeramo, F.G., Barbieri, C., 2017. On the demand for agritourism: a cursory review of methodologies and practice. *Tourism Planning & Development* 14 (1), 139–148. <https://doi.org/10.1080/21568316.2015.1137968>.
- SATD, 2023. State agency for tourism development of Ukraine [WWW Document]. URL. <https://www.tourism.gov.ua/>. (Accessed 10 March 2023).
- SAVZ, 2023. Special Address by Volodymyr Zelenskyy, President of Ukraine. World Economic Forum [WWW Document]. URL. <https://www.weforum.org/events/world-economic-forum-annual-meeting-2023/sessions/special-address-by-volodymyr-zelenskyy-president-of-ukraine-068bdf6a88>. accessed 02.02.23.
- Shevchenko, H., Petrusenko, M., 2021. Rural tourism within the sustainable development goals: the case of Ukraine. *Les Ulis. EDP Sciences.* <https://doi.org/10.1051/shsconf/20219501004>.
- Shevchenko, H., Pakhomov, V., Petrusenko, M., 2016. Economic and legal issues of rural and recreational land use in Ukraine. *Economic Annals-XXI* 156 (1–2), 54–58. <https://doi.org/10.21003/ea.V156-0012>.
- Shubravskaya, O., Prokopenko, K., 2022. The agricultural sector of Ukraine in the global food market: pre-war state and post-war prospects. *Research on World Agricultural Economy* 3 (4), 693. <https://doi.org/10.36956/rwae.v3i4.693>.
- Shvediuk Iu, 2023. Improvement of human resources policy of the branch 'Radekhiv forestry and hunting' state enterprise 'Forests of Ukraine'. *Economics, finance, management: topical issues of science and practice* 1, 7–19. <https://doi.org/10.37128/2411-4413-2023-1-1>.
- SMI, 2015. Strategy the ministry of infrastructure of Ukraine [WWW Document]. URL. <https://mtu.gov.ua/content/strategiya-2015.html>. (Accessed 2 February 2023).
- SPDUCR, 2020. The state programme for the development of the Ukrainian carpathian region for 2020-2022, approved by the cabinet of ministers of Ukraine on 20 October 2019 № 880 [WWW Document]. URL. https://zakon.rada.gov.ua/laws/show/880-2019-%D0%BF?find=1&text=%D1%82%D1%83%D1%80%D0%B8%D0%B7%D0%BC#w1_1. (Accessed 8 April 2023).
- Spiegel, A., Slijper, T., de Mey, Y., Meuwissen, M.P., Poortvliet, P.M., Rommel, J., Hansson, H., Viganì, M., Bárbara, S., Wauters, E., Appel, F., Antonioli, F., Gavrilescu, C., Gradziuk, P., Finger, R., Feindt, P.H., 2021. Resilience capacities as perceived by European farmers. *Agric. Syst.* 193, 103224 <https://doi.org/10.1016/j.agsy.2021.103224>.
- SSSU, 2021a. State statistics service of Ukraine. *Agriculture of Ukraine (2021)*. Statistical Publication [WWW Document]. URL. https://ukrstat.gov.ua/druk/publicat/kat_u/publ7_u.htm. (Accessed 8 December 2022).

- SSSU, 2021b. Plant Growing in Ukraine (2021). Statistical Publication. State Statistics Service of Ukraine [WWW Document]. URL: https://ukrstat.gov.ua/druk/publicat/kat_u/publ7_u.htm. (Accessed 10 December 2022).
- SSSU, 2021c. Population and migration. The State Statistics Service of Ukraine [WWW Document]. URL: https://ukrstat.gov.ua/druk/publicat/kat_u/publnasel_u.htm. (Accessed 3 February 2023).
- SSSU, 2021d. Main agricultural characteristics of households in rural area (2018-2021). Statistical publication. The State Statistics Service of Ukraine [WWW Document]. URL: https://ukrstat.gov.ua/operativ/operativ2018/sg/opsdg/arch_oschd_e.htm. (Accessed 1 December 2022).
- SSSU, 2022. Population of Ukraine (2021). The State Statistics Service of Ukraine. Statistical publication [WWW Document]. URL: https://ukrstat.gov.ua/druk/publicat/kat_u/2022/zb/10/zb_nasel%202021.pdf. (Accessed 5 December 2022).
- Statistisches Bundesamt, 2022. Agricultural land in Germany in 2010 and 2022, by type of use (in 1,000 ha) [WWW Document]. URL: <https://www.statista.com/statistics/1249647/agricultural-land-by-type-of-use-germany/>. (Accessed 11 April 2023).
- Streifeneder, T., Dax, T., 2020. Agritourism in Europe: enabling factors and current developments of sustainable on-farm tourism in rural areas. In: Kala, D., Bagri, S. (Eds.), *Global Opportunities and Challenges for Rural and Mountain Tourism*. IGI Global, pp. 40–58. <https://doi.org/10.4018/978-1-7998-1302-6.ch003>.
- The United Nations High Commissioner for Refugees, 2023. Ukraine Situation Flash Update #39 [WWW Document]. URL: <https://data.unhcr.org/en/documents/details/98413>. (Accessed 27 January 2023).
- Tourist tax report, 2023. The State Agency for Tourism Development of Ukraine. in 2021, in 2022 [WWW Document]. URL: <https://lookerstudio.google.com/u/0/reporting/2557879b-b2db-4aeb-9581-67134b0f97a8/page/slp9B?s=tF1oLcJNEN4>. (Accessed 26 March 2023).
- TTDI, 2022. Travel & Tourism Development Index 2021: Rebuilding for a Sustainable and Resilient Future. Insight Report. World Economic Forum. May 2022. [WWW Document]. URL: <https://es.weforum.org/reports/travel-and-tourism-development-index-2021/in-full>. (Accessed 23 June 2022).
- TTIU, 2022. Taxes from the tourism industry in Ukraine in 2022. The State Agency for Tourism Development of Ukraine [WWW Document]. URL: <https://www.tourism.gov.ua/blog/u-2022-roci-nadhodzhenya-do-derzhbyudzhetu-vid-turistichnoy-gal-uzi-skorotilisya-mayzhe-na-31>. (Accessed 27 March 2023).
- TTU, 2022. Tourist tax in Ukraine for 2022. The State Agency for Tourism Development of Ukraine [WWW Document]. URL: <https://datastudio.google.com/u/0/reporting/2557879b-b2db-4aeb-9581-67134b0f97a8/page/slp9B?s=tF1oLcJNEN4>. (Accessed 21 April 2023).
- UAETA, 2022. Ukrainian adventure and ecological tourism association [WWW Document]. URL: <http://www.uaeta.net/>. (Accessed 18 June 2023).
- UHEPIO, 2023. Ukraine's heritage, economic power and investment opportunities on the agenda at day 3. Ukraine house Davos (January 2023) [WWW Document]. URL: <https://www.ukrainehousedavos.com/press-release/ukraines-heritage-economic-power-and-investment-opportunities-on-the-agenda-at-uhd-day-3/>. (Accessed 13 April 2023).
- Union of RGTD, 2023. Union of rural green tourism development in Ukraine [WWW Document]. URL: <https://www.greentour.com.ua/region>. (Accessed 1 May 2023).
- URC, 2022. Ukraine recovery conference. Conference materials. Lugano, 2022 [WWW Document]. URL: <https://www.urc2022.com/conference-materials>. (Accessed 18 September 2022).
- USA, 2022. Infographic: the First Results and Predictions of the 2022 Seeding. Ukrainian Seed Association [WWW Document]. URL: <https://ukrseeds.org.ua/infografika-per-shi-pidsumky-ta-prognozy-posivnoyi-2022>. (Accessed 7 September 2022).
- USDA, 2022. Households agricultural production [WWW Document]. URL Foreign Agricultural Service. United States Department of Agriculture. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwN2eXW04jAhUsg_0HHSUhClcQFnoECMDMQAQ&url=https%3A%2F%2Fapps.fas.usda.gov%2Fnewgainapi%2Fapi%2FReport%2FDownloadReportByFileName%3FFileName%3DHouseholds%2520Agricultural%2520Production_Kyiv_Ukraine_UP2022-0030&usg=AOvVaw3U1FtBtMdDSTRbRU_8c8Su. (Accessed 21 November 2022).
- USDA, 2023. Ukraine crop production summary. Foreign Agricultural Service. United States Department of Agriculture [WWW Document]. URL: <https://ipad.fas.usda.gov/countrysummary/Default.aspx?id=UP>. (Accessed 3 June 2023).
- UTS, 2022. Ukrainian tourism statistics for 2022. State Agency for Tourism Development of Ukraine [WWW Document]. URL: <https://www.tourism.gov.ua/blog/u-2022-roci-suma-turistichnogo-zboru-u-ukrayini-skorotilasya-na-24>. (Accessed 1 April 2023).
- Van der Ploeg, J.D., Roep, D., 2003. Multifunctionality and rural development: the actual situation in Europe. In: van Huylensbroeck, G., Durand, G. (Eds.), *Multifunctional Agriculture. A New Paradigm for European Agriculture and Rural Development*. Ashgate, pp. 37–54.
- ViRDS, 2020. Vinnytsya region development strategy for 2021-2027 [WWW Document]. URL: <https://www.vin.gov.ua/invest/rehionalni-prohramy-rozvytku/622-strat-ehiia-zbalansovanoho-rehionalnoho-rozvytku-vinnytskoi-oblasti-na-period-do-2027-roku>. (Accessed 15 April 2023).
- Voloshynskiy, O., Hrybalskiy, Ya, Matselukh, A., et al., 2019. Organization of entrepreneurial activity in the field of rural tourism by persons with disabilities. manual. Lviv: Rastr- 7, 206.
- VoRDS, 2020. Volyn region development strategy for 2021-2027 [WWW Document]. URL: <https://voladm.gov.ua/category/strategiya-rozvytku-oblasti1/1/>. (Accessed 3 April 2023).
- Vroege, W., Meraner, M., Polman, N., Storm, H., Heijman, W., Finger, R., 2020. Beyond the single farm - a spatial econometric analysis of spill-over effects in farm diversification in The Netherlands. *Land Use Pol.* 99, 105019 <https://doi.org/10.1016/j.landusepol.2020.105019>.
- VRU, 2022. Concept of the national target program for the use and protection of land. The Verkhovna Rada of Ukraine [WWW Document]. URL: <https://zakon.rada.gov.ua/laws/show/70-2022-%D1%80#Text>. (Accessed 3 August 2022).
- WB, 2019. Classifying Countries by Income. The World Bank, a%20GNI%20per%20capita%20of%20%241%2C376%20or%20more [WWW Document]. URL: <http://datatopics.worldbank.org/world-development-indicators/stories/the-classification-of-countries-by-income.html#:~:text=As%20of%201%20July%202019%2C%20low-income%20economies%20are>. (Accessed 2 May 2023).
- WB, 2021. World development indicators. Rural Population (% of Total Population). The World Bank [WWW Document]. URL: <https://databank.worldbank.org/reports.aspx?dsid=2&series=SP.RUR.TOTL.ZS#>. (Accessed 8 July 2022).
- WB, 2022. World development indicators. Agricultural Land (% of Land Area). The World Bank [WWW Document]. URL: <https://databank.worldbank.org/reports.aspx?dsid=2&series=AG.LND.AGRI.ZS#>. (Accessed 25 July 2022).
- WTO, 2002. World tourism organisation. Tourism market trends 2002 - Europe (English version). [WWW Document]. URL: <https://www.e-unwto.org/doi/book/10.18111/9789284405510>. (Accessed 17 October 2022).
- WTO, 2021. World tourism organisation. WTO (2002). World Tourism Organization [WWW Document]. URL: <https://www.unwto.org/tourism-data/covid-19-measures-to-support-travel-tourism>. (Accessed 18 November 2022).
- ZARDS, 2019. Zakarpattia region development strategy for 2021-2027 [WWW Document]. URL: <https://carpathia.gov.ua/diyalnist/ekonomichnij-blok/regionalni-programi-rozvytku>. (Accessed 3 April 2023).
- ZHRDS, 2021. Zhytomyr region development strategy for 2021-2027 [WWW Document]. URL: <https://oda.zht.gov.ua/main/rozroblennya-proektu-strategiyi-rozvytku-zhytomyrskoyi-oblasti-na-period-do-2027-roku/rozroblennya-strategiyi-rozvytku-zhytomyrskoyi-oblasti-na-period-do-2027-roku/>. (Accessed 23 April 2023).