Implementation of local food concept for social-economic revitalization in rural areas: the case of Ukraine

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Abstract

Objectives: The article is aimed at studying the features of implementation of local food concept as a way to ensure social-economic revitalization and sustainable development of both the agrisector and rural areas in Ukraine.

Methods/Analysis: The research is based on the analysis of available statistics on agriculture enterprises development, social and demographic, as well as agricultural activity characteristics of households in Ukraine. It also generalizes the scientific views on the essence and implementation approaches for local food concept (LFC) as an alternative mode of agriculture development.

Findings: The existing model of agriculture in Ukraine negatively affects social and environmental aspects of rural territories development. It leads rather to the impoverishment of the rural population, further degradation and the extinction of rural areas. There were summarized the scientific approaches concerning LFC as alternative model of agriculture development, that, in turn, determine the peculiarities of its implementation. The local food concept presupposes the development of short and local food supply systems. Its implementation is based on the agricultural production of end-use products and their distribution via direct producer-consumer contacts. In this regard, the features of agriculture organization for different types of producers were studied and the main LFC players were identified. There were examined the features of households' agricultural activity in Ukraine.

Novelty/Improvements: There were defined the main obstacles for LFC implementation in Ukraine, as well as prior areas of agriculture and rural policy regulation aimed at ensuring the social-economic rural revitalization in the sustainable development context.

Keywords: local food concept, peasant households, sustainable rural development, industrial agriculture, agricultural policy, rural policy.

1. Introduction

Sustainable rural development is a prerequisite for sustainable development of society, as the population in rural areas is the significant and usually the most vulnerable and socially disadvantaged. Current trends of economic development of agriculture are positive in Ukraine, although, unfortunately, this did not become the driving force for improving the welfare of the rural population and even have aggravated the already accumulated problems. In this context, research aimed at finding the ways of sustainable development of both agriculture and rural territories become urgent. Scientific debates over the content and basis vectors of agriculture (industrial mass production or regional and diversified product systems) have a long history and are still going on. Modern agricultural development within the rural economy involves shift from the economy of scale to the economy of range, and is reflected in the re-spatialization of food supply chains also driven by environmental and social concerns [1-5]. Re-spatialization and re-configuration of agricultural systems presuppose the development of new forms of an agriculture organization opposed to the mass food production, in particular: alternative and short food supply chains, local food system, and rural webs [6-8]. At the same time, the transition to alternative food production and supply systems is quite complex problem not solved yet, as industrial food production system is more accessible to consumers with different income and is more democratic [9].

So, an issue about the ways and tools for improvement the organization of agriculture production (production modes, products and their combinations) to meet the strategic goals of sustainable rural development in Ukraine needs more in-depth research, and it constitutes the purpose of this study.

2. Materials and Methods

The research is based on the analysis of available statistics on agriculture enterprises development, social and demographic, as well as agricultural activity characteristics of households in Ukraine. The structuration theory and functionalism lie at the root of the research. That allows, in particular, illustrating the main players in Ukrainian agrisector, as well as their role in promoting and ensuring sustainable development of rural areas and, thus, to identify policy tools needed to support necessary transformations. The article also generalizes the scientific views on the essence and implementation approaches for local food concept (LFC) as an alternative mode of agriculture development. The special attention is paid to the identification of barriers for LFC implementation in Ukraine, as well as the elaboration of necessary policy regulations.

3. Results and Discussion

Nowadays Ukraine is one of the largest world's exporters of food (e.g. grain, sunflower oil, poultry, honey, etc.). Agriculture is strengthening its position in the country's economy and region is regaining the "food basket of Europe" title [10-12]. As a result, agriculture production is becoming more and more focused on the production of export-led crops (Figure 1).

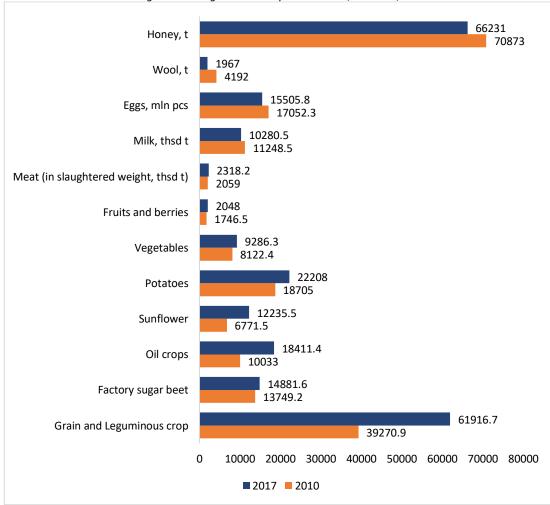
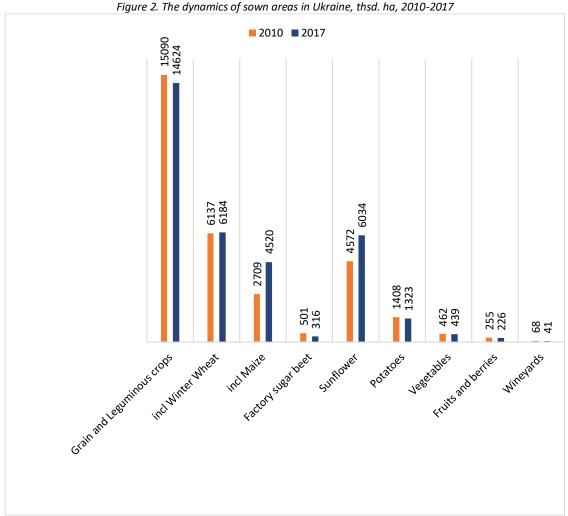


Figure 1. The agricultural output in Ukraine, thsd. ton, 2010-2017

Source: State Statistics Service of Ukraine, http://ukrstat.gov.ua

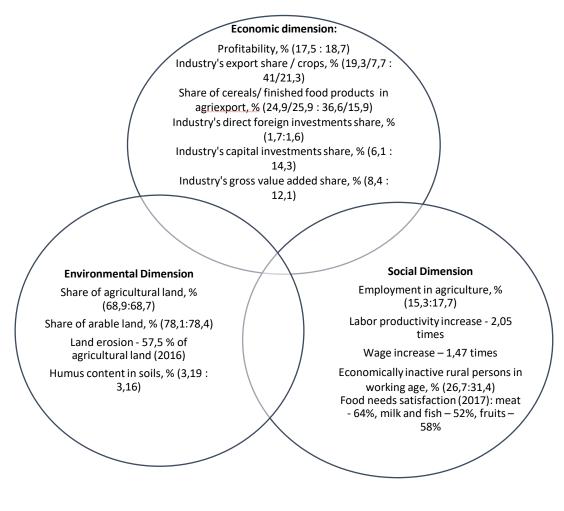
The data presented in Figure 1 shows a significant increase of raw food production for the last seven years, particularly: grains, sunflower, oilseeds. At the same time, the production of livestock products demonstrates a decrease, specifically, relating to honey, eggs, milk, and wool. The analysis of changes in sown areas occupied by certain crops (Figure 2) also illustrates the shift towards the establishment of industrial model of agricultural production in Ukraine during the 2010-2017. In a point of fact, maize crop acres have increased by 1.7 times, as well as sunflower planted area - by 1.3 times, whereas the area under vineyards, fruits and berries, vegetables, sugar beet, etc. have decreased. Obviously, such tendencies pose risks for the natural soil fertility, threatening the sustainable development of the industry and society over the long term.



Source: State Statistics Service of Ukraine, http://ukrstat.gov.ua

Within the given context, it should be noted that in 2017, the grain and leguminous crops occupied 64% of the total country's acreage, and sunflower - 27%. This highlights the problem of the over-specialization of Ukrainian agricultural production. From this perspective, the question on the concordance of the existing model of agri-production in Ukraine and the sustainable development goals, in particular, ensuring the adequate food supply, fair wages, and preserving the natural resource potential of the territoriesshould be brought up a point. In this regard, we should made disappointing conclusions, having studied the dynamics of certain indicators describing the social, economic and ecological "dimensions" of agriculture and rural territories sustainability (Figure 3).

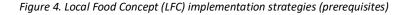
Figure 3. Ukrainian agriculture and rural development in figures: the sustainability view, (2010:2017)

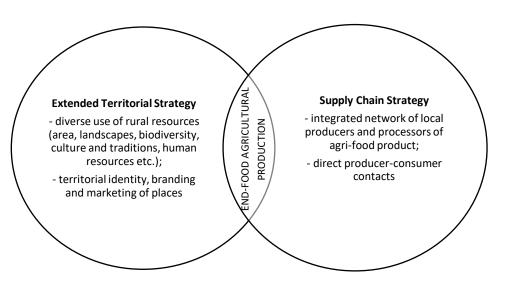


Source: authors' development on the data given in (11-14)

Commenting the presented data, it should be noted the dangerous trends concerning the environmental impact of the existing agricultural practice. According to the results of soil quality studies [13-14], the humus content in soils decreased on 0.03%, indicating the loss of natural soil fertility and quality impairment. The erosion affected 57.5% of agricultural land, and given the reduction of agricultural land share (from 68.9 to 68.7%), the increase of arable land share (78.4% against 78.1%) should be seen insecure in terms of rational and environmentally safe land use. Are the economic results of the industry so positive? The analysis of dynamics and structure of exports, investments, gross output and industries value-added shows disappointing trends. For instance, on the back of more than two-fold increase of agri-export share (in total country's export, from 19.3% to 41%), the share of raw food export has increased almost three times (from 7.7% to 21.3%). Therewith the share of cereals in agri-export has amounted to 36.6 %, whereas the share of finished food products has down from 25.9% to 15.9%. The agricultural sector is profitable and, moreover, it is the only industry in Ukraine which has shown positive financial results even in times of crisis and economic downturn during the 2010-2017. The positive trends in dynamics of the industry targeted capital investments share (from 6.1 to 14.3%) prove the sector's investment attractiveness. However, the decreasing share of direct foreign investments (DFI) (on 0.1 %) demonstrates the declining interest of foreign investors. It also should be emphasized that the industry creates only 12.1% of value added, involving 17.7% of the country's labour force.

Aforementioned, given the scale and pattern of land (natural) resource use, gives reason to be sceptical about the bright economic achievements of agriculture. Does the agriculture development lead to enhancement of social well-being? In this regard we should make an emphasis on superior growth of labor productivity compared with wages. Specifically, on the background of more than two-fold increase of productivity, the wage has increased only by 1.5 times and remains still one of the lowest in the country's economy. Although the share of employees in the agricultural sector has increased (from 15.3% to 17.7%), another fact should be seen dangerously. This is about theshare of economically inactive working-age rural population. It has increased on 4.7%, reaching almost a third of the total rural population. It is possible to conclude on social well-being relying on the indicators of food needs satisfaction. Specifically, the Ukrainians consume slightly more than 50% of the rational need for such vital food products as milk and fish, fruits. The consumption of meat (64% of rational need) is also insufficient.



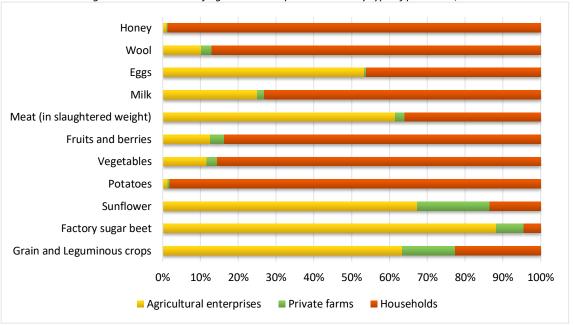


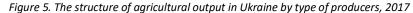
Source: authors' generalization based on(6, 8, 15)

So, the above indicates that the industrialized model of agricultural production established in Ukraine does not lead to the achievement of the goals of country's sustainable development. The movement away from the low-cost, less diversified agriculture needs reintegration of agriculture and food in local communities. The formation of regional value chains is based on two different approaches, namely: "supply chain strategy" and "extended territorial strategy" [15]. Supply chain strategy is based on building up an integrated network of local producers and processors of agri-food products. The main goal of integration is to ensure the efficient production management, products safety and quality control, effective marketing processes to meet consumer needs for food [15]. The efficiency of the network is ensured by its "reduction" through establishing the direct contacts in the system of producer-consumer relations [6]. Such networks have the agri-food character, so the main elements of the supply chains are products intended for final consumption. Extended territorial strategy comes from understanding the multi functionality of rural resources, landscapes, biodiversity, culture and traditions, human resources and so on. These resources can be potentially involved in a wide range of initiatives, contributing, thus, to the development of new activities, new relationships between different types of participants [15]. It is understood that territorial identity, branding and marketing of places should be based on the diversified agricultural production of end food products. The outlined approaches to the implementation of the "local" food concept are different, but have a common feature. This is the end-food agricultural production (Figure 4). Therefore, the producers of such agri-food products should be seen as driving-force for the local food concept implementation and expansion. The abovementioned emphasizes the importance of development of end-food agricultural production to promote and provide the revitalization of rural areas. Particularly, but not exceptionally, benefits of establishment and development of local food chains include:

Building mutually beneficial direct relationships between the producer and consumer of food products. On the one side, itcontributes to the improvement of food quality and safety as a result of ensuring the producer's traceability and establishment of feedbacks. From the producer's perspective this allows increasing the income by eliminating intermediaries in the value chain, strengthening the farm efficiency, enhancing the "customer orientation" of production and its market integration. The increase of farms' market activity leads to the complementary development of other sectors of the rural economy, in particular, trade services, transport and information services, thereby contributing to the rural economy diversification. It is also relevant for the increase of income of rural population.

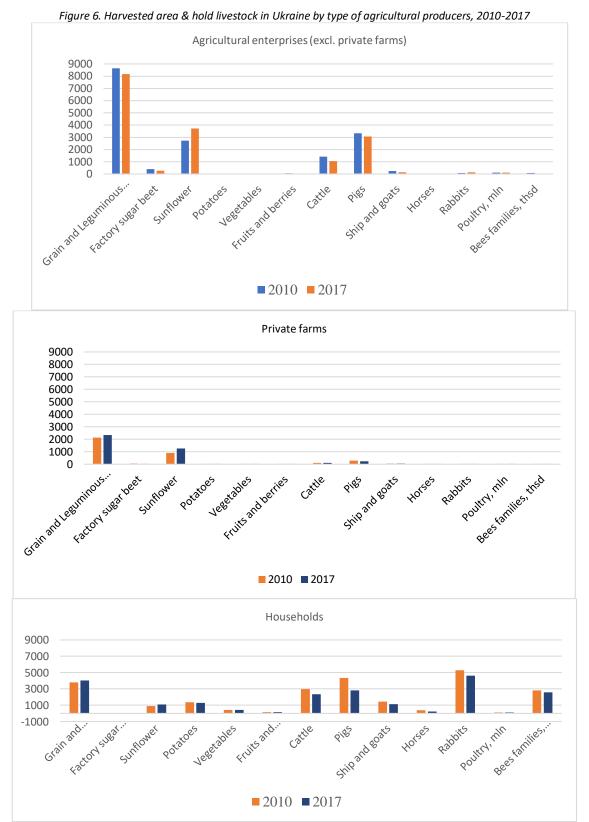
Additionally, it is also a driver of social infrastructure and consumer services development that directly affects the level of society well-being. The integration of agri-food producers and processors strengthens agriculture's value added and efficiency of resources used. The development of the tourism industry, regeneration of local culture and traditions. However, the agricultural production of the end-food products so far has merely scratched the surface in Ukraine [16]. The analysis of contribution of different types of agricultural producers to the gross output of certain agricultural products (Figure 5) shows that so-called "households" is the main producer of end-food products (e.g. honey, milk, fruits, vegetables, potatoes) in Ukraine.





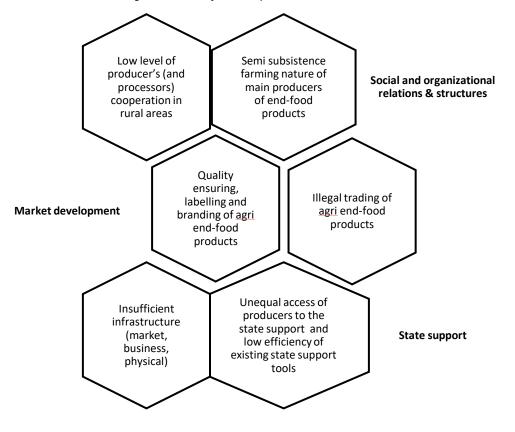
Source: State Statistics Service of Ukraine, http://ukrstat.gov.ua

According to the methodology of statistical surveys [17], the "households" is defined as households engaged in agricultural activity for the purpose of self-provision of food products and for the purpose of production agricultural products for market. This category includes rural households, households in urban areas (including collective gardens), as well as individuals - entrepreneurs who conduct their agricultural activities without a legal entity. So according to Ukrainian legislation households are comprised of a) personal peasant households, b) individuals-entrepreneurs, and c) household plots both urban and rural. In 2017 households produced 98.7% of gross honey production, 46.1% of eggs gross output, 73.1% of milk, 36% of meat, 83.7% of fruits and berries, 85.5% of vegetables, 98, 1% of potatoes totally produced in the country (Figure 5). When comparing production models of different types of agricultural producers in Ukraine (Figure 6) it becomes evident that households have more diversified production organization, and mainly focuses on the production of end-food products [18], unlike agricultural enterprises and private farms. On the one hand, this is driven by the subsistence character of households' agricultural activity, as they consume most of the food produced to satisfy their own needs. On the other hand, this is the result of embodying the traditions of family, individual farming in a small area.



Source: State Statistics Service of Ukraine, http://ukrstat.gov.ua

Therefore, it is households who should serve as the basis for the implementation and further development of local agri-food chains. In this context, the implementation of households' agricultural activity commercialization strategy requires a revision of the state policy in the field of agriculture and rural development. With regard to this, there is the need to clearly identify existing barriers for the local food concept implementation centered on the households' commercialization. Such constraints are shown at Figure 7. Figure 7. Barriers for LFC implementationin Ukraine



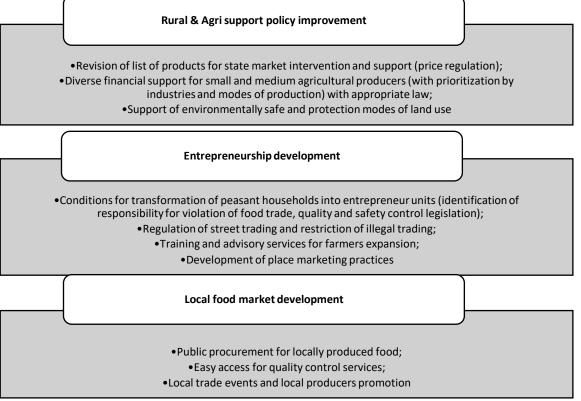
Source: authors' development

Commenting on the data shown in Figure 7, we emphasize that the obstacles to the creation of local agrifood chains are mainly social, organizational and market-based, as well as caused by the inadequacy of the policy pursued in the sector. The subsistence nature of the Ukrainian households' agricultural activity predetermines the low level of productivity, economic efficiency and profitability [19]. This significantly bounds animplementation of new technologies and a ramp-up of output. The low level of cooperation between individual producers aggravates those downturns. In this case the radical revision of the advisory system is needed, specifically, focused on the expansion of advisory services in rural areas (with ensuring the sufficient financing), the provision of the transparent processes of such services obtaining, as well as their high professionalism.

The lack of proper control and information on the quality and safety of products produced in households reduces the ability of small producers to access the retail network, and preserves the tradition of semi-legal functioning of the market for end-food agricultural products in Ukraine. Although the strict statistics on informal trade are not maintained in Ukraine, however, estimates on the share of turnover of both the organized agrifood market and informal one in total retail turnover illustrate the abundance of this phenomenon. In particular, as of the end of 2016, it accounted for 7.0% and has a tendency to increase since 2014 (2014 - 6.5%, 2015 - 6.9%) [20]. The problem of illegal trade directly illustrates an imperfect market organization, which impedes the commercialization of households' activities, but, on the other side, it shapes a way for the development of local food networks build on the direct producer-consumer contacts [21].

Existing state regulation and support tools for households' agricultural development are embodied only in compensation payments for cattle keeping (about \$ 100 per year per head) [22], and neglect other elements of successful commercialization of households' production activity, i.e. access to technologies, modern seeds, creating market opportunities, etc. Summarizing the above, to create the space favourable for LFC establishment and expansion the policy should focus on the improvement of agriculture support and rural development measures, development of entrepreneurship and local food market (Figure 8).

Figure 8. System of measures for LFC implementation in Ukraine through the commercialization of households' agricultural activity



Source: authors' development

Briefly commenting the presented data (Figure 8), one should emphasize the importance of the entrepreneurship development in rural areas. Ways of sustainable transformation of the business sector of a rural economy are to be the establishment of full-fledged entrepreneurs based on private peasant households. In [23] this case the improvement of public procurement system with the prioritization of local products and services is urgently needed. For example, the development of nutrition programs in public organizations (i.e. schools, hospitals, etc.) on the base of locally produced products opens up new market opportunities for small producers. The implementation of such practices requires a revision of the national public procurement legislation with an introducing of a "locally produced" criterion for propositions evaluation.

4. Conclusion

Results of the conducted study indicate that the existing model of agriculture in Ukraine is the industrial mass production of export-targeted raw crops. Such production organization adversely affects the natural resource potential of rural areas, leading to its depletion. The achieved economic results do not contribute to the strengthening of socio-economic potential of rural areas, as well as enhancing the well-being of the rural population. Moreover, the food security is also threatened. In this context, the implementation of local food concept is seen as a way for social-economic revitalization in rural areas and hindrance for further downturn. The development of local food networks allows increasing the income of rural population, improving the quality of end-food agricultural products, as well as to support the development of other sectors of rural economy.

The implementation of local food concept requires the increase of end-food agricultural products production. In this context, the main problem is that the production of diversified end-food products in Ukraine is concentrated mainly in the so-called "households". They are subsistence farms by nature without entrepreneur status. Such features of subsistence farming as low efficiency, difficulties of market integration, and lack of knowledge limit the production capacity of these farms, thus, impeding the implementation of local food idea. All this is compounded by an imperfect policy for agriculture support and rural development.

The radical revision of state agriculture policy is needed to support the implementation of local food concept in Ukraine through the households' activity commercialization. The main focus should be on the entrepreneurship development (e.g. the formation of fully-fledged registered business units), the enhancement of knowledge, entrepreneur skills and technological level of production (by the advisory services), the creation of market opportunities (in particular, through the public procurement for local products and promotion of territories), etc.

Finally, production and commercial integration within the local food chain, the acquisition of the business status and commitments on tax and fees payments are seen primarily as an element of upbringing the following important sides: the new consciousness (business); the new responsibility (as a member of the community that uses shared resources, and therefore has to share the responsibility for the joint development); the new thinking (strategic, flexible and agile) and culture (business culture, a culture of joint action and communication, a culture of interaction in processes of self-government, etc.). This is seen as an important step towards building a modern, diversified rural economy and sustainable rural development.

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