

local energy strategies, but for its successful implementation, project builds specific local action groups, consist from numerous experts, administrators, investors and public, which has to approve solutions, based on renewable energy sources or energy efficiency. According to the reports of EUROSTAT, Mediterranean countries and south- east European countries are recognized as countries with rising energy poverty. Energy poverty is indicated with the combination of high-energy cost and relatively low incomes per capita. These regions are extremely exposed not just to the climate changes and nature protection requests, but also to the pressure of economy, which demands comfortable touristic standards, new working places and new traffic infrastructure, what all cause higher consumption of energy. All this expectations cause intersectional conflicts and rising dependence on fossil fuels or import of energy, produced by nuclear or fossil power plants. The combination of energy poverty and environmental risks, caused by fossil fuels and heavy traffic, need innovative solutions, which could be solved throughout smart intervention logics, respecting rules of sustainability.

The key contribution of the COMPOSE project to the common energy goals is implementation of many small, but successful projects, carried out at the local level. Associated partners support project and are actively involved to the implementation process, what will improve the understanding and implementation of key supports measures. The main advantage of the internationality of the project is in exchange of know-how and best practices approach, not just within the project partnership, but also through the network of associated partners and the expert know- how exchange. The ambassador of the project, prof. Lucka Kajfez Bogataj, the co- winner of the Nobel Prize helps by promoting of smart solutions, respecting natural circumstances and economic power of single region. Regions and partners with long- term experience on RES and EE, will help non - EU regions to improve their natural potentials with taking into account sustainable development of rural regions. Other, the most important part of the project is oriented to the social potential of the project, with emphasize on development planning as a horizontal measure. It will result a memorandum of understanding, signed and confirmed by decision making policy partners and will be daily followed as an integral part of policy planning process. The expectation of the project is the increasing of the share of RES and EE in pilot regions by 12% in rural areas and up to 20% on islands.

Providing sustainability of agri-food chains in Ukraine: priority oriented ways

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Background. Providing sustainability of the agri-food sector has a key importance for Ukraine, as it helps to ensure: stable image of the country as producer and exporter of safe and high quality products; guarantee of the State food security and providing foodstuffs for the population according to scientifically justified norms; enlargement of employment and increasing of incomes for rural population. In the same time the creation of value in agri-food chain is based on joining and synergy of several compounds: reasonable agricultural productivity, guarantee of quality and safety of produced foodstuffs, providing territorial and economic accessibility to foodstuffs for consumers, enlargement of food markets' geography.

The aim of this article is to carry out the typing of agri-food chains in Ukraine according to the main classification characteristics and to justify proposals for enhancing their sustainability in present conditions.

Nowadays the organizational and economic transformations in the Ukrainian agricultural sector are aimed to transform production in a new system oriented to consumer and capable to enhance its sustainability based on innovations.

We have studied the peculiarities of agri-food chain formation according to the following classification characteristics:

technological: horizontally integrated, where final products are produced directly at agricultural enterprises or cooperatives; vertically integrated, where chain's actors participate in different stages of final product production;

territorial: productive network structure can cover different territories; it can be local, departmental, regional, interregional, transnational;

sectoral: milk (raw milk – processed milk and milk products); oil (oil crops seeds - vegetable oil); meat (pork farms and poultry farms with closed production cycle); cereals (grains – flour – bread), animal feeds (grains, wastes of processing food production) – mineral and organic additives (premixes); fruit and vegetable conserves (fruits and vegetables – necessary ingredients and other products - conserved fruits and vegetables) etc.;

organisational: small format; medium format; big format (created by farms and households, small, medium and big enterprises, processing facilities, research institutions, enterprises producing equipment for agro-industrial complex etc.);

legal: "soft" - actors of agri-food chain have common activity but they keep full legal and economic independence; "hard" – actors have lost completely or mainly their legal and economic independence during organisation or functioning;

timely and spatial: permanent functioning (agricultural raw materials are supplied daily); seasonal functioning; episodic functioning etc.

Among the export oriented agricultural productions the highest added value is created by sunflower oil production (its share in the world export was 54,8% in 2016). Cereals present the next export oriented chain (39 million of tonnes exported in 2016), but it is characterized by a low added value, as not processed grains are exported. In order to extend the grain chain, favourable conditions for investments in processing technologies, infrastructure and logistic development should be created.

A positive dynamics of added value growing is shown in egg chain, where a reduced number of producers (three powerful agroholdings) cover up to 75% of eggs production and almost 100% of their deep processing. Other chains in animal production target mainly internal market and are not able to increase added value as they can't ensure quality and safety of products.

So, most of chains need integrated technological and wasteless cycles for safe and high quality production based on innovations. It makes sense to use technological modules

developed by the world practice allowing the implementation of PLM (product lifecycle management) system.

The integration of Ukraine to EU engages producers to respect normative parameters of food raw materials quality and safety. Normally small producers apply traditional and even simplified (because of high prices on chemicals) practices which support natural and environmentally friendly technologies of raw materials production. On the other hand big enterprises apply industrial technologies where all aspects are described in technological cards and their respect is a guarantee of quality and safety.

Nowadays, 1340 management systems are certified in food production, 338 functional systems are being developed and implemented. It covers 87,5% of agricultural enterprises. Only 1100 – 1500 among 77400 agricultural enterprises have implemented HACCP or ISO 22000:2007 and have been audited for the conformity to minimal requirements of ISO/TS 22002-3:2011 (Obligatory preliminary measures for food safety).

According to the framework law of Ukraine related to food safety the group of meat, milk and fish producers providing raw materials to processing was defined. They had to implement the systemic safety methods by 20.09.2017.

The integration of small producers into added value chains is low. We mean chains based on individual partnership contracts with producers, processors, trade companies or on the creation of non-formal organizations (marketing groups etc.), formal organizations (associations, cooperatives etc.). In order to promote creation of cooperatives it makes sense to establish fiscal preferences for 5 years, after their registration as non-profit organization. Also, a big challenge is to implement rural development measures including creation of non-agricultural employments in rural territories.

In order to involve small and medium producers into chains, it is necessary: to enhance the work of the Ministry of agriculture, associations aimed to support small producers in the implementation of safety methods into primary production; to identify sources of dangerous impacts of agri-food chains on environment; to develop and to adopt quantitative indices of tolerable environmental impact; to identify problems leading to social instability inside agri-food chains and among them; to develop tools for the evaluation of every actor contribution into income and added value creation, as well as of their fair distribution among chain's actors due to inter-branch agreements.