

діаметр куща – 63 см, а урожайність гісопу при цьому становила 79,9 ц/га, вихід ефірної олії – 98,23 кг/га.

УДК 332.365:338.439.02

MODEL OF METHODOLOGY FOR THE FORMATION OF FOOD SECURITY ON THE BASIS OF SUSTAINABLE DEVELOPMENT OF AGRICULTURAL LAND USE

Olena Kotykova, Doctor of Economics, Professor
e-mail: eikotikova7@gmail.com
Mykolaiv National Agrarian University

The development of agriculture plays an important role in ensuring food security and improving nutrition, namely: production in sufficient quantities, quality and variety of food; the agricultural sector is a driver of economic transformation and a major source of income for rural households. Income from agriculture is the basis of livelihood for 1.3 billion people working in this sector, and directly determines their food security [1, p. 10]. Many years of world experience show that both agricultural development and economic scaling are necessary factors to improve food security, and the agricultural sector can strengthen the economy as a whole.

The development of agriculture after the Second World War has led to impressive progress in food production. This is largely due to a number of factors: economic growth, advances in technology and knowledge, and improved supply chain management. From the point of view of production factors, the increase in agricultural production was due to intensification, specialization and economies of scale. However, extensive livestock farming systems on national households and small farms have also significantly contributed to the increase in food production.

Given the fact that agricultural land is the main method of production, it is fair to say that solving the problems of food security of those that already exist and those that await us in the near future, including due to significant population growth with ever-decreasing population the area of arable land suitable for growing agricultural products lies in the plane of the food supply system formation on the basis of sustainable development of agricultural land use.

Methodology is a type of rational-reflexive consciousness aimed at studying, improving and constructing methods. The concept of "methodology" has two main meanings: first, it is a system of certain rules, principles and operations applied in a particular field of activity; secondly, it is the doctrine of this system, the general theory of the method [2].

Thus, the model of food security methodology based on sustainable development of agricultural land use, in our opinion, should include: principles of food security formation based on sustainable development of agricultural land use; levels of food security on the basis of sustainable development of agricultural land use; levels of food security management on the basis of sustainable development of agricultural land use; mechanism

for achieving food security on the basis of sustainable development of agricultural land use; tools for food security management on the basis of sustainable development of agricultural land use.

In general, the author's vision of the methodological requirements for the formation of food security on the basis of sustainable development of agricultural land use is presented in Figure 1.

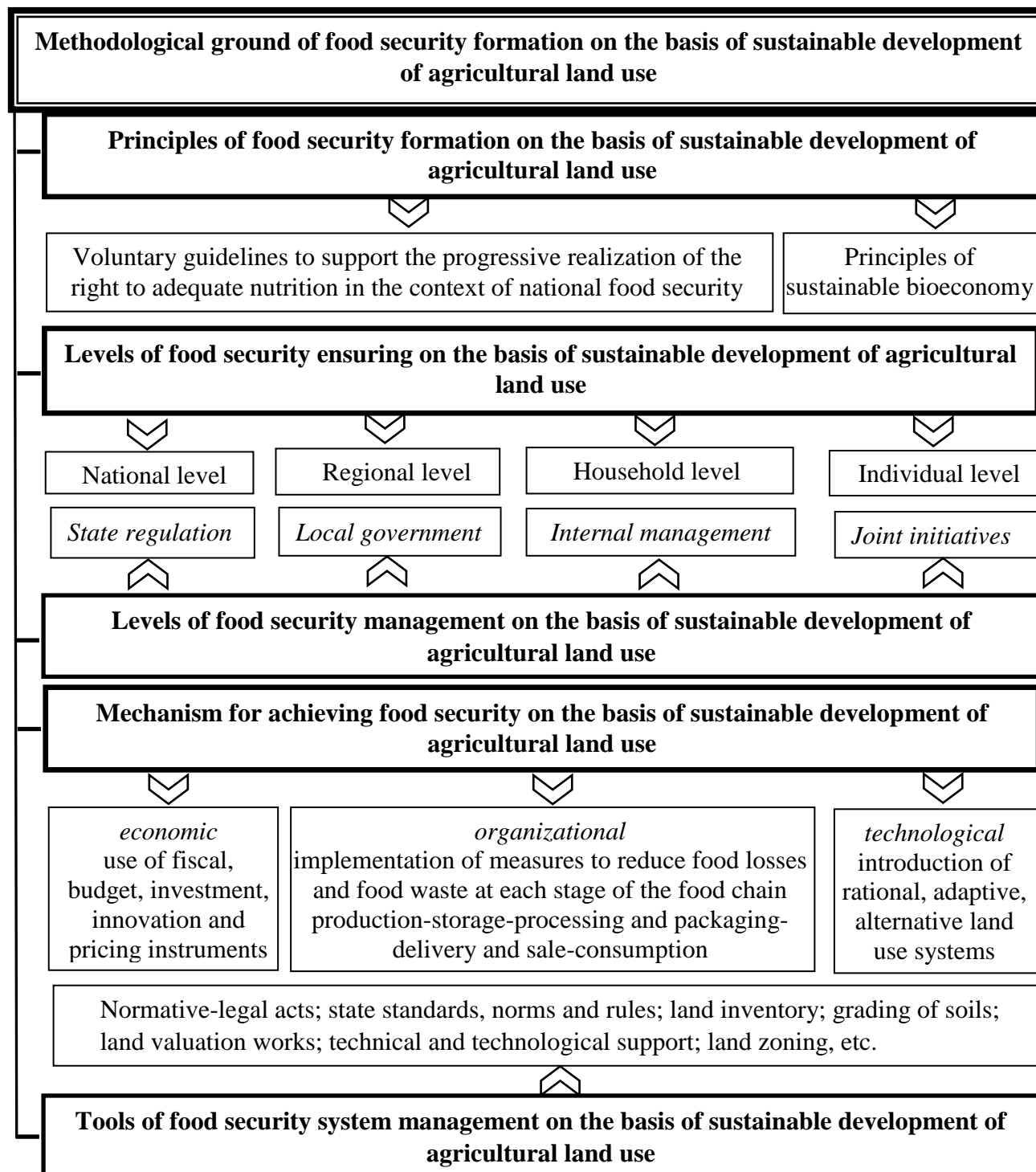


Fig. 1. Logical and semantic model of methodology for the formation of food security on the basis of sustainable development of agricultural land use

Source: made by the author

There are well-founded arguments that call into question the fact that current and future directions of agricultural development are sustainable. In particular: the inability of world agriculture and food systems to provide a nutritious food to a growing population given the so-called "triple burden" - maintaining significant food security, achieving zero hunger and reducing obesity through irrational diets; insufficient social efficiency of food systems; degradation of land, fresh water and ecosystems at both local and global levels; the negative impact of agriculture on increasing greenhouse gas emissions and, consequently, climate change, which in turn have a negative impact on agriculture.

References:

1. HLPE. (2016). *Sustainable agricultural development for food security and nutrition: what roles for livestock? A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security*. FAO, Rome.
2. Konverskyi, A. (Red.). (2010). *Osnovy metodolohii ta orhanizatsii naukovykh doslidzhen (Fundamentals of methodology and organization of scientific research)*. Kyiv. Tsentr uchbovoi literatury. [in Ukrainian].

УДК 633:338.49

РОСЛИННИЦТВО У ВИРІШЕННІ СУЧАСНИХ ВИКЛИКІВ ЩОДО ПРОДОВОЛЬЧОЇ ТА ЕНЕРГЕТИЧНОЇ БЕЗПЕКИ

Каленська С. М., д-р с.-г. наук, професор, академік НААН України
e-mail: kalenskaya@nubip.edu.ua

Гарбар Л.А., канд. с.-г. наук, доцент
e-mail: garbarl@ukr.net

Федів Р.В., аспірант

Національний університет біоресурсів і природокористування України

Каштанова О. Г., д-р екон. наук, професор
e-mail: elena.kashtanova@hs-anhalt.de

Університет прикладних наук Анхальт, Німеччина

Продовольча та енергетична безпека світу та України значно пов'язані зі стабільністю виробництва продукції рослинництва, яка є сировинною базою виробництва продуктів харчування, кормів, біопалив, біомастил, промисловості, фармацевтики та інше. Світове виробництво та споживання продукції рослинництва має глобальне значення і тісну взаємодію та взаємозалежність країн в світі щодо забезпечення безпеки як окремих країн, так і світу в цілому.

Світова політична криза негативно впливає й на світовий ринок зернових. Високі ціни на енергетичні ресурси призводять до дорожчання пального та всіх інших матеріально-технічних ресурсів, які включені в технологічний процес виробництва та переробки продукції рослинництва, що обумовлює підвищення собівартості виробництва продукції та може спричинити скорочення обсягів її