

NATIONAL UNIVERSITY OF BIORESURS AND NATURAL RESOURCES OF UKRAINE

Department of administrative management
and foreign economic activity

" APPROVED "

Dean of the Faculty
of Economics

_____ A.D. Dibrova
" ____ " _____ 2020.

CONSIDERED AND APPROVED

at the meeting of the administrative department
management and foreign economic activity
protocol № 14 from 17.06.2020

Head of Department

_____ T.L. Mostenska

WORKING ACADEMIC PROGRAM
“ ECONOMICS OF THE WORLD AGRICULTURE “

(name educational discipline)

Specialty: 051 "Economy"
072 Finance, Banking and Insurance

(cipher and title of training)

Faculty _____ Economic _____
(name of the faculty)

Developers : doctor of economics , prof. V.P. Galushko, Ph.D. , Assoc. Mischenko I.A.

Kyiv-2020

1 Description of the discipline

“ ECONOMICS OF THE WORLD AGRICULTURE “

Branch of knowledge, direction of training, specialty, educational-qualification level		
Branch of knowledge	___ <u>07 - Management & Administration</u> _____	
Specialty	<u>072 Finance, Banking and Insurance (Finance and Credit)</u>	
Educational degree	_____ <u>Bachelor</u> _____ (bachelor, specialist, master)	
Characteristics of the discipline		
Kind	<i>selective</i>	
Total hours	39	
Number of ECTS credits	1	
Number of content modules	2	
Course project (work) (if available in the working curriculum)	_____ <i>(name)</i> _____	
Form of control	<i>credit</i>	
Indicators of academic discipline for full-time and part-time study forms		
	full-time education	external form of education
Year of preparation	4	
Semester	8 st	
Lecture classes	26 hours	
Practical, seminars	13 hours	
Laboratory classes	-	
Independent work	-	
Individual tasks	hours	
Number of weekly hours for full-time study form: classroom independent work of the student -	hours	

2. Purpose and tasks of the discipline

Purpose The discipline "Economics of World Agriculture" is the training of specialists of the "new generation" that would be able to orientate themselves to the actual problems of the global food system, on the basis of which to make informed decisions for increasing the competitiveness of domestic agro-industrial enterprises both in the domestic and foreign markets. This will allow not only to ensure high yield of domestic agrarian business, but also to solve the problem of providing high-quality and safe food products at moderate prices.

As a result of studying the discipline the student must:

- to know the basic laws of the formation and functioning of agriculture in the world, individual regions and countries;
- analyze the situation of global markets for crop and livestock production;
- have the factors that determine the competitiveness of agriculture in certain countries in international markets;
- know the pyramid of a healthy human being;
- be able to identify promising directions of integration of Ukrainian agriculture into the global food system.

3. Program of the discipline

MODULE 1

"THE ROLE AND MAIN PROPERTIES OF RESOURCE POTENTIAL OF MODERN WORLD AGRICULTURAL HOLDING"

Topic 1. Agriculture is a key factor in the development of the world economy

The essence of the world economy is clarified and the main preconditions for its formation and development are revealed; The definition of the agricultural sector, its features and place in the structure of the world economy is presented. Also, modern factors that influence the development of the agrarian economy of the world are presented. Modern economy is a complex economic system of interacting national economies of all countries of the world, interconnected economic relations. This set of economic, financial and political ties between countries of different socio-economic types, formed as a result of the international division of labor, manifests itself in the creation of a world market. Moreover, the interconnections between countries are intensified with the deepening of the international division of labor, which are manifested in the specialization of individual countries in the production of certain types of products and services, and in the further exchange of them.

The world economy is based on the world market. It is not divided by an impassable wall. Through the world market, general trade, scientific, technical and other economic ties between countries and regions of the world take place, which is carried out within the framework of the modern world economy, which is an objective reality. The market implements the interaction between local and regional markets based on the international division of labor.

Topic 2. Land resources in world agriculture

The level of provision of countries, regions and the world as a whole land resources for agricultural production is considered. Their dynamics and structure are substantiated. The main factors and patterns of distribution and influence of agrarian resources on the indicators of efficiency of the industry are determined. Specificity of land as a factor in agrarian production. Land is the main means of production in agriculture, the main source of food intake.

Economic management of territories - national regions, continents. Area of agricultural land, forests, unused territories, their agro-climatic potential, qualitative estimation. Structure and dynamics

of agricultural lands. Mastering of new lands. The number of agricultural lands per capita in the world, the differences across continents, regions, countries. The global problem of reducing cultivated land. Pollution, desertification and soil erosion. Reproduction of destroyed lands, development of new lands. Forms of land tenure and land use. Regulation of issues of ownership, land use, sale and purchase of land, transfer of inheritance. Rights and responsibilities of the land user. Land rent. Land tax,

Topic 3. Labor resources in world agriculture

Labor, labor productivity in global agriculture. Describes their dynamics and structure.

In different historical times, the Earth inhabited an uneven number of people. So, at the beginning of our era in the world lived about 200 million people. Then their number accelerated. Especially during the last millenium there is an increase in population in geometric progression. According to world experts, during the period 1950-2012, the rural population of the world has more than doubled, from 1.4 to 3.4 billion. Despite the positive dynamics of the growth of the rural population, the share of the latter in the structure of the world's population is gradually decreasing.

Labor resources are part of the population of the country, which has a set of physical abilities, knowledge and practical experience for work in the national economy. They include all able-bodied people aged 16 to 55 for women and from 16 to 60 years for men, as well as persons older and junior in working age who are actually employed in the national economy (working pensioners and schoolchildren). Labor as the main productive force of society is an important factor of production, the rational use of which ensures an increase in the level of production of agricultural products and its economic efficiency.

Theme 4. Material and technical base of agriculture of the world

The essence of the concept "Green revolution", the level of quantity of agricultural machinery: tractors, combines and other types of equipment is considered. Also, the level of use and availability of different types of agricultural machinery in the countries of the world is compared. Agriculture is one of the most important sectors of the world economy. Level of development of world agriculture. Stability of the functioning of agriculture. Volume structure, dynamics of agricultural production in the world, regions, large states. The share of the agrarian sector in the gross domestic product (GDP) and gross national income (GNI), domestic and foreign trade. Agriculture - raw material base of light and food industry. The main problems of the development of world agriculture. Impact of the scientific and technological revolution on the development of agriculture in countries with different levels of economic development. Prospects for the development of modern agriculture. Investments and their income in agricultural production. Concentration and specialization of agricultural production; cooperation and agro-industrial integration. Socio-economic consequences of scientific and technological progress in agriculture in developed and developing countries. The globalization of the global economy and its impact on the development of agriculture.

MODULE 2

"STATE AGRICULTURAL SUPPORT, ASSESSMENT OF THE EFFECTIVENESS OF AGRICULTURAL PRODUCTION AND THE WORLD FOOD MARKET"

Theme 5. State support of agriculture in the countries of the world

The factors of necessity of state intervention in the development of agriculture are revealed; the economic content of the category "state regulation of agricultural production" is revealed and the instruments of its implementation are substantiated; The OECD methodology for assessing the degree of state support to the agrarian sector of the economy is highlighted. On the basis of the proposed theoretical and methodological apparatus, the principle of regulation of the agrarian market in developed countries and in developing countries is analyzed. Historical evolution of state regulation of agro-food the sector. Formation of agrarian policy of states. The need for governments to intervene

in market relations. The main forms and methods of state regulation in the modern market economy. Administrative state agencies of agriculture in different countries. The economy of state regulation of the agrarian sector. Price mechanism of state regulation. Prices: adjustable, contract, contract, monopoly, free, stock, dump. Price control. Price support systems. Direct price subsidies are methods for quantifying the level of state support for agriculture.

Theme 6. Economic assessment of the break-even nature of the production of agrarian products

Methodological principles for assessing the effectiveness of agricultural products. Practical estimation of the break-even nature of grain corn production is presented on the example of US farms. An enterprise of any form of ownership during its activity carries out certain expenses (material, intangible, money and labor resources), connected with simple and extended reproduction of fixed and circulating assets, production and sale of products, provision of services, performance of works, social development team and so on. Distinguish costs associated with the operational, investment and financial activities of the enterprise. The method consists in determining the price on the basis of the calculation of the optimal amount of production, which allows you to reimburse all expenses of the enterprise at the expense of the received gross income, proceeding from the point of break-even.

Theme 7. Organizational forms of agricultural production in the countries of the world

It is devoted to the substantiation of the peculiarities of conducting agrarian business in different countries of the world. The deepening of the process of globalization of agro-food markets is underlined, as reflected in the rapid development of international food companies.

Theme 8. World market of crop production

The markets of cereals, oil, sugar, tinting and fruits are analyzed. Particular attention is paid to production, consumption, international trade and price conditions. The place of Ukraine in this segment of the global market is determined.

The total land fund of the world is 13.4 billion hectares. Of this fund for plant growing (arable land and perennial plantations) 1.5 billion hectares (11%) are used. Plant growing. Grain Cultures. Grain production is the basis of world agriculture. Grain crops occupy almost half of the cultivated area, and the total annual grain harvest in the world exceeds 1.8 billion tons. The level of development and specialization of grain farming in the countries of the world is very different. These differences are due to uneven natural and socio-economic conditions.

4. Structure of the discipline

051 "Economy", 072 Finance, Banking and Insurance

[illegible]

4. Topics of self work

No. w / o	Title of topic	Number hours
1	Agriculture is a key factor in the development of the world economy	
2	Land resources in world agriculture	
3	Labor Resources in World Agriculture	
4	Material and technical base of agriculture of the world	
5	State support of agriculture in countries of the world	
6	Economic assessment of the breakeven production of agrarian products	
7	Organizational forms of agricultural production in the countries of the world	
8	World market of crop production	
	<i>Total</i>	

5. Topics of practical classes

# w / o	Title of topic	Number hours
1	Agriculture is a key factor in the development of the world economy	2
2	Land resources in world agriculture	1
3	Labor Resources in World Agriculture	2
4	Material and technical base of agriculture of the world	2
5	State support of agriculture in countries of the world	1
6	Economic assessment of the breakeven production of agrarian products	2
7	Organizational forms of agricultural production in the countries of the world	1
8	World market of crop production	2
	<i>Total</i>	<i>13</i>

6. Topics of laboratory lessons

Not provided by the curriculum.

7. Control questions, sets of tests to determine the level of knowledge acquisition by students

"Test Questions"

1	Solve the task (5 points): Determine the breach of milk hopes on an American farm, if you know: constant costs - 62.4 dollars / t, variable costs - 161.5 dollars / t, the cost of hired labor - 14.9 USD / t, selling price 1 tons of milk - 211.9 dollars , planned gross hopes of milk per one cow - 9.4 t per year, the number of cows on the farm - 182 goals. Will the farmer profit from planned targets?
2	Insert Missing Words (2 points): The branch of the national economy, which is aimed at providing food products to the population and obtaining raw materials for a number of industries , is
3	Insert Missing Words (2 points): The phenomenon that manifested itself in the rapid increase in the volume of agricultural production due to the penetration of new advances in science and technology in the agricultural sector is

												
4	Paste Missed Word (2 points): The main cause of hunger and chronic malnutrition in the world is												
5	Insert missing number (2 points): According to the FAO methodological approach, the normative ratio of world grain stocks to world consumption should be at least%:												
6	Put in accordance stages of implementation of the EU CAP to their characteristics (2 points): <table border="1"> <tr> <td>A) 1951-57 gg.</td><td>1. "Changes in the common agricultural policy"</td></tr> <tr> <td>B) 1958-68</td><td>2. Fisher's Reform</td></tr> <tr> <td>B) 1969-73</td><td>3. Preparatory period</td></tr> <tr> <td>D) 1974-84</td><td>4. Reform of McSharry</td></tr> <tr> <td>E) 1985-92</td><td>5. Launching the CAP</td></tr> <tr> <td>E) 1993-2004</td><td>6. Manzoltan plan</td></tr> </table>	A) 1951-57 gg.	1. "Changes in the common agricultural policy"	B) 1958-68	2. Fisher's Reform	B) 1969-73	3. Preparatory period	D) 1974-84	4. Reform of McSharry	E) 1985-92	5. Launching the CAP	E) 1993-2004	6. Manzoltan plan
A) 1951-57 gg.	1. "Changes in the common agricultural policy"												
B) 1958-68	2. Fisher's Reform												
B) 1969-73	3. Preparatory period												
D) 1974-84	4. Reform of McSharry												
E) 1985-92	5. Launching the CAP												
E) 1993-2004	6. Manzoltan plan												
7	Place the types of meat in the order of growth of their share in the structure of world production (2points): <table border="1"> <tr><td>1</td><td>Beef</td></tr> <tr><td>2</td><td>Mutton</td></tr> <tr><td>3</td><td>Pork</td></tr> <tr><td>4</td><td>Poultry meat</td></tr> <tr><td>5</td><td>Others</td></tr> </table>	1	Beef	2	Mutton	3	Pork	4	Poultry meat	5	Others		
1	Beef												
2	Mutton												
3	Pork												
4	Poultry meat												
5	Others												
8	What is the name of the situation shown in the picture? (2 points)												
9	Why is the world level of mineral fertilizers equal to 1 hectare of arable land? (0.5 points) a) 23.4 kg b) 43.8 kg c) 52.1 kg g) 98.2 kg d) 117.7 kg												
10	What is the number of children aged 5 to 14 working in the global agricultural sector? (0.5 points) a) 110 thousand people b) 132 thousand people c) 132 million people d) 215 million people e) 544 million people												
11	Why is the average world level of agricultural labor productivity (as of the end of 2009)? (0.5 points) a) US \$ 315. b) 1980 dollars. c) 2120 dollars. d) 998 dollars. e) 43500 USD.												
12	What percentage of land in the world is considered to be plowed? (0.5 points) a) 5 b) 8 c) 10 g) 15 d) 20 e) 25												
13	How many mineral fertilizers were produced in the world as of 2009? (0.5 points) a) 170 thousand tons b) 1.5 million tons c) 45 million tons d) 110 million tons e) 170 million tons												
14	Why is the average level of provision of tractors of world agriculture for 2005-07 per 1000 hectares of arable land (0.5 points): a) 7.5 units. b) 10.5 units. c) 15.4 units. d) 20,3 units. e) 32,2 units.												
15	Determine the role of world agriculture in the global economy (0.5 points) a) source of income b) type of economic activity c) stimulus for NTP d) provider of environmental services e) provides the population with food												
16	Why is the world's arable land (0.5 points) a) 32.5 million ha b) 1.4 billion hectares (c) 1.9 billion hectares d) 4.9 billion hectares e) 14 billion hectares												
17	How many harvesting and threshing machines are used in world agriculture as of 2007? (0.5 points) a) 4.4 million units. b) 1.5 billion units. c) 10.5 million units. d) 102 million units. e) 44 million units.												

18	Which country makes the most mineral fertilizers per 1 hectare of arable land :(0.5 points) a) Singapore b) OAU c) The Netherlands g) Ukraine e) Egypt e) Kenya
19th	Choose the product that underlies the Latin American Pyramid of Healthy Eating: (0.5 points) a) meat b) milk c) fish d) vegetables and fruits e) olive oil
20	What is the optimal level of energy consumption per person during the day: (0.5 points) a) 2500-3500 kcal b) 1500-2000 kcal in) 2000-2500 kcal g) 3500-4000 kcal
21	In what year and where the FAO summit with the participation of representatives from 186 countries was organized, which produced a declaration and a series of decisions aimed at reducing from 800 to 400 million hunger by 2015? (0.5 points): a) 1972, Beijing b) 1996, Rome c) 2002, New York d) 2009, Moscow d) 2011, Davos
22	The critical level of food security, which characterizes the dependence on food imports, should be taken as the level where its share is% (0.5 points) a) 15 b) 25 c) 40 d) 50 e) 65
23	The difference between planned food supplies in the country and consumer requirements is: (0.5points) a) food "peak" b) food gap c) chronic gap d) temporary gap
24	In which of the following countries is the highest share of employed in agriculture? (0.5 points): a) USA b) Ethiopia c) Ukraine d) Slovakia d) Algeria e) India
25	Which country is the largest producer of bananas? (0.5 points): a) India b) Ecuador c) Costa Rica d) Bangladesh e) Malaysia e) Vietnam
26	What area of the world's land is considered " moderately degraded": (0.5 points): a) 5 million hectares b) 24 million hectares c) 910 million hectares g) 1220 million hectares
27	What is the name of a country whose agriculture has the smallest area of the economy? (0.5 points): a) Japan; b) the USA; c) Canada e) Germany e) Ukraine
28	Select the three leading countries in terms of grain production of all types (0.5 points) a) USA, Brazil, India b) Argentina, EU, Canada c) Ukraine, Russia, Kazakhstan d) Pakistan, EU, Australia d) China, USA, EU e) Mexico, Chile, USA
29	Which country continues to be the undisputed leader in the export of sunflower oil: (0.5 points) a) Argentina b) Russia c) EU d) USA d) Ukraine
30	What kind of vegetable oils in the world is produced the most? (0.5 points) a) sunflower b) peanut c) rapeseed d) soya e) palm

НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ І ПРИРОДОКОРИСТУВАННЯ УКРАЇНИ

ОКР Магістр напряму підготовки/ спеціальність Економіка Фінанси і кредит	Кафедра Адміністративного менеджменту та ЗЕД	БІЛЕТ № з дисципліни Економіка світового сільського господарства	Затверджую Зав. кафедри
			Мостенська Т.Л.
	2020-2021 навч. рік		01.09.2019 р.

Екзаменаційні запитання

- The problem of unemployment in developing economies is conceptually very different in urban-industrial and rural-agricultural areas.?*
- Labor productivity is used

Тестові завдання різних типів

1. Chose the right answer:

- The break-even point is the point at which revenue is exactly equal to costs.
- The break-even point is not the point at which revenue is exactly equal to costs
- The break-even point is the point at which revenue is equal to the transfers
- All answers are right

2. What does it mean if sales are above the number of costs

- It means loss
- It means that the government support of agriculture sector is increased
- It means profit
- None answer is right

3. Chose to each type of costs the appropriate examples

a) Fixed costs	1) Rent and rates
b) Variable expenses	2) Raw materials
	3) Wages
	4) Depreciation
	5) Administration cost
	6) Labor

4. Direct variable costs are:

- Those which can be directly attributable to the production of a particular product or service and allocated to particular cost centre.
- Those which cannot be directly attributable to production but they do vary with output/ these include depreciation
- Those which the distinction between fixed and variable costs
- Those which largely related to the overall "scale" and/or complexity of the business.

5. How many times should we calculate break-even

- Once
- Twice
- On regular basis
- We need not to calculate break-even

6. Break-even analysis this is

- One of the most common tools used in evaluating the economic feasibility of a new enterprise or product
- Analysis that help to evaluate the level of costs
- Analysis that leads to profit increasing
- All answers are wrong

7. Chose the wrong answer:

- a) A vertical line down from the break-even point shows the level of production necessary to cover all costs.
- b) Break-even analysis can be helpful in the evaluation of a new venture
- c) Break-even analysis mandates that costs be analyzed. It
- d) Production greater than the level of production on the graph generates losses; profit are incurred at lower levels of production

8. Chose the wrong answer. What is the total income line

- a) Gross value of output
- b) The sum of the total fixed costs and total variable costs.
- c) The intersection of the total cost line and total income line.
- d) The line that line parallels the total variable cost line, but it begins at the level of the total fixed costs line.

9. Why we should calculate break-even on regular basis?

- a) Because of the selling price, fixed costs or variable costs will not remain constant resulting in a change in the break-even
- b) Because of behavioral reasons: the expert who calculate the can make a mistake
- c) Because of during different economical cycles we should use different formulas of break-even
- d) We shouldn't calculate it on the regulary basis

10. Where is the lowest agrarian employment level in the world:

- a) United Kingdom
- b) Australia
- c) Indonesia
- d) China

8. Methods of training

Lecture is the main form of conducting classroom studies at a higher educational institution, it is designed to form the basis for knowledge of the relevant field of science, as well as to determine the direction, the main content and nature of all other types of training and independent work of students in the discipline "Economics of World Agriculture" , as well as communication with other disciplines. The main task of the lecture is to teach specific topics in accordance with the curriculum in the logical sequence and interconnection.

Practical classes provide consolidation and systematization of theoretical knowledge of students and acquire the necessary skills on the features of the national economy and institutional factors and their impact on the specifics of economic development.

Independent and individual work is the main means of assimilating material in time-free hours on the basis of study of legislative acts, educational literature, additional sources, current information. In addition, individual tasks include the fulfillment by students of research tasks of a creative nature. These tasks are aimed at increasing the level of preparation and development of individual creative abilities of gifted students.

9. Distribution of points received by students

Control of the acquired knowledge is carried out in the following forms: current control in practical classes (surveys, testing, implementation of situational tasks), modular control (control work after studying the study material, integrated into the module or content module), final control - PMK (current module control over the results of the studied material and write off work).

Current control		Rating on educational work R_{HP}	Rating with additional work R_{DR}	Penalty rating R_{SHTR}	Final certification (exam or test)	Total number of points
Content module 1	Content module 2					
0-100	0-100	0-70	0-20	0-5	0-30	0-100

Notes. 1. In accordance with the "Regulations on the credit-module system

study at NULES of Ukraine ", approved by the rector of the university on 03.04.2009, the rating of a student in the academic work of R_{NR} in relation to the study of a particular discipline is determined by the formula

The above formula can be simplified if we take $K^{(1)3M} = \dots = K^{(n)3M}$. Then it will look like

$$PHP = \frac{0.7 \cdot (R^{(1)3M} + \dots + R^{(n)3M})}{n} + R_{DR} - R_{SHTR}.$$

The rating for additional work R_{DR} is added to R_{HP} and cannot exceed 20 points. It is determined by the lecturer and is provided to students by the decision of the department for the performance of work that is not provided by the curriculum, but contributes to improving the level of knowledge of students in the discipline.

Penalty rating R_{SHTR} does not exceed 5 points and is deducted from R_{HP} . It is determined by the lecturer and introduced by the decision of the department for students who material the content module was mastered late, the work schedule was not adhered to, classes were missed, etc.

2. According to this Regulation, the preparation and defense of a course project (work) is assessed on a 100-point scale and then translated into assessments on a national scale and ECTS scale.

The estimated rating of the discipline is 100 points. Rating for academic work - 70 points, rating for certification - 30 points

Ratings from content modules

Term training (weeks)	Number content module	Educational load, hours	Loans ECTS	Content rating module	
				Minimal	Estimated
1-4	1	72	2.0	60	100
5-7	2	72	2.0	60	100
Total	2	144	4	42	70

The rating for additional DDR work is 20 points. The penalty rating of RSHTR is 5 points.

$$R_{dis} = R_{no} + 0.3R_{at}$$

$$R_{no} = (0.7 (R_{13M} \times 1.5 + R_{23M} \times 1.5)): 2 + R_{etc.} - R_{pg}$$

Rating scale		
The sum of points for all kinds of training	Score on a national scale	
	for exam, course project (work), practice	credited
90 - 100	perfectly	
74-89	fine	
60-73	satisfactorily	not credited
0-59	unsatisfactorily	

Grade "Excellent" is given to the student (listener), who worked systematically during the semester, showed during the exam versatile and in-depth knowledge of the program material, is able to successfully perform tasks provided by the program, mastered the content of basic and additional literature, realized the relationship of individual sections. , their importance for the future profession, showed creative abilities in understanding and using educational material, showed the ability to independently update and replenish knowledge.

The grade "Good" is given to the student who has shown full knowledge of educational and program material, successfully carries out the tasks provided by the program, has mastered The main literature recommended by the program showed a sufficient level of knowledge with discipline and capable to their independent renewal and replenishment in during further training and professional activity.

Grade "Satisfactory" is given to a student who has shown knowledge of the basics curriculum in the amount necessary for further training and further work in the profession, copes with the tasks provided by the program, made some mistakes in answering the exam and when performing exam tasks, but has the necessary knowledge to overcome mistakes under the guidance of scientific pedagogical worker.

The grade "Unsatisfactory" is given to a student who did not show sufficient knowledge of the basic curriculum, made fundamental mistakes in performing the tasks provided by the program, cannot use the knowledge in further study without the teacher's help, failed to master independent skills.

10. Methodical support

1. Educational and methodical complex of studying the discipline "ECONOMICS OF WORLD AGRICULTURE" (working program of the discipline, the program of the discipline, the course of lectures, illustrative materials).

11. Recommended References

1. Economics of world agriculture: Textbook / edited by V.P. Galushko. - Kyiv: CJSC "Nichlava", LLC "Energy and Electrification", 2019. - 1000 p.
2. Hollensen, Svend. Global marketing / Svend Hollensen. - 7th ed. Pearson Prentice Hall, 2016.
2. Keegan, Warren J. Global marketing / Warren J. Keegan, Mark C. Green. - 8th ed. Pearson Prentice Hall, 2012.
3. Philip G. Pardey, Jason M. Beddow, Terrance M. Hurley, Timothy KM Beatty, Vernon R. Eidman. 2014. A Bounds Analysis of World Food Futures: Global Agriculture Through to 2050. Australian Journal of Agricultural and Resource Economics 58: 4, 571-589
4. Economics of world agriculture: Textbook / O.M. Faichuk, I.A. Mishchenko. - K.: «Comprint». 2016. - 488 p.
5. Biofuel Support Policies: An Economic Assessment // OECD, Paris, 2018.
6. Altieri AM, Clara I, Nicholls CI, Henao A, Lana AM (2015) Agroecology and the design of climate change-resilient farming systems. Agron Sustain Dev 35: 869–890
7. Richard N. Onwonga, Carbon Sequestration: Pathway to Increased Agricultural Productivity and Zero Hunger for Developing Countries, Zero Hunger, 10.1007 / 978-3-319-95675-6_60, (147-159), (2020).
8. Saeed Nosratabadi, Amirhosein Mosavi, Zoltan Lakner, Food Supply Chain and Business Model Innovation, Foods, 10.3390 / foods9020132, 9, 2, (132), (2020).
9. FAO (Food and Agriculture Organization of the United Nations, Italy). 2019a. FAOSTAT statistical database (online). Rome, Italy. Consulted on 19 Sept. 2019. Available at <http://www.fao.org/faostat/en/#home>.

Additional references:

1. Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. World Population Prospects: The 2018 Revision . [Electronic resource] - Mode of access : <http://esa.un.org/unpp>
2. Roots and Resilience. World Resource. 2018. Growing The Wealth of the Poor [Electronic resource]. - Mode of access : http://pdf.wri.org/world_resources_2018_roots_of_resilience.pdf
3. Special Program for Food Security [Electronic resource]. - Mode of access : http://www.fao.org/spfs/about_spfs/mission_spfs/en/
4. State of the World's Forest 2017. FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Rome , 2007 [Electronic resource]. - Mode of access : <http://www.fao.org/docrep/009/a0773e/a0773e00.htm>
5. State of the World's Forest . Food and Agriculture Organization of the United Nations Rome , 2017 [Electronic resource]. - Access mode: <http://www.fao.org/docrep/013/i2000e/i2000e.pdf>
6. The GATT / WTO at 60: WTO World Trade Report examines the six decades of multilateralism in trade [Electronic resource]. / WTO : 2007 press releases. - Mode

- of access : http://www.wto.org/english/news_e/pres07_e/pr502_e.htm . (4.12.2007). - Name from the screen
7. The State of Food Insecurity in the World. Addressing food insecurity in protracted crises, 2017 [Electronic resource] . - Access mode: <http://www.fao.org/docrep/013/i1683e/i1683e.pdf>
 8. The World Bank [Electronic resource]. - Access mode: <http://data.worldbank.org/topic/agriculture-and-rural-development>
 9. Willer, H. and Klicher, L. (Eds.), (2009): The World of Organic Agriculture. Statistics and Emerging Trends 2009. IfOM, Bonn, FiBL, Frick, ITC, Geneva [Electronic resource]. - Mode of access : <http://orgprints.org/15575/3/willer-kilcher-2009-1-26.pdf>
 10. William R. Cline . Global Warming and Agriculture [Electronic resource]. - Mode of access : <http://www.imf.org/external/pubs/ft/fandd/2008/03/pdf/cline.pdf>
 11. World Development Indicators 2017 [Electronic resource]. - Access mode: <http://web.worldbank.org/WBSITE/EXTERNAL/EXTRUSSIANHOME/EXTRUSSABOUTUS/EXTANNREP2010RUS/0,,contentMDK:22685298~menuPK:7350533~pagePK:64168445~piPK:64168309~theSitePK:7251399,00.html>
 12. World Economic Situation and Prospects-2017. [Electronic resource] -Access mode : <http://web.worldbank.org/WBSITE/EXTERNAL/EXTRUSSIANHOME/EXTRUSSABOUTUS/EXTANNREP2010RUS/0,,contentMDK:22685298~menuPK:7350533~pagePK:64168445~piPK:64168309~theSitePK:7251399,00.html> . - Name from the screen
 13. World fisheries production, by capture and aquaculture, by country (2009) [Electronic resource] . - Access mode: <http://ftp.fao.org/FI/STAT/summary/a-0a.pdf>
 14. Wulf Killman . Climate Change and Food Security: A Framework Document / FAO, Rome , 2018. [Electronic resource]. - Mode of access : <http://www.fao.org/forestry/15538-079b31d45081fe9c3dbc6ff34de4807e4.pdf>
 15. World agricultural outlook . FAPRI -2017. [Electronic resource]. - Access mode: http://www.fapri.iastate.edu/outlook/2017/text/Outlook_2017.pdf