

MINISTRY OF AGRICULTURE AND WATER RESOURCES  
OF THE REPUBLIC OF UZBEKISTAN

TASHKENT INSTITUTE OF IRRIGATION AND MELIORATION

DEPARTMENT OF ENGLISH LANGUAGE

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# **Let`s Learn English for Agriculture**

Study-book for the intermediate students of agriculture

Tashkent – 2017





**CONTENTS**

<b>FOREWORD</b> .....	6
<b>UNIT I. NATURE AND HUMANITY</b> .....	8-30
SESSION 1. NATURE.....	9
SESSION 2. HUMANITY .....	14
SESSION 3. INTERACTIONS BETWEEN NATURE AND HUMANITY.....	19
SESSION 4. AGRICULTURE AS A NATURAL SCIENCE.....	24
REVISION.....	29
<b>UNIT II. SOIL</b> .....	31-49
SESSION 5. SOIL.....	42
SESSION 6. SOIL STRUCTURE.....	36
SESSION 7. PHYSICAL PROPERTIES OF SOILS.....	40
SESSION 8. THE MINERAL COMPONENTS OF SOIL.....	44
REVISION.....	48
<b>UNIT III. SOIL MELIORATION</b> .....	50-68
SESSION 9. LEACHING AS AN AGRICULTURAL CONCERN.....	51
SESSION 10. SOIL IMPROVEMENT: MELIORATION.....	55
SESSION 11. TILLAGE.....	59
SESSION 12. FERTILIZER.....	63
REVISION.....	67
<b>UNIT IV. WATER AND APPLICATION OF WATER</b> .....	69-91
SESSION 13.	70
WATER.....	

SESSION 14. WATER STRUCTURE.....	74
SESSION 15. IRRIGATION.....	78
SESSION 16. IRRIGATION: ARTIFICIAL APPLICATION OF WATER.....	82
SESSION 17. TYPES OF IRRIGATION.....	86
REVISION.....	90
<b>UNIT V. IRRIGATION TECHNIQUES.....</b>	<b>92-110</b>
SESSION 18. SOURCES OF IRRIGATION WATER.....	93
SESSION 19. SPRINKLER.....	97
SESSION 20. SUB-IRRIGATION.....	101
SESSION 21. DRAINAGE.....	105
REVISION.....	109
<b>UNIT VI. LET`S DISCUSS ECOLOGICAL PROBLEMS AND HEALTH CARE.....</b>	<b>111-133</b>
SESSION 22. ECOLOGICAL PROBLEMS.....	112
SESSION 23. AFFORESTATION.....	116
SESSION 24. DESERTIFICATION.....	120
SESSION 25. EROSION.....	124
SESSION 26. HEALTH CARE.....	128
REVISION.....	132
<b>TESTS FOR SELF-CONTROL.....</b>	<b>134-146</b>
<b>ENGLISH-ENGLISH GLOSSARY.....</b>	<b>147-159</b>
<b>ENGLISH-UZBEK GLOSSARY.....</b>	<b>160-168</b>
<b>USED LITERATURE AND REFERENCES.....</b>	<b>169-170</b>





## Unit 1

# AGRICULTURE





**SESSION 1**

**NATURE**

⇒ **STARTER:** Look at the pictures below and share your ideas with your partner if possible.



**Step 1.** Answer the following questions:

- How do you understand the notions “thing”, “man”, “mankind”, “object”?
- Explain the meanings of the notions “made by man” and “not made by man”.
- Do you know original (etymological) meaning of the word “nature”?
- What kind of derivatives do you know made from “nature”?

**Step 2.** Read the following passages and tell your own understanding on the topic comparing with textual statements.

We usually use a word “nature” or other usages (wordcombinations, derivatives) made from “nature”. But do you know original meaning of this word or have you been introduced with some scientific interpretations of it. If you look for its definition in different dictionaries, you will see very wide explanations of it. Let`s introduce with some of them definitely.

What is nature? Science wants to understand nature. Therefore it is important,

how the word nature is defined: Nature is everything that was not made by man. The original meaning of this word deals with Middle English (denoting the physical power of a person): from Old French, from Latin *natura* 'birth, nature, quality', from *nat-* 'born', from the verb *nasci*.

So the definition of nature excludes all things that were introduced by mankind. All those human developments are summarized as culture. The definition of nature summarizes natural objects, e.g. stones, animals, plants.

It also reflects on **events in nature** like the wind, the rain, earthquakes, food.

Nature can be divided into a living and a not living (abiotic) part. The **living part** of nature consists of all life on earth: plants, animals, mushrooms, bacteria, humans.

The **abiotic part** of nature consists of all things, that were not made by man and are not living. You can count to it: the outer space, not living objects on earth (stones, water, air etc).

Concluding, it is important to generalize above-stated points:

Nature is:

- the physical world and everything in it (such as plants, animals, mountains, oceans, stars, etc.) that is not made by people
- the natural forces that control what happens in the world
- the way that a person or animal behaves : the character or personality of a person or animal.

**Step 3.** Match the words 1-10 related to the nature and explain your choices.

1. artificial

2. sort

3. synthetic

4. temperament

5. substance

Nature

- 6. habit
- 7. individuality
- 8. uniqueness
- 9. attribute
- 10. characteristic

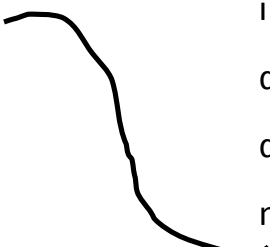
**Step 4.** Differ synonyms of “nature” from antonym ones and fill in the columns.

character, gap, environment, nothingness, personality, self, tone, void, individuality

Synonyms	Antonyms
<i>character</i>	<i>void</i>

**Step 5.** Pay your great attention to the definitions below and match with given notions.

type, kind, sort, description, character – are the synonyms of “nature” that mean a number of individuals thought of as a group because of a common quality or qualities.

- nature  implies a group marked by agreement in all details belonging to a type as described or defined.
- kind may imply inherent, essential resemblance rather than obvious or superficial likenesses.
- sort implies a group marked by distinctive likenesses

	peculiar to the type.
description	may suggest strong and clearly marked similarity throughout the items included so that each is typical of the group.
character	often suggests some disparagement.
type	may suggest natural grouping.

**Step 6.** Learn wise-sayings and citations of great personalities and discuss them in the group.

- "Fortunately science, like that nature to which it belongs, is neither limited by time nor by space. It belongs to the world, and is of no country and no age. The more we know, the more we feel our ignorance; the more we feel how much remains unknown." – Humphry Davy (1778-1829), 30.11.1825
- "In all things of nature there is something of the marvelous." – Aristotle (B.C. 384–322)
- "It is in man's heart that the life of nature's spectacle exists; to see it, one must feel it." – Jean-Jacques Rousseau (1712-1778), *Emile*, 1762
- Nature answers only when she is questioned." – Jacob Henle (1809-1885)
- "Nature is painting for us, day after day, pictures of infinite beauty." – John Ruskin, (1819-1900)

## HELP DESK

### WHAT DO THESE WORDS MEAN?

**abiotic part** – a physical rather than biological part of nature; not derived from living organisms

**nature** – the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations

**living part** – a way or style of life; an income sufficient to live on or the means of earning it

**event in nature** – a thing that happens or takes place in nature

**human** – a person; relating to or concerning people

**culture** – the arts and other manifestations of human intellectual achievement regarded collectively

**science** – the intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation and experiment

**mankind** – human beings considered collectively; the human race

**object** – 1) a material thing that can be seen and touched. 2) a person or thing to which a specified action or feeling is directed

**natural force** – strength or energy as an attribute of physical action or movement by nature.

SESSION 2

HUMANITY

⇒ **STARTER:** Look at the pictures and answer the following questions:



- What notions come to your mind when you see pictures?
- What is the difference between the first and the second pictures?
- What notions do you know related to the pictures?

**Step 1.** Read the text. Find highlighted words and expressions in the text to the definitions below.

**Humanity** is the human race, which includes everyone on Earth. It's also a word for the qualities that make us human, such as the ability to love and have compassion, be creative, and not be a robot or alien.

The word humanity is from the Latin *humanitas* for "human nature, kindness." Humanity includes all the humans, but it can also refer to the kind feelings humans often have for each other. But when you talk about humanity, you could just be talking about people as a whole. When people do bad things, it tests your faith in humanity. When people ask for money to help feed starving

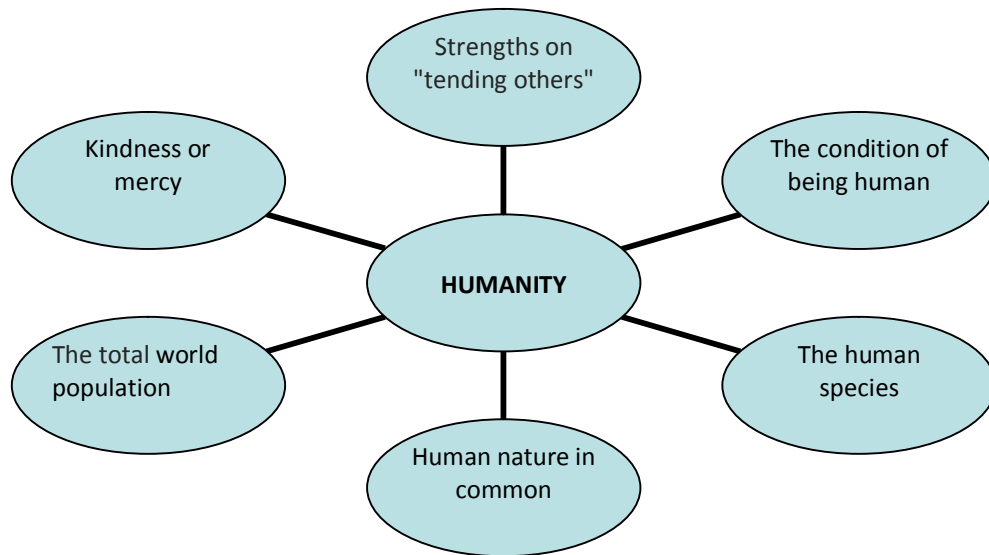
children, they're appealing to your sense of humanity. In the plural form (the humanities), it means the study of literature, philosophy, and the arts (the study of Ancient Greek and Roman language, literature, the study of Old English language etc).

1. A machine capable of carrying out a complex series of actions automatically, especially one programmable by a computer
2. Human beings collectively
3. Complete trust or confidence in someone or something
4. A faculty by which the body perceives an external stimulus; one of the faculties of sight, smell, hearing, taste, and touch
5. Sympathetic pity and concern for the sufferings or misfortunes of others

**Step 2.** Look at these picture and mind map made according to the picture and choose appropriate central theme for it. Add some more options here if necessary.

- a. Definition of "humanity".
- b. Humanity as historical being.
- c. Humanity – in examples.
- d. Differentiation of the meanings of "humanity" as a word.





**Step 3. Match synonyms for “humanity”.**

	mankind
	animals
	humanness
Humanity	objectiveness
	activity
	manhood

**Step 4. Try to differentiate synonym words and expressions to the different kind of meaning of a word “humanity” and fill in the columns.**

Humane, antihumanity, man, kindness, human race, graciousness, humankind, benevolence, sympathy, mankind, unkindness, tenderness, humanness, goodwill, human form, kindness, human being, human species, mercy, human group, philanthropy, human sort, goodbreeding, overhumanity, people, refinement, inhumanity, population.

Humanity <sub>1</sub>	<i>human being</i>



Humanity <sub>2</sub>	<i>goodbreeding</i>

**Step 5.** Try to choose antonyms for “humanity” from the synonym ones given above. Underline negative forms making those antonyms and practice on making another derivatives with them.

Ex.: *humanity* – *antihumanity*...

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**Step 6.** Match the translation forms for “humanity” with the languages they belong to.

Italian	humanity
German	humanidade
Uzbek	人类人类類
British English	humanité
Chinese	menschheit
Brazilian Portuguese	insoniyat
Russian	umanità
French	человечество

**HELP DESK**

**WHAT DO THESE WORDS MEAN?**

**humanity** – human beings collectively

**human race** – human beings in general; humankind

**faith** – complete trust or confidence in someone or something

**ability** – possession of the means or skill to do something

**alien** – belonging to a foreign country

**compassion** – sympathetic pity and concern for the sufferings or misfortunes of others

**over humanity** – out of human being

**sense** – a faculty by which the body perceives an external stimulus; one of the faculties of sight, smell, hearing, taste, and touch

**good breeding** – grown up well, clever



**SESSION 3**

**ENVIRONMENT.**

**INTERACTIONS BETWEEN ENVIRONMENT (NATURE) AND  
HUMANITY**

➡ **STARTER:** Look at the pictures and answer the following questions:



- What can you see in the first picture?
- What is the meaning of the second picture?
- Does the third picture describe an interaction between nature and humanity?
- What is the environment? Which of the pictures show full image of the environment? Why?

**Step 1.** Read following text and choose the central title for it:

- Human as a part of environment
- Interrelations between environment and humanity
- Humanities and natural disciplines

Human beings live in the realm of nature, they are constantly surrounded by it and interact with it. The most intimate part of nature in relation to man is the biosphere, the thin envelope embracing the earth, its soil cover, and everything else that is alive. Our environment, although outside us, has within us not only its image, as something both actually and imaginatively reflected, but also its material energy and information channels and processes. If we lose nature's



	interact with them isolated from nature and reality.
	Nature depends on human being and activity as human is constantly aware of the influence of nature in the form of the air he breathes, the water he drinks, the food he eats, and the flow of energy and information.
	Nature and reality exist out of our consciousness and monitoring.
	Interaction between human and nature is intertransitory and mutual associated.

**Step 3. Match the words 1-10 and their definition a-j.**

1. Interact (v)	a. (of a person, animal, or plant) living, not dead
2. Alive (adv)	b. cease to be visible
3. Imaginatively (adv)	c. the surroundings or conditions in which a person, animal, or plant lives or operates
4. Organic (adj)	d. the strength and vitality required for sustained physical or mental activity
5. Principle (n)	e. Have an action and relation together with pair or more of things in any time and space
6. Energy (n)	f. the capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself
7. Disappear (v)	g. a thought or suggestion as to a possible course of action
8. Environment (n)	h. relating to or derived from living matter
9. Ideal (adj)	i. having or showing creativity or inventiveness
10. Influence (n)	j. a fundamental truth or proposition that serves as the foundation for a system of belief or behavior or for a chain of

	reasoning
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**Step 4. Fill in the gaps using words from the box.**

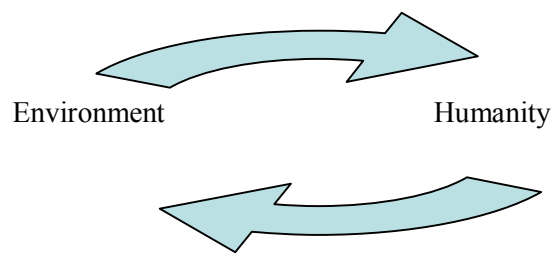
amount, primeval, society, dweller, incursions, species.

**Ex. Man is not only a dweller in nature, he also transforms it.**

1. Man is not only a ... in nature, he also transforms it.
2. From the very beginning of his existence, and with increasing intensity human society has adapted environing nature and made all kinds of ... into it.
3. An enormous ... of human labour has been spent on transforming nature.
4. Humanity converts nature's wealth into the means of the cultural, historical life of ....
5. Not only has man transferred various ... of plants and animals to different climatic conditions; he has also changed the shape and climate of his habitation and transformed plants and animals.

If we were to strip the geographical environment of the properties created by the labour of many generations, contemporary society would be unable to exist in such ... conditions.

**Step 5. Learn the mind map here according to the text on the previous page. Give a title to it.**



**Step 6. Read the following questions and write three paragraphs using the map in Step 5.**

- Do you agree with the statement that human beings live in the realm of environment?
- How do you fact interrelation and interaction of environment and humanity?
- What forms of human contacts with nature do you monitor in reality?

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ .

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ .

3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ .

**HELP DESK**

**WHAT DO THESE WORDS MEAN?**

**energy** – the strength and vitality required for sustained physical or mental activity

**influence** – the capacity to have an effect on the character, development, or behavior of someone or something, or the effect itself

**precipitation** – the action or process of precipitating a substance from a solution

**spaceman/spacewoman** – (pl. spacemen or spacewomen) an astronaut

**magnetic storm** – a disturbance of the magnetic field of the earth (or other celestial body)

**irradiation** – 1) the process or fact of irradiating or being irradiated 2) the apparent extension of the edges of an illuminated object seen against a dark background

**interact** – act in such a way as to have an effect on each other

**alive** – 1) (of a person, animal, or plant) living, not dead 2) alert and active; animated

**natural process** – existing in or derived from nature action; not made or caused by humankind

SESSION 4

AGRICULTURE AS A NATURAL SCIENCE

➡ **STARTER:** Look at the picture and answer the following questions:



- What type of human~nature interactions do you comprehend from this illustration?
- What historical period is described here?
- What is the doing of a man in the picture?
- Is it dealt with planting, cultivating and harvesting? If yes, what method of cultivation is used in the picture? Is it used in nowadays?
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**Step 1.** Regrouped into 3 groups, turn by turn tell the words based on agriculture.

Ex.: *cultivating...*

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**Step 2.** Read the following passage carefully. Pay more attention to the new words.

**Agriculture** is the cultivation of animals, plants and other life forms for food, fiber,



biofuel and other products used to sustain human life. Agriculture is also called **farming** or **husbandry**. The study of agriculture is known as agricultural science.

The word *agriculture* is the English adaptation of Latin *agricultūra*, from *ager*, "a field", and *cultūra*, "cultivation". In the strict sense it means "tillage of the soil". Thus, a literal reading of the word yields "tillage of fields".

The history of agriculture dates back thousands of years, and its development has been defined by greatly different climates, cultures, and technologies. However, all farming generally relies on techniques to expand and maintain the lands that are suitable for raising domesticated species.

The major agricultural products can be broadly grouped into *foods*, *fibers*, *fuels*, and *raw materials*. In the 21st century, plants have been used to grow biofuels, biopharmaceuticals, bioplastics, and pharmaceuticals.

**Specific foods** include cereals, vegetables, fruits, and meat. **Fibers** include cotton, wool, hemp, silk and flax. **Raw materials** include lumber and bamboo. **Biofuels** include methane from biomass, ethanol, and biodiesel. Other useful materials are produced by plants, such as resins. Cut flowers, nursery plants, tropical fish and birds for the pet trade are some of the ornamental products.

**Step 3.** Define the words which are the most suitable for the boxes below.

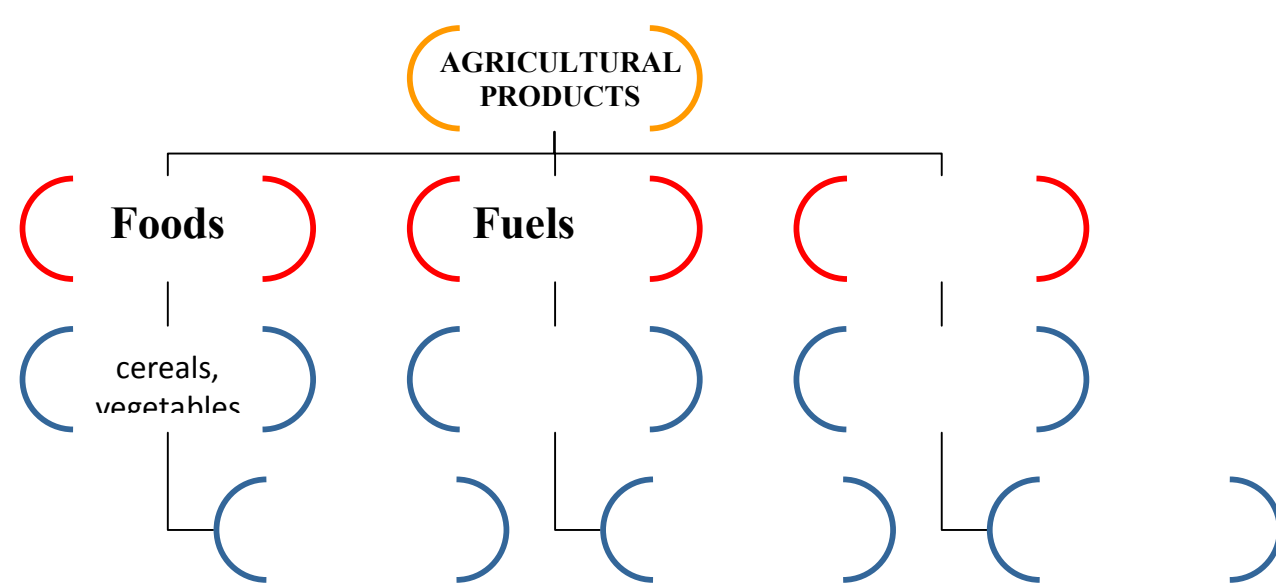
Cereals, wheat, kerosene, silk, flatulence, wool, blog, mohair, vegetables, jute, flax, fruits, methane, meat, mustard.

<b>Foods</b>	<b>Fibers</b>	<b>Raw materials</b>
<i>cereals</i>	<i>wheat</i>	<i>methane</i>



	<i>Farming and husbandry are opposite to agriculture.</i>
	The major agricultural products can be broadly grouped into <i>foods, fibers, fuels, and building materials.</i>
	Cereals, vegetables, fruits, and meat – are <i>specific food</i> , <i>fibers</i> include methane from biomass, ethanol, and biodiesel, and <i>raw materials</i> include lumber and bamboo.

**Step 6.** Complete the mind map according to the text on the previous page. Add some more options if necessary. Give your explanations in the lines.




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## HELP DESK

### WHAT DO THESE WORDS MEAN?

**raw materials** – materials used in a production process, which are at a low level of completion compared to the final product or cost unit Examples include steel plate, wood, and chemicals.

**fertilizer** – a chemical or natural substance added to soil or land to increase its fertility

**pesticide** – a substance used for destroying insects or other organisms harmful to cultivated plants or to animals

**manure** – animal dung used for fertilizing land ■ any compost or artificial fertilizer

**crop rotation** – the system of growing a sequence of different crops on the same ground so as to maintain or increase its fertility

**nutrient** – a substance that provides nourishment essential for the maintenance of life and for growth

**sustainable agriculture** – able to be maintained at agriculture

**pastoral** – (of land) used for the keeping or grazing of sheep or cattle

**tillage** – the preparation of land for growing crops ■ land under cultivation

**irrigation** – the use of water pumped from boreholes or diverted from rivers to assist agriculture. This makes it possible to use otherwise uncultivable land, and to produce larger and more reliable crops on land already in use.

**cultivation** – the action of cultivating land, or the state of being cultivated

**fungi** – any of a group of unicellular, multicellular, or spore-producing organisms feeding on organic matter, including moulds, yeast, mushrooms, and toadstools

**biofuel** – a fuel derived immediately from living matter

**fiber** – a thread or filament from which a vegetable tissue, mineral substance, or textile is formed

**SELF-CONTROL on UNIT 1 (total 15 points)**

**Step 1. VOCABULARY CHECK.** These are the important words that you have studied in Unit 1. You should make sure that you know these words before you go on to Unit 2.

abiotic part	influence
ability	interact
alien	irrigation
alive	living part
biofuel-	magnetic storm
compassion	mankind-
crop rotation	manure
cultivation	nature
culture	natural processes
domesticated	object
energy	over humanity
events in nature	pastoral-
faith	pesticides
fertilizers	precipitation
fiber	range
fungi	raw materials
good breeding	science
human	sense
humanity	surplus
human race	sustainable agriculture
imaginatively	tillage
irradiation	

