

**МИНИСТЕРСТВО ОБРАЗОВАНИЯ, НАУКИ И МОЛОДЕЖНОЙ
ПОЛИТИКИ КРАСНОДАРСКОГО КРАЯ
ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ПРОФЕССИОНАЛЬНОЕ
ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ КРАСНОДАРСКОГО КРАЯ
«БРЮХОВЕЦКИЙ АГРАРНЫЙ КОЛЛЕДЖ»**



**Учебное пособие
по учебной дисциплине СГ.02 Иностранный язык в
профессиональной деятельности
специальность 35.02.16 Эксплуатация и ремонт
сельскохозяйственной техники и оборудования
для обучающихся 2 курса.**

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2024

Рассмотрено
Учебно-методическим объединением
ИЯЗ

протокол № 10 от 15.05.24

Председатель УМО ИЯЗ


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Введение

Настоящее учебное пособие предназначено для специального этапа обучения английскому языку в сельскохозяйственных колледжах по специальности 35.02.16 Эксплуатация и ремонт сельскохозяйственной техники и оборудования. Учебное пособие соответствует требованиям государственного образовательного стандарта по специальности 35.02.16 Эксплуатация и ремонт сельскохозяйственной техники и оборудования.

Цель пособия – приобретение навыков чтения и перевода спец. текстов средней трудности. Работая с данным пособием, у обучающихся формируются практические навыки различных видов речевой деятельности.

Пособие состоит из специальных текстов и упражнений, способствующих усвоению лексического и грамматического материала. Тексты пособия и словаря в качестве приложения заимствовались из оригинальных источников.

Специальный текст направлен на изучение лексики по специальности, развитие навыков чтения вслух, умения извлекать полную и частичную информацию, основную идею. Текст также является основой для монологической и диалогической речи.

Упражнения, направлены на активизацию мыслительной деятельности обучающихся.

В конце пособия имеется англо-русский словарь терминов, встречающихся в текстах, но отсутствующих в рекомендуемых обучающимся общих словарях.

History of the automobile.

Exercise 1. Vocabulary. Learn the words.

full-size self-propelled vehicle – полноразмерное самодвижущееся средство передвижения
to propel a vehicle – передвигать транспортное средство
steam-driven carriage – экипаж, приводимый в движение паром
three-wheeled carriage – 3-колесный экипаж
conventional vehicles – обычное средство передвижения
steam-engine – паровой двигатель
to run at slow speed – двигаться на малой скорости
internal combustion engine – двигатель внутреннего сгорания
steam-powered engine – паровой двигатель
four-stroke cycle engine – двигатель 4-тактный
battery-powered – питание от батареи
pollute – загрязнять
pollution – загрязнение
exhaust – выхлоп
basic – основной
clatter – стук, шум
pump – качать
brake – тормоз
roller – каток
gear-box – коробка передач
burner – камера сгорания
valve – клапан
cam – кулачок
fuel – топливо
save – экономить
ignite – зажигать

Exercise 2. Read and translate the text:

The history of the automobile goes back several hundred years. One of the earliest attempts to propel a vehicle by mechanical power was suggested by sir Isaac Newton about 1680. It was little more than a toy consisting of a steam boiler supplying a steam jet turned to the rear.

However, the credit for building the first self-propelled road vehicle must undoubtedly go to the French military engineer, Nicholas Cugnot (Кюньо). Between 1763 and 1769 two steam-driven carriages were built and tried.

In 1784 the Russian inventor Kulibin built a three-wheeled carriage. In his vehicle he used for the first time such new elements as brakes, rollers and a gear –box. The first Englishman to build a full-size self-propelled vehicle for use on the roads and to obtain practical results was Threvithick (Тревитик). Between 1798-1800 he built several working models.

Up to 1860 most of road vehicles were powered by steam engines which ran at slow speeds. In 1860 Lenoir (Ленуар) of Paris built an internal combustion engine which ran on city gas, the gas being ignited by an electric spark. In 1866, Otto invented the type of four-stroke cycle engine which is used today.

Slowly but surely the auto industry is perfecting a number of alternatives to the conventional engines found in almost all of today's passenger cars. Two prime factors lie behind the search for different engines - the necessity to reduce air pollution by requiring cleaner auto exhaust and the desire to produce cars that will run farther on a gallon of fuel. While basic research is continuing on electric and steam powered engines, it is the diesel, turbine and Stirling that are current industry favourites.

Diesels get better mileage than gasoline engines, and the fuel is usually cheaper. In 1890's, Rudolf Diesel, invented the engine that bears his name. As air is drawn into the engine and compressed internal temperatures rise, and pressures reach two to three times those in a gasoline engine. The extreme pressures have meant that diesels usually are much larger and heavier than gasoline engines of the same power potential.

The disadvantages of diesels as passenger - car engines are slow performance, noise and smoke.

The turbine and Stirling are multifuel engines, capable of running on any liquid that will burn, including such exotic types as peanut oil and perfume. This would be a major advantage if severe petroleum shortages develop.

The turbine cars now operating are handbuilt models that cost more than 1 million dollars each. Alloys of precious metals of high durability are still required for certain vital turbine parts. Engineers believe that progress in ceramics hold the key to making turbines practical alternatives to present-day engines...

The Stirling concept, first offered more than 150 years ago by a Scottish clergyman, involves external instead of internal combustion ... In the new design, hydrogen gas is heated by a burner, which can run on virtually all kinds of fuel ... Engineers point out that a Stirling engine would be quieter than an equivalent internal combustion engine, would emit less toxic gases, and would use fuel more economically ...

Yet, there is still opinion in the auto industry that the conventional gasoline powered engine - the type in almost universal use now - will continue to dominate until or unless outside circumstances dictate otherwise.

Exercise 3. Answer the questions.

1. Who made an attempt to propel a vehicle?
2. Who built the first self-propelled road vehicle?
3. What kind of carriage did the Russian inventor Kulibin build in 1784?
4. What did Kulibin use in his vehicle for the first time?
5. What were all road vehicles up to 1860 powered by?
6. What did Lenoir built in 1860?
7. How did an internal combustion engine run on?

8. When was the four-stroke cycle engine invented?
9. What are the main factors that are important search for different engines?
10. Why are these factors very important?
11. What are the disadvantages of diesel?
12. When was the Stirling engine invented?
13. Will electric cars replace the conventional vehicles?
14. What kind of engine will dominate in the near future?

Exercise 4. Write down the sentences where it says:

- а) о первых попытках использовать механическую энергию для приведения в движение экипажа;
- б) об основных требованиях, предъявляемых к автомобилю.

Exercise 5. Check statements that match the content of the text:

1. The history of the automobile goes back...
 - a) a hundred years;
 - b) a thousand years;
 - c) several hundred years.
2. Diesels are usually much larger and heavier than...
 - a) gasoline engines;
 - b) turbine cars;
 - c) Stirling engines.
3. The disadvantages of diesels are...
 - a) low speeds;
 - b) noise and smoke;
 - c) heavy weights.
4. The turbine and Stirling are multifuel engines, capable of running on...
 - a) petrol only;
 - b) peanut oil and perfume;
 - c) benzene.

Exercise 6. Translate the following words and phrases into Russian:

vehicle, mechanical power, self-propelled, was constructed, a steam-driven carriages, wheels, passengers, motor cars, issued, prosecuted, of gasoline engines, introduced the four-stroke cycle of operation, two-seated cars, efficient, international combustion engine, abolition, automobile industry, collect antique cars, advertisements.

Exercise 7. Finish the sentences using the text:

- 1) In a steam engine was built in Great Britain.
- 2) From 1860 to 1900 was a period of the application...
- 3) The cars of that time were very small...
- 4) Multi-cylinder engines came into use, most commonly used are...
- 5) The best collection-100 old cars of great rarity –...

Exercise 8. Tell about the history of the automobile industry using the following expressions and verbs:

the history of the automobile mechanical power, a steam boiler, selfpropelled, vehicle steam-driven carriages, brakes, gear-box, steam engines, internal-combustion engine, air-pollution, diesel engines, turbine cars, Stirling engine; to go back, to propel, to build, to use, to obtain, to be powered by, to invent, to reduce, to produce, to offer, to involve, to dominate.

Exercise 9. Match the following words to their definitions:

1. production	a. to make or draw plans for something, for example clothes or buildings
2. to design	b. damage caused to water, air, etc. by harmful substances or waste
3. automobile	c. a road vehicle with an engine, four wheels, and seats for a small number of people
4. carriage	d. to start to burn
5. pollution	e. a substance that is used to provide heat or power, usually by being burned
6. engine	f. the process of making or growing goods to be sold
7. vehicle	g. a vehicle with four wheels that is usually pulled by horses and was used mainly in the past
8. engineer	h. a machine that uses the energy from liquid fuel or steam to produce movement
9. fuel	i. a person whose job is to repair or control machines, engines, or electrical equipment
10. to combust	j. a machine, usually with wheels and an engine, used for transporting people or goods on land, especially on roads

Exercise 10: Match the following words to their definitions:

1. Invention
2. Mass production
3. Innovation
4. Sustainable
5. Efficiency

- a. The introduction of something new
- b. The process of producing large quantities of goods
- c. Using resources in a way that will not deplete them
- d. The ability to accomplish a task with minimal wasted effort or expense
- e. A new device, method, or process developed through study and experimentation

The ecological problems of agriculture.

Exercise 1. Vocabulary. Learn the words.

Deforestation - вырубка леса

Soil erosion - эрозия почвы

Pesticide pollution- загрязнение пестицидами

Water scarcity- нехватка воды

Livestock farming -животноводство

Promoting agroforestry- содействие агролесомелиорации

Sustainable agricultural practices - устойчивые методы ведения сельского хозяйства

Industrial enterprises –промышленные предприятия

In addition to – в добавление к

Present — представлять

A threat – угроза

A source – источник

Exercise 2. Read and translate the text:

Environmental problems in agricultural enterprises have become a growing concern in recent years. The practices and techniques used in modern agriculture have led to a number of environmental challenges that need to be addressed. One of the main issues is the excessive use of chemical fertilizers and pesticides. While these inputs are essential for increasing crop yields, they can also have harmful effects on the environment. Chemical run-off from farms can contaminate water sources, leading to water pollution and posing a threat to aquatic life. Another problem is soil erosion, which occurs when the top layer of soil is washed away by wind or water. This can reduce the fertility of the land and lead to decreased crop yields. Deforestation for agricultural expansion also contributes to soil erosion and loss of biodiversity. Furthermore, agricultural activities are a major source of greenhouse gas emissions, particularly methane and nitrous oxide. Livestock farming, in particular, is a significant contributor to methane emissions due to enteric fermentation in cows and sheep. Nitrous oxide is released from the use of nitrogen-based fertilizers. In order to address these environmental challenges,

sustainable agricultural practices need to be adopted. This includes reducing the use of chemical inputs, implementing soil conservation techniques, promoting agroforestry, and adopting climate-smart agriculture methods. Government regulations and incentives can also play a role in encouraging farmers to adopt more environmentally friendly practices. By addressing these ecological problems in agricultural enterprises, we can help safeguard the environment for future generations and ensure the long-term sustainability of our food production systems.

Exercise 3. Match the following ecological terms with their definitions:

- a) Deforestation
- b) Soil erosion
- c) Pesticide pollution
- d) Water scarcity

1. The process of gradually wearing away soil by wind or rain.
2. Cutting down forests or trees at a large scale for industrial or agricultural purposes.
3. Contamination of water bodies due to excessive use of chemicals in agriculture.
4. Lack of adequate freshwater resources due to overuse or pollution.

Exercise 4. True or False:

Indicate whether the following statements are true (T) or false (F).

- a) Using organic farming methods can help reduce pesticide pollution.
- b) Soil erosion has no negative impact on crop yields.
- c) Water scarcity is not a major concern for agricultural enterprises.
- d) Deforestation contributes to climate change.

Exercise 5. Discussion Questions:

Discuss the following questions in pairs or small groups:

- a) What are some sustainable practices that agricultural enterprises can adopt to minimize their impact on the environment?
- b) How can agricultural businesses balance economic profitability with environmental conservation?
- c) What are the potential consequences of ignoring ecological problems in agricultural enterprises?

Exercise 6. Role-play:

Divide the class into groups of farmers, environmentalists, and government officials.

Role-play a scenario where these stakeholders collaborate to address ecological problems in an agricultural enterprise. Discuss potential solutions and compromises that could be reached.

My future profession.

Exercise 1. Vocabulary. Learn the words.

profession – профессия

to lack – испытывать недостаток, недоставать

desire – желание

to coincide – совпадать

possibility – возможность

a piece of advice – совет

to research – изучать, исследовать

to get interested in — заинтересовываться

to affect — затрагивать

to be concerned — быть заинтересованным

wide range — широкий диапазон, круг, область, сфера

to justify the hopes of my parents — оправдывать надежды моих родителей

Mechanical engineer-техник-механик

Exercise 2. Read and translate the text:

Plans for future is a problem that worries not only me, but my friends, classmates, parents and teachers. The reason is that at the age of 17 we have to make a very important choice in our life – the choice of a profession. On the one hand, I'm adult enough to have an opinion of my own about what I'm interested in and what I'm good at. On the other hand, at this age we lack life experience and our desires sometimes don't coincide with our possibilities. That's why it's very important to have somebody to give us a piece of advice. Such people are our parents, teachers and friends.

As for me, I want to be a mechanical engineer. Mechanical engineer is an exciting and rewarding career choice for those interested in working with machinery and solving technical problems. As a mechanical engineer, you will be responsible for repairing and maintaining a variety of mechanical systems, such as engines, transmissions, and hydraulic systems. This profession requires strong technical skills, problem-solving abilities, and a passion for working with your hands.

Exercise 3: Fill in the blanks with the correct words:

1. A mechanical engineer is responsible for _____ and maintaining mechanical systems.
2. This profession requires strong _____ skills.
3. If you enjoy working with machinery and solving technical problems, you may be interested in becoming a _____ engineer.

Exercise 4. True or False:

1. A mechanical engineer works with electrical systems. (False)
2. This profession requires problem-solving abilities. (True)
3. A mechanical engineer does not need to have a passion for working with hands. (False)

Exercise 5. Match the following words:

1. Mechanical engineer
2. Machinery
3. Problem-solving

- A. A person who repairs mechanical systems.
- B. Equipment or devices that are used in a mechanical process.
- C. The ability to find solutions to technical issues.

Exercise 6: Write a short paragraph about why you are interested in becoming a mechanical engineer. Include at least three reasons to support your choice.

What is agriculture?

Exercise 1. Learn the words.

agriculture – сельское хозяйство
 animal – животные
 apply – применять
 breed – разводить
 crop – культура
 cultivation – обработка
 develop – развивать
 development – развитие
 farm – ферма, хозяйство
 field – поле
 food – пища
 grow – расти, выращивать

growth – рост
 increase – увеличение
 plant – растение
 supply – снабжать
 use – использовать
 yield – урожай

Exercise 2. Read and translate the text:

Agriculture is an important branch of economy. Economic growth of any country depends on the development of agriculture which supplies people with food and clothing and industry with raw materials.

The word "agre" is a Latin word. It means the cultivation of fields in order to grow crops. Now agriculture also includes the use of land to breed farm animals.

We do not know when people began to grow crops. It was many thousand years ago. Now crop production and animal husbandry are highly developed branches of agriculture.

Life is impossible without plants. They play a highly, important role in everyday life of people. Plants that are grown by farmers are known as farm crops. They are used for many different purposes. Most of them are used directly as food for people, some are consumed by farm animals, others are used in industry and medicine.

In order to increase crop yields and animal products our collective and state farms apply widely intensive technologies.

Exercise 3. Call equivalents following international words:

region, climate, machine, tractor, combine, bulldozer, to mechanize, tendency, tradition, traditional, industrial.

Exercise 4. What questions are answered in the text:

1. Из каких отраслей состоит сельское хозяйство?
2. Когда люди начали выращивать сельскохозяйственные культуры?
3. Может ли человек жить, не выращивая культуры?
4. О каких интенсивных технологиях говорится в тексте?

Exercise 5. Answer the following questions:

1. Why is agriculture very important?
2. What are the two branches of agriculture?

3. What does the Latin word "agre" mean?
4. Is life possible without plants?
5. Where are farm crops used?
6. How do people increase crop yields?

Farm machinery

Exercise 1. Learn the words.

apply fertilizers вносить удобрения в почву
break (broke, broken) up the layers of soil разбивать на мелкие куски пахотный горизонт
break down the soil рыхлить почву
compact утрамбовывать
crush the clods дробить глыбы, комья земли
cover seeds заделка семян
consolidate the soil трамбовать, уплотнять почву
destroy (syn. eliminate) weeds удалять сорняки
disk дисковать почву
beet cultivator свекловичный культиватор
bean cultivator культиватор для бобовых культур
broad- cast planter сеялка для пропашных культур
baler пресс-подборщик, сеной пресс
beet harvester машина для уборки свеклы
cultivation machinery (syn. cultivator) культиваторы
chisel cultivator чизель-культиватор
combine harvester зерноуборочный комбайн

Exercise 2. Read and translate the text:

Farm machinery plays a crucial role in modern farming practices. These machines help farmers increase efficiency and productivity in various agricultural tasks. From plowing and planting to harvesting and processing, different types of agricultural machinery are utilized to streamline the farming process. We know the farmer to have a wide range of machinery to plow and disk, and harrow, and plant, and fertilize, and finally harvest faster, easier and more profitably today. The machine is known to be a device that uses force to accomplish something transmitting and changing force or motion into work. Agricultural implements and machines being very numerous and diversified now may be divided into 4 main groups: tillage equipment, planting equipment, fertilizing equipment, harvesting equipment. The aim of tillage is to prepare the soil for planting and to keep it loose and free from weeds during the growth of crops. The primary tillage equipment

used by the farmer includes plows, sub-soilers, and thinners. The secondary tillage equipment embraces harrows, rollers and tools for mulching and fallowing. Plow is designed to eliminate weeds, to prepare a suitable seedbed, to improve the physical condition of the soil. Plows fall into mounted, semi mounted, disc, moldboard plows. The main components of ploughs are the main frame, the share, the moldboard, the disc coulter, the skim coulter, the headstock. The function of sub-soiler is to penetrate into the deeper depths and break up the layers of soil which have become compacted due to the movement of heavy machinery. A harrow is an implement used to level the ground and crush the clods, to stir the soil, and to prevent and destroy weeds. There are three principal kinds of harrow namely the disk, the spike-tooth, and the spring tooth. Cultivation machinery is used to break down the soil before or after a crop is sown for covering seeds, for consolidating the soil and for hoeing out weeds. There are several types of cultivators designed for special crops and conditions: beet and bean cultivators, lister cultivators, rotary hoe cultivators, rod weeders, field cultivators, sub-soil and chisel cultivators. Planting equipment is any power-operated device introduced to place seeds or plant parts in or on the soil for production of food and feed crops. It is classified as row-crop planters, broad-cast planters, grain drills and planting attachments for other equipment. Applying such types of fertilizers as barnyard manure, granular fertilizers, and fertilizers in liquid and gaseous form is necessary where soils are deficient in plant food elements. Such fertilizing equipment as manure spreaders, fertilizer distributors, sprayers are in use. Crops are harvested by the use of many kinds of harvesting equipment for all types of crops. The principal machines required to make hay are mowers, rakes, balers. Grain and all types of seed crops are harvested by combine harvesters. Beet harvesters are available to harvest beet, potato harvesters and diggers being for potatoes. The tractor is the most important machine pulling many kinds of implements that cultivate plant, fertilize, and harvest.

Exercise 3: Choose the correct answer for each question:

1. What is the primary purpose of farm machinery?
 - a) To decrease productivity
 - b) To increase efficiency in farming
 - c) To reduce the need for technology

Exercise 4. Which of the following is NOT a task performed by farm machinery:

- a) Harvesting
- b) Cooking
- c) Planting

Farmers use farm machinery to streamline which of the following processes?

- a) Baking

- b) Farming
- c) Fishing Exercise

Exercise 5. Match the following components of agricultural machinery with their functions:

- a) Seed drill
- b) Plow
- c) Harrow
- d) Tractor

Functions:

- 1) Used to break and turn over soil
- 2) Used to sow seeds at the correct depth and spacing
- 3) Used for smoothing and leveling the soil
- 4) Provides power and traction to other machinery

Exercise 6. Fill in the blanks with the appropriate term:

- a) The _____ is used to prepare the soil for planting by breaking it and turning it over
- b) A _____ is a machine used to sow seeds in rows.
- c) A _____ is a farm vehicle designed to provide power and traction to agricultural implements.
- d) A _____ is used to pulverize soil for seedbed preparation.

Exercise 7. True or False:

- a) A disc harrow is used for spreading or mixing materials into the soil. (True/False)
- b) A combine harvester is used for planting seeds. (True/False)
- c) A plow breaks and turns over the soil. (True/False)
- d) Tractors are not used in modern agriculture. (True/False)

Exercise 8. Which of the following is NOT a component of agricultural machinery?

- a) Planter
- b) Harvester
- c) Crop
- d) Sprayer

Exercise 9. Matching exercise:

Match the components with their descriptions:

- Tire
- Engine
- Plow
- Seeder

Descriptions:

- a) Used to turn over soil
- b) Provides power to the machinery
- c) Distributes seeds during planting
- d) Supports the weight of the machinery and provides traction

Exercise 10 . Discussion

Questions:

- a) What are the benefits of using agricultural machinery in farming practices?
- b) How have advances in technology impacted the design and efficiency of agricultural machinery?
- c) What safety measures should farmers take when operating agricultural machinery?

Trends in Tractor Design.

Exercise 1. Learn the words.

meet these ever increasing demands – учитывать возрастающие потребности

power unit – силовой агрегат

the engine – двигатель

the capacity – мощность

design of transmission – конструкция трансмиссии

chassis – шасси

maintenance time – время обслуживания

a conjunction – сочетание

a land reclamation – мелиорация земли

a feature – особенность

general-purpose tractors – тракторы общего назначения

to equip with an all-metal cab – быть оснащённым цельнометаллическими кабинами

r.p.m. – обороты в минуту

gph speeds – галлоны в час

a range – диапазон

average soil compacting pressure – среднее давление прессования почвы

Exercise 2. Read and translate the text:

It is known that the need for more food, feed and industrial crops ¹ regularly grows. Farmers usually meet these ever increasing demands by increasing crop yields. This largely depends on the quantity and quality of the machinery supplied by tractor and agricultural engineering industry. The most important machine used on farms is the tractor. The heart of the tractor is its power unit, that is, the engine.

The main trend adopted in designing new tractors and other farm machinery is as follows:

- to increase the capacity of the engine, mainly by increasing its power and field speed;
- to improve the design of transmission, chassis and the engine;
- to reduce fuel consumption and maintenance time;
- to improve labour conditions for tractor operators, etc.

The designers said that this trend would result in basic improvements in tractor design. As a result, for example, both the wheeled and track-type general purpose tractors T-150 used in conjunction with² trailing or mounted machines and implements are now able to perform not only a number of routine operations, such as soil cultivation, sowing and harvesting, but also land reclamation, earth-moving and other jobs. Of great importance now is ³ that both the wheeled and the crawler models have up to 70% of standardized parts, which is of great importance.⁴

The most important feature of the T-150 is its high power which provides higher field speeds as compared to ⁵ other general-purpose tractors. Its other important feature is the dual transmission system. The tractor is equipped with an all-metal cab which may be heated and ventilated. When tractor operators began to work on the T-150 they said the new cab had greatly improved their labour conditions.

The basic technical data (specifications) of the T-150 crawler-type tractor are as follows: engine power — 150 hp, at 200 r.p.m. fuel consumption per brake horse power — 185 gph speeds — eight forward and four reverse range of speeds — 2.68 to 15.89 km/h track — 1435 mm ground clearance — 300 mm average soil compacting pressure — 0,44 kg/cm² mass (weight) — 7400 kg

Notes:

¹ for more food, feed and industrial crops - в большем количестве пищевых добавок, кормовых и промышленных культур.

² in conjunction with – в сочетании с чем-либо

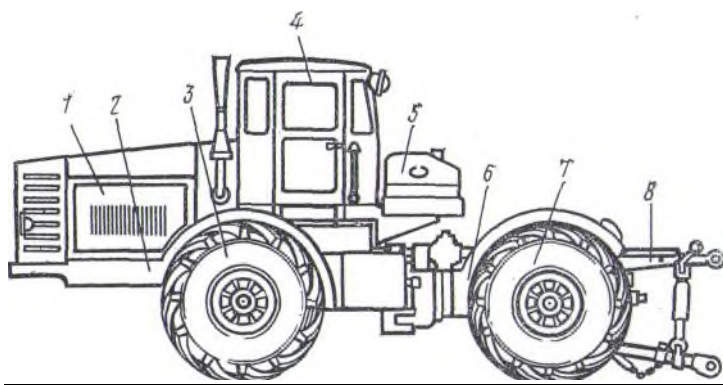
³ of great importance is – очень важно то, что (большое значение имеет то, что)

⁴ which is of great importance - что имеет большое значение

⁵ as compared to - по сравнению с чем-л.

Exercise 3. Describe the picture:

1. Fig. 1 1. engine; 2. front subframe; 3. front driving wheels; 4. cab; 5. fuel tank; 6. rear subframe; 7. rear driving wheels; 8. hitch.



Exercise 4. Find 10 adjectives and form three degrees of comparison.

Harvesting Machinery.

Exercise 1. Learn the words.

thresher – молотилка

whereas – в то время как

mechanical corn pickers – механические сборщики кукурузы

a reaping – жатва

a baler – пресс-подборщики

a weed – сорняк

a mower – косилка

a crushers – жатка

a windrower – дробилка

a forage harvester – кормоуборочный комбайн

a brief description – краткое описание

crop Harvesting Machine – машина для сборки урожая

grain Harvesting Machine – зерноуборочная машина

root crop Harvesting Machine – машина для уборки корнеплодов
a digger-picker – экскаватор-сборщик
a stalk – стебель
a husk – шелуха

Exercise 2. Read and translate the text:

Harvesting machinery or equipment is a mechanical device used for harvesting. There are several types of harvesting machines which are generally classified by crop. Reapers are used for cutting cereal grains, threshers for separating the seed from the plant; whereas corn or maize harvesting is performed by employing a specially designed mechanical device 'mechanical corn pickers.' A typical harvesting machine comprises of a traveling part, a reaping part, and a baler part.

Harvesting machines are also used for controlling the production of weeds. Machines like field choppers, balers, mowers, crushers and windrowers are the common examples of this category. A forage harvester is used for cutting and chopping of almost all silage crops.

Types of Harvesting Machinery
Following is a brief description of major harvesting machines used all around the globe:

- **Crop Harvesting Machine:** The mechanical device which harvests forage crops cultivated in upland/paddy field and forms roll bale simultaneously was developed, is termed as crop harvesting machinery. It comprises of traveling, reaping and a baler part.
- **Grain Harvesting Machine:** This machine is used to harvest grains, the edible brans or fruit seeds of a cereal crop.
- **Root crop Harvesting Machine:** Traditionally root crops are harvested with diggers and digger-pickers. Now a days, several machines are available in the market. Modern sugar-beet harvester is one of the most popular examples of the root crop harvesting machine.
- **Threshers:** Threshers or threshing machine is used for the separation of grain from stalks and husks.
- **Vegetable Harvesting Machine:** Nowadays, machines are also available for the harvesting of vegetables. These 'vegetable harvesting machines', are quite common among the global vegetable farmers. Tomato harvesting machine is the most common example of this.

Exercise 3. Answer the following questions:

1. What is Harvesting Machinery?
- 2) What types of harvesting machinery do you know?

- 3) What is crop Harvesting Machine?
- 4) For what purposes is used grain Harvesting Machine?
- 5) Give an example of root crop Harvesting Machine.
- 6) Call vegetable Harvesting Machine.

Exercise 4. Make a plan to the text.

Exercise 5. Find English equivalents.

В наши дни, механическое устройство, рисовое поле, типичная машина для сборки урожая, пример из этой категории, использоваться, сбор овощей.

Exercise 5. Make a dialog.

ПРИЛОЖЕНИЕ 1

АНГЛО-РУССКИЙ СЛОВАРЬ ТЕРМИНОВ

Сокращения

a – *adjective* – прилагательное
adv – *adverb* – наречие
n – *noun* – существительное
pl – *plural* – множественное число
v – *verb* – глагол

adaptability n - приспособляемость
aeration n - аэрация (почвы)
affect v – влиять (на что-либо)
alfalfa n – люцерна
apply v – применять, вносить
attachment n - приспособление
automation n - автоматизация
bedding n – подстилка
body n – орган
breeder n – селекционер, животновод
broadcast v – разбрасывать (семена и др.)
carbohydrate n - углевод
care n – уход, забота; *v* заботиться
closely adv – тесно
coarse a – крупный (о семенах)
common a – обычный, распространённый
compaction n - уплотнение
concentrate n - концентрированный корм, концентрат

condition *n*- состояние, кондиция
 control *n* – борьба, контроль; *v* бороться, контролировать
 cost *n* – стоимость, себестоимость; *pl* затраты, издержки
 cover *v* – заделывать(семена)
 cowshed *n* – хлев, коровник
 crop *n* - (с.-х.) культура
 crossbreeding *n* - кросс-бридинг (скрещивание неродственных особей)
 cultivation *n*- выращивание, возделывание; обработка
 cutter *n* – резальная машина
 dairy *a* – молочный
 depreciation *n*- амортизация, износ
 digestible *a* – перевариваемый, усвояемый
 digestion *n* - переваривание, усвоение
 digger *n* - копалка
 draft *a* - тягловый, рабочий (скот)
 dual-purpose (cattle) *a*- мясо-молочный скот
 economics *n* – экономика
 economy *n* – экономика, хозяйство
 efficiency *n* – эффективность, производительность
 electronic *a* – электронный
 employment *n*- занятость
 farming *n* – ведение хозяйства, земледелие
 fibre *n* – клетчатка
 fibrous *a* - мочковатый (о корне)
 fine *a* – мелкокомковатый (о почве), мелкий (о семенах)
 firm *a* – уплотнённый, осевший (о почве)
 flock *n* – отара
 gain *v* – прибавлять в весе
 germination *n* – прорастание
 grass *n* – злак, трава
 grinder *n* – дробилка
 grower *n* – фермер, колхозник; производитель
 herbicide *n* – гербицид
 high-yielding *a* – высокоурожайный, высокоудойный
 inbreeding *n*- инбридинг (родственное спаривание)
 indication *n* - показатель
 indigestible *a* – непереваримый
 insecticide *n* - инсектицид
 kind *n* - вид
 labour-consuming *a* - трудоёмкий
 legume *n* – бобовое растение
 lifter *n* - подъёмное приспособление
 maintenance *n* – поддержание, сохранение
 management *n* – содержание, управление

markedly *adv* заметно
 marketing *n* – реализация, сбыт
 mellow *a* – рыхлый, спелый
 mobility *n* – подвижность, мобильность
 mount *v* – навешивать
 nutrient *n* – питательное вещество; *a* питательный
 nutritional *a* – пищевой
 overfeed *v* – перекармливать
 photosynthesis *n* – фотосинтез
 picker *n* – уборочная машина
 planter *n* – посадочная машина
 power *n* – энергия; *v* приводить в движение
 practice *n* – приём
 production *n* – возделывание, производство
 productivity *n* – производительность, продуктивность
 profitability *n* – рентабельность, прибыльность
 profitable *a* – рентабельный, прибыльный
 purebred *a* – чистопородный
 rainfall *f* *n* – осадки
 remove *v* – выносить (питательные вещества из почвы)
 robotization *n* – роботизация
 roll *v* – прикатывать (почву)
 roller *n* – каток
 roughage *n* – грубый корм
 seedbed *n* – пашня
 self-propelled *a* – самоходный
 set *v* – устанавливать, налаживать
 sheep-pen *n* – овчарня, загон для овец
 sire *n* – производитель (о животных)
 soybeans *n* – соя
 spread *v* – разбрасывать
 stand *n* – всходы, травостой, стеблестой
 supplement *n* – добавка
 tap *a* – стержневой (о корне)
 technology *n* – технология
 tractor-drawn *a* – на тракторной тяге
 tuber *n* – клубень
 underfeed *v* – недокармливать
 unloader *n* – разгрузочная машина
 utilization *n* – использование
 variety *n* – сорт
 yield *n* – урожай, надой (молока)

Заключение

Модернизация образования в учреждениях, осуществляющих профессиональное обучение, связана с реализацией компетентного подхода. Данный подход предусматривает формирование компетенций, которые определяют профессионализм и конкурентоспособность будущего специалиста.

Практико-ориентированное содержание данного учебного пособия позволяет развить у обучающихся навыки чтения, перевода и общения по различным темам специальности Эксплуатация и ремонт сельскохозяйственной техники и оборудования. Применение разнообразных методов и приемов, таких как групповая работа, обсуждение проблемных вопросов, решение задач, монологическое высказывание, способствует лучшему пониманию материала и его практическому применению.

Кроме того, учебное пособие включает в себя и воспитательный аспект, направленный на формирование у обучающихся чувства гордости за достижения отечественной техники, развитие их познавательных интересов, и воспитание уважения к техническому прогрессу.

Литература

- 1.Малецкая, О. П. Английский язык: учебное пособие для спо / О. П. Малецкая, И. М. Селевина. — 2-е изд., стер. — Санкт-Петербург: Лань, 2021. — 136 с. — ISBN 978-5-8114-8057-9.
- 2.Г.В. Маслова - Пособие для сельскохозяйственных техникумов «Английский язык», Москва, 2001
- 3.Е.Н. Комарова - Английский язык для специальностей «Зоотехния» и «Ветеринария» , - М., 2008
- 4.<http://www.englisharticles.info/2010/10/14/farming-mechanization/>
- 5.<http://www.gov.pe.ca/af/agweb/index.php3?number>

