

МИНИСТЕРСТВО СЕЛЬСКОГО ХОЗЯЙСТВА РОССИЙСКОЙ ФЕДЕРАЦИИ  
ДЕПАРТАМЕНТ ОБРАЗОВАНИЯ, НАУЧНО-ТЕХНОЛОГИЧЕСКОЙ ПОЛИТИКИ  
И РЫБОХОЗЯЙСТВЕННОГО КОМПЛЕКСА

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ  
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ  
«ДОНСКОЙ ГОСУДАРСТВЕННЫЙ АГРАРНЫЙ УНИВЕРСИТЕТ»  
(ФГБОУ ВО Донской ГАУ)

АЗОВО-ЧЕРНОМОРСКИЙ ИНЖЕНЕРНЫЙ ИНСТИТУТ – ФИЛИАЛ  
ФЕДЕРАЛЬНОГО ГОСУДАРСТВЕННОГО БЮДЖЕТНОГО ОБРАЗОВАТЕЛЬНОГО  
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«ДОНСКОЙ ГОСУДАРСТВЕННЫЙ АГРАРНЫЙ УНИВЕРСИТЕТ» В Г. ЗЕРНОГРАДЕ  
(Азово-Черноморский инженерный институт ФГБОУ ВО Донской ГАУ)

Кафедра гуманитарных дисциплин  
и иностранных языков

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**АНГЛИЙСКИЙ ЯЗЫК  
ДЛЯ НАПРАВЛЕНИЯ ПОДГОТОВКИ  
«Землеустройство и кадастры»**

*Учебное пособие*

Зерноград – 2022

УДК 338.2 (076)

*Печатается по решению методической комиссии  
по направлению подготовки  
21.03.02 – Землеустройство и кадастры  
Азово-Черноморского инженерного института  
федерального государственного бюджетного образовательного  
учреждения высшего образования  
«Донской государственный аграрный университет» в г. Зернограде*

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**Новикова, Ю.В.** Английский язык для направления подготовки «Землеустройство и кадастры»: учебное пособие / Ю.В. Новикова. – Зерноград: Азово-Черноморский инженерный институт ФГБОУ ВО Донской ГАУ, 2022. – 31 с.

Учебное пособие составлено в соответствии с ФГОС ВО для подготовки бакалавров по направлению подготовки «Землеустройство и кадастры», профиль «Землеустройство». Цель данного пособия – формирование и совершенствование навыков чтения и перевода аутентичных текстов у студентов по направлению подготовки «Землеустройство и кадастры», расширение, закрепление у обучающихся лексического запаса в области их будущей профессиональной деятельности, развитие навыков устной речи, формирование профессионально ориентированной коммуникативной компетенции. Пособие предназначено как для аудиторной работы, так и для самостоятельной работы студентов.

Рассмотрено и одобрено на заседании кафедры гуманитарных дисциплин  
и иностранных языков.

Протокол № 4 от 23 ноября 2021 г.

Рассмотрено и одобрено методической комиссией  
по направлению подготовки «Землеустройство и кадастры».

Протокол № 3 от 25 ноября 2021 г.

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Донской ГАУ, 2022

**СОДЕРЖАНИЕ**

Введение.....	4
My Profession of a Land Planner.....	5
Land-use Planning.....	8
The History of Land-use Planning.....	11
Land Resources.....	15
Land-use Activities.....	18
What is Land Cadastre?.....	21
Дополнительные тексты.....	25
Литература.....	30

## ВВЕДЕНИЕ

Предлагаемое учебное пособие предназначено для аудиторных практических и самостоятельных занятий по иностранному языку для студентов по направлению подготовки «Землеустройство и кадастры» и является профессиональным дополнением к общему базовому курсу английского языка.

Пособие включает шесть тем: «My Profession of a Land Planner» («Моя профессия – землестроитель»), «Land-use Planning» («Землеустройство»), «The History of Land-use Planning» («История землеустройства»), «Land Resources» («Земельные ресурсы»), «Land-use Activities» («Направления деятельности в землеустройстве»), «What is Land Cadastre?» («Что такое земельный кадастр?»). Тексты, представленные в данном пособии, связаны с различными аспектами землеустройства и кадастров, содержат профессиональные лексические единицы. Темы сопровождаются упражнениями и заданиями, направленными на развитие продуктивных и рецептивных иноязычных навыков.

Вторая часть пособия содержит дополнительные тексты профессиональной направленности, чтение которых направлено на развитие навыков самостоятельной работы студентов.

Пособие разработано в соответствии с требованиями рабочей программы дисциплины по иностранному языку для направления подготовки «Землеустройство и кадастры», профиль «Землеустройство».

## My Profession of a Land Planner

### Vocabulary

1. **land planning (planning)** – землеустройство
2. **land planner (planner)** – землеустроитель
3. **Bachelor's degree** – степень бакалавра
4. **interpreter (n)** – истолкователь
5. **landmark (n)** – межевой знак
6. **records (n, pl)** – учётно-отчётные материалы
7. **impact (v)** – влиять
8. **real property** – недвижимое имущество
9. **primary asset** – главное имущество
10. **survey (n, v)** – землемерная, геодезическая, топографическая съёмка местности; проводить землемерную, геодезическую, топографическую съёмку местности
11. **build layouts** – создавать схемы (макеты)
12. **topographical survey** – топографическая съёмка
13. **property boundary** – граница собственности
14. **determine (v)** – определять
15. **evidence (n)** – доказательство
16. **weigh the evidence** – оценить доказательства
17. **fairly (adv)** – честно
18. **re-establish a boundary** – восстановить границу
19. **legislation (n)** – законодательство
20. **bylaw (n)** – подзаконный акт
21. **legal (adj)** – юридический
22. **enjoyable (adj)** – приятный
23. **public access** – публичный доступ
24. **salary (n)** – зарплата
25. **take on a responsibility** – взять ответственность
26. **compensate (v)** – компенсировать
27. **appropriately (adv)** – соответствующе

### 1. Переведите слова и производные от них.

- survey (n) – planning (n) – planner (n)  
 intellect (n) – intellectual (adj)  
 technology (n) – technological (adj)  
 interpret (v) – interpreter (n)  
 provide (v) – provider (n)  
 direct (adj) – directly (adv)  
 responsible (adj) – responsibility (n)  
 expect (v) – expectation (n)  
 weigh (v) – weight (n)  
 evident (adj) – evidence (n)

establish (v) – re-establish (v)  
 science (n) – scientific (adj)  
 legal (adj) – legislation (n)  
 law (n) – bylaw (n)  
 appropriate (adj) – appropriately (adj)

## 2. Прочитайте текст и переведите его на русский язык.

### My Profession of a Land Planner

**Land planning** can be very physical work. But there is a strong intellectual and technological component as well. To become a **land planner** you need to get a **Bachelor's degree** in technology or land planning. Land planners are the **interpreters** and providers of **landmarks** and **records** that directly **impact real property**. Land planning is a responsible job because land is often people's **primary asset**. Land planners deal with many types of **surveys**, **build layouts** and **topographical surveys**, survey **property boundaries**. Property boundaries often need to be **determined** based on **evidence** and plans that are old, and done with different technology and expectations than we have today. Learning how to **weigh evidence** and **fairly re-establish a boundary** can be as much an art as a science. So land planners spend much time reading **legislation**, **bylaws**, and engineering documents. They also spend much time in the field using their instrument. The worst part of the job is to spend much time in the snow, smoke and hail to find **legal** evidence. The most **enjoyable** part of the job is working in unique and beautiful places that are often closed for **public access**. As for a land planner's **salary**, professional land planners **take on** a lot of **responsibility**, and should be **compensated appropriately**.

## 3. Ответьте на вопросы к тексту.

1. What kind of works is land planning?
2. What kind of education should one get to become a land planner?
3. Prove that a job of a land planner is responsible.
4. What do land planners deal with?
5. Where do land planners spend most of their time?
6. What is the worst part of the job of a land planner?
7. What is the most enjoyable part of the job?
8. How much do planners get?

## 4. Ответьте, соответствуют ли следующие утверждения тексту «My Profession of a Land Planner» или нет.

1. Land planning is always intellectual work.
2. To become a land planner you need to get a Master's degree.
3. Land planners are the interpreters of the Bible.
4. Property boundaries based on old plans are impossible to be interpreted.

5. Land planners spend much time reading legislation, bylaws, and engineering documents.
6. The worst part of the job is to spend much time under difficult weather conditions.
7. A land planner's salary is rather good.

**5. Переведите словосочетания с английского языка на русский:**

land planning; intellectual component; a Bachelor's degree; real property; salary a responsible job; people's primary asset; property boundaries; weigh evidence; spend much time; legal evidence; public access; as for.

**6. Переведите словосочетания с русского языка на английский:**

физическая работа; землеустроитель; землеустройство; межевой знак; иметь дело с; создавать схемы; недвижимость; топографическая съемка; оценить доказательства; техническая документация; самое неприятное; самое приятное; брать на себя ответственность; компенсируется.

**7. Вставьте пропущенное: physical, instrument, art, landmarks, surveys, layouts, primary, Bachelor's degree, enjoyable, spend.**

1. Land planning can be very ... work.
2. To become a land planner you need to get a ... in technology.
3. Land planners are the interpreters of ... and records.
4. Land is often people's ... asset.
5. Land planners deal build ... and topographical ... .
6. Learning how to re-establish a boundary can be as much an ... as a science.
7. Land planners spend much time in the field using their .. .
8. The worst part of the job is to ... much time in the snow.
9. The most ... part of the job is working in unique and beautiful places.

## Land-use Planning

### Vocabulary

1. **land-use planning (planning)** (n) – землеустройство
2. **assessment** (n) – оценка
3. **in order to** – для того, чтобы
4. **purpose** (n) – цель
5. **meet the needs** – удовлетворить потребности
6. **driving force** – движущая сила
7. **improved management** – совершенствование управления
8. **rural land use** – землепользование в сельских районах
9. **guidance** (n) – разработать указания
10. **valuable** (adj) – ценный
11. **meet conditions** – удовлетворить условиям
12. **unwanted change** – нежелательные изменения
13. **political will** – политическая воля
14. **put into effect** – вступить в силу
15. **apply** (v) – применить
16. **make the best of** – воспользоваться наилучшим образом
17. **according to** – в соответствии
18. **labour and capital available** – имеющиеся трудовые ресурсы и капитал
19. **take into account** – принять в расчет
20. **rigorous methods** – точные методы

### 1. Переведите слова и производные от них.

- system (n) – systematic (adj)  
 assess (v) – assessment (n)  
 economy (n) – economic (adj)  
 select (v) – selection (n)  
 adopt (v) – adaptation (n)  
 practice (n) – practise (v)  
 drive (v) – driving (adj)  
 plan (n) – planning (n)  
 improve (v) – improvement (n)  
 guide (n) – guidance (n)  
 industry (n) – industrial (adj)  
 expand (v) – expansion (n)  
 value (n) – valuable (adj)  
 use (n) – useful (adj)  
 wanted (part.) – unwanted (part.)  
 politics (n) – political (adj)  
 effect (n) – effective (adj)  
 apply (v) – application (n)  
 farm (n) – farmer (n)  
 complex (adj) – complexity (n)



## 2. Прочитайте текст и переведите его на русский язык.

### Land-use Planning

**Land-use planning** is the systematic **assessment** of land and water potential, alternatives for land use and economic and social conditions **in order to** select and adopt the best land-use options. Its **purpose** is to select and put into practice those land uses that will best **meet the needs** of the people. The **driving force** in planning is the need for change, the need for **improved management** or the need for a quite different pattern of land use dictated by changing circumstances. All kinds of **rural land use** are involved: agriculture, pastoralism, forestry, wildlife conservation and tourism. Planning also **provides guidance** in cases of conflict between rural land use and urban or industrial expansion, by indicating which areas of land are most **valuable** under rural use.

Two **conditions** must be **met** to make planning useful:

- the need for changes in land use, or action to prevent some **unwanted change**, must be accepted by the people involved;
- there must be the **political will** and ability to **put the plan into effect**.

Land use planning is **applied to make the best use of** land. Over the years, farmers have made plans season after season, deciding what to grow and where to grow it. Their decisions have been made **according to** their own needs, their knowledge of the land and the technology, **labour and capital available**. Land planners take into account the size of the area, the number of people involved and the complexity of the problems, so they need information and **rigorous methods** of analysis and planning.

### 3. Ответьте на вопросы к тексту.

1. What is land-use planning?
2. What is its purpose?
3. What kinds of rural land use are involved?
4. What two conditions must be met to make planning useful?
5. Why is land use planning useful?

### 4. Ответьте, соответствуют ли следующие утверждения тексту «Land-use Planning» или нет.

1. Land-use planning is the random assessment of land and water potential.
2. Land-use planning is needed to select and adopt the best land-use options.
3. Its purpose is to select and put into practice those land uses that will best meet the needs of the large organizations.
4. The driving force in planning is the need for improved management.
5. Planning also provides guidance in cases of conflict between rural land use and urban or industrial expansion.
6. There are two conditions that must be met to make planning useful: an individual and a political ones.
7. Land planners take into account only the size of the area.

**5. Переведите словосочетания с английского языка на русский:**

land-use planning; land and water potential; economic conditions; in order to; meet the needs; driving force; improved management; provide guidance; areas of land; rural use; meet conditions; unwanted change; make the best use; capital available; take into account.

**6. Переведите словосочетания с русского языка на английский:**

систематическая оценка; земельные и водные ресурсы; социальные условия; стратегии землепользования; **реализовать виды землепользования**; совсем другая модель; землепользование в сельское местности; сохранение живой природы; предотвратить нежелательные изменения; политическая воля; реализовать план; в соответствии с; количество задействованных людей; сложность проблем; точные методы.

**7. Вставьте пропущенное: change, size, best, conflict, tourism, systematic, select, rigorous, according.**

1. Land-use planning is the ... assessment of land and water potential.
2. Its purpose is to ... and put into practice those land uses that will best meet the needs of the people.
3. The driving force in planning is the need for ... .
4. All kinds of rural land use are involved: agriculture, pastoralism, forestry, wildlife conservation and ... .
5. Planning also provides guidance in cases of ... between rural land use and urban or industrial expansion.
6. Land use planning is applied to make the ... use of land.
7. Farmers' decisions have been made ... to their own needs.
8. Land planners take into account the ... of the area.
9. Land planners need information and ... methods of analysis and planning.

## The History of Land-use Planning

### Vocabulary

1. **landownership** (n) – землевладение
2. **determine** (v) – определять
3. **terrestrial position** – наземное положение
4. **establish** (v) – устанавливать
5. **accurate** (adj) – точный
6. **rope stretcher** – канатонатягиватель
7. **rope** (n) – канат
8. **the Groma** – грома (измерительный и геодезический инструмент древнеримских агрименсоров)
9. **constellation** (n) – созвездие
10. **dioptr** (n) [daɪ'ɒptə] – диоптр
11. **portable tool** – переносной измерительный прибор
12. **culmination** (n) – верхняя часть, верхушка
13. **cogwheel** (n) – зубчатое колесо
14. **William the Conqueror** – Вильгельм Завоеватель
15. **land plot** – участок земли
16. **Domesday Book** ['du:mzdeɪ,bʊk] – Книга Судного Дня
17. **record** (n) – запись, перепись
18. **create** (v) – создавать
19. **theodolite** (n) – теодолит (угломерный инструмент)
20. **precise** (adj) – точный
21. **setup** (n) – установка
22. **tripod** (n) – треножник; тренога; штатив
23. **triangulation** (n) – триангуляция
24. **error** (n) – ошибка
25. **rely** (v) – основываться
26. **global positioning system** (GPS) – глобальная (спутниковая) система определения местоположения
27. **GIS software** – геоинформационная система, ГИС
28. **laser scanner** – лазерный сканер
29. **terrestrial scanning** – геосканирование

### 1. Переведите слова и производные от них.

- important (adj) – importance (n)  
 develop (v) – development (n)  
 own (adj) – owner (n) – ownership (n) – landownership (n)  
 determine (v) – determination (n)  
 accurate (adj) – accurately (adv)  
 engineer (n) – engineering (n)  
 tax (n) – taxation (n)  
 stretch (v) – stretcher (n)

China (n) – Chinese (adj)  
 magnet (n) – magnetic (adj)  
 terra (n) – terrestrial (adj)  
 portable (adj) – portability (n)  
 culminate (v) – culmination (n)  
 record (n) – record (v)  
 order (n) – order (v)  
 describe (v) – description (n)  
 scan (v) – scanner (n)  
 computer (n) – computerization (n)

## 2. Прочитайте текст и переведите его на русский язык.

### The History of Land-use Planning

Land planning is an important aspect of real estate, property development, and **landownership**. It is the process or **determining** the **terrestrial position** of points on a property, as well as the distances/angles between them. Land planning **establishes accurate** maps for real estate purposes, using complex elements of engineering, geometry, physics, and mathematics.

Land planning is an ancient practice that dates back at least to 1,400 B.C., when the ancient Egyptians used land planning for the taxation of land plots. The name for Egyptian planners was «harpedonaptae», which means «**rope stretchers**» through translation. The planners used **a rope** to measure distances and mark significant places.

An early planning instrument that came after the Egyptian's rope method is **the Groma**. The Romans and Greeks used the Groma in land planning as early as 400 B.C. This helped establish land planning as a profession for the first time in history.

The Chinese invented the first magnetic compass around 221–206 B.C. They used the first compass to mark **constellations** and map out important points and boundaries.

Around 120 B.C., the Greeks further developed geometry and created a new land planning tool called the **dioptra**. This was **a portable tool** that used a **culmination of a cogwheel** and water level to measure terrestrial and astronomical figures on a property.

**William the Conqueror** created a **record** of land plots as early as 1086. He ordered a «**Domesday Book**», which was a record of people who owned land in England and the size of the plots they owned.

Some new land planning tools were **created** between 1570 and 1787. Among them was the first **theodolite**. It is a highly **precise** instrument for land planning that uses a **setup** with a **tripod** and compass. Planners used theodolites to create boundary lines. Then there appeared a European **triangulation** in the 18<sup>th</sup>

century. It was a planning system that used large triangles to map points accurately and with little room for **error**.

By the early 1800s, industrial revolution led to a greater demand in profession of a land planner thanks to a rapid development of cities, roads, and railways. It was more important than ever to have accurate **land plot** measurements and descriptions.

In the 20<sup>th</sup> and 21<sup>st</sup> centuries, land planning has **relied** on the same basic methods and principles of measurement that have existed for thousands of years. The development of technologies such as global positioning systems (**GPS**), **GIS software**, **laser scanners**, and **terrestrial scanning** have made land planning more efficient and accurate, as well as faster and easier. The computerization of ancient methods has propelled the land planning industry forward, and continues to give this industry an important place in the world.

### 3. Ответьте на вопросы к тексту.

1. What is land planning?
2. Is land planning an ancient practice? If yes, prove it.
3. Which instrument appeared after the Egyptian's rope method?
4. What did the Chinese invent?
5. What did the Greeks further develop?
6. What is a diopter?
7. What book did William the Conqueror order to create?
8. What new land planning tools were created between 1570 and 1787?
9. Why was the profession of a land planner in a great demand during the industrial revolution?
10. Which new planning methods appeared in the 20<sup>th</sup> and 21<sup>st</sup> centuries?

### 4. Ответьте, соответствуют ли следующие утверждения тексту «The History of Land-use Planning» или нет.

1. Land planning is the process or determining the terrestrial position of points on a property.
2. Land planning establishes accurate maps for astronomy.
3. Land planning is an ancient practice that dates back at least to 1,400 B.C.
4. The name for Egyptian planners was «rope catchers».
5. An early planning instrument is the Groma.
6. The Groma established building as a profession for the first time in history.
7. The Chinese invented the Groma.
8. Around 120 B.C., the Greeks developed a new land planning tool called the diopter.
9. William the Conqueror created a record of land plots.
10. A «Domesday Book» is a record of people who owned land in England and the size of the plots they owned.
11. A theodolite was created between 1570 and 1787.

12. A triangulation is a highly precise instrument for land planning that uses a setup with a tripod and compass.

13. Global positioning systems appeared as early as 1900s.

**5. Переведите словосочетания с английского языка на русский:**

land planning; real estate; landownership; terrestrial position; accurate maps; ancient practice; rope stretchers; as early as 400 B.C; a portable tool; to measure terrestrial and astronomical figures; land plots; a planning system; with little room for error; industrial revolution; a greater demand; the same basic methods and principles of measurement; global positioning systems; software; laser scanners; terrestrial scanning.

**6. Переведите словосочетания с русского языка на английский:**

недвижимость; а также; сложные элементы; датироваться (относиться к); в переводе; измерить расстояния; отметить важные места; первый землеустроительный инструмент; примерно в 400 до н.э.; нанести на карту; переносной измерительный прибор; уровень воды; высокоточный инструмент; европейская триангуляция; с небольшой погрешностью; быстрое развитие; геосканирование; подтолкнуть развитие.

**7. Вставьте пропущенное: demand, magnetic compass, 1,400, terrestrial position, a rope, engineering, the Groma, a tool, global positioning systems, a «Domesday Book».**

1. Land planning is the process or determining the ... of points on a property.
2. Land planning uses complex elements of ..., geometry, physics, and mathematics.
3. Land planning is an ancient practice that dates back at least to ... B.C.
4. The planners used ... to measure distances and mark significant places.
5. An early planning instrument that came after the Egyptian's rope method is ... .
6. The Chinese invented the first ... around 221–206 B.C.
7. Around 120 B.C., the Greeks developed a tool called the diopter.
8. William the Conqueror created ... .
9. By the early 1800s, industrial revolution led to a greater ... in profession of a land planner.
10. In the 20<sup>th</sup> and 21<sup>st</sup> centuries, have made land planning more efficient and accurate.

## Land Resources

### Vocabulary

1. **define** – определить
2. **landscape** – ландшафт
3. **land fund** – земельный фонд
4. **average density of population** – средняя плотность населения
5. **alongside** – наряду
6. **high-fertile soil** – высокоплодородная почва
7. **low-yield soil** – низкоплодородная почва
8. **noticeably** – значительно
9. **subdivision** – подразделение
10. **sub-zone** – подзона
11. **podsolic soil** – подзолистая почва
12. **peatbog soil** – торфяно-болотная почва
13. **wood zone** – лесная зона
14. **occupy** – занимать
15. **flat territory** – равнинная территория
16. **arable land** – пахотная земля
17. **dwelling** – проживание
18. **forest-steppe** – лесостепь
19. **black earth soil** – чернозем
20. **Pre-Caucasian territory** – Предкавказская территория
21. **chestnut soil** – каштановая почва
22. **dark chestnut soil** – темнокаштановая почва
23. **semidesert** – полупустыня
24. **salinity** – солёность

### 1. Переведите слова и производные от них.

- define (v) – definition (n)  
 dense (adj) – density (n)  
 fertile (adj) – fertility (n)  
 noticeable (adj) – noticeably (adv)  
 divide (v) – division (n)  
 occupy (v) – occupation (n)  
 dwell (v) – dwelling (n)  
 Caucasus (n) – Caucasian (adj)  
 desert (n) – semidesert (n)  
 saline (adj) – salinity (n)  
 meliorate (v) – melioration (n)  
 climate (n) – climatic (adj) – bioclimatic (adj)  
 distribute (v) – distribution (n)  
 special (adj) – especially (adv)  
 Europe (n) – European (adj)  
 artificial (adj) – artificially (adv)

## 2. Прочитайте текст и переведите его на русский язык.

### Land Resources

Land resources may be **defined** as certain areas of the earth's surface with various **landscapes**, soils, climatic conditions and other different characteristics.

The **land fund** of the Russian Federation has nearly 1710 million hectares. **The average density of population** – 8,6 persons per square km. Soils in Russia are different. **Alongside** with **high-fertile soils** there are poor, **low-yield** ones, as well as the soils requiring melioration.

Bioclimatic conditions of land zones **noticeably** change from north to south. This fact determines **subdivision** of zones into **sub-zones**.

Tundra, taiga, **podsolic** and **peatbog soils** of these regions cover almost 40% of flat territories of Russia. **Wood zones occupy** about 14% of **flat territories** of Russia. They are characterized by different kinds of podsolic, sod-podsolic soils. The subzones of southern taiga and mixed woods lands are most agriculturally developed among all taiga territories. Agricultural lands occupy here 17,3% of total area including **arable lands** with about 10 %.

More than 70% of the territories of the country are hardly suitable for **dwelling** or agriculture. The most productive are the soils of **forest-steppes** and steppes of Russia. They cover more than 12% of all flat areas of the country. Gray wood soils, **black earth soils** and leach soils are most distributed in this region.

The European part of the country has even higher percentage of agricultural lands, especially in **Pre-Caucasian territories**. 85–90% of some regions of this zone are agricultural lands. It is a principle grain-producing area of Russia.

**Chestnut soils** are more typical of dry steppes (about 1,3% of the Russian Federation territory). Agricultural lands occupy more than 85% of the territories including arable lands with 52%, and pastures – about 34%. Arable lands are concentrated mainly in a subzone of **dark chestnut soils**. They are more fertile and better watered.

The zone of **semideserts** and deserts (0,9% of the Russian Federation) mainly consists of light chestnut and brown desert-steppe soils. Agriculture is possible only applying artificial irrigation. These soils are characterized by a low content of humus and almost universal salinity.

### 3. Ответьте на вопросы к тексту.

1. What are land resources?
2. What is the land fund of the Russian Federation?
3. How many percent do tundra, taiga, podsolic and peatbog soils occupy?
4. How many percent do wood zones occupy?
5. How many percent of the Russian territories aren't suitable for agriculture?
6. What are the most productive soils?
7. Are chestnut soils more typical of dry steppes?
8. What kinds of soils are semideserts and deserts characterized by?



**4. Ответьте, соответствуют ли следующие утверждения тексту «Land resources» или нет.**

1. The land fund of the Russian Federation has nearly 1710 million hectares.
2. The average density of population – 10 persons per square km.
3. Tundra, taiga, podsolic and peatbog soils of these regions cover almost 80% of flat Russia territories.
4. Wood zones are characterized by different kinds of podsolic, sod-podsolic soils.
5. More than 70% of the territories of the country are hardly suitable for dwelling or agriculture.
6. The most productive are the soils of forest-steppes and steppes of Russia.
7. The European part of the country is a principle grain-producing area of Russia.
8. Chestnut soils are characteristic of semideserts.
9. Arable lands are concentrated mainly in a subzone of dark chestnut soils.

**5. Переведите словосочетания с английского языка на русский:**

various landscapes; climatic conditions; land zones; podsolic soils; peatbog soils; total area; arable lands; hardly suitable; gray wood soils; black earth soils; dry steppes; light chestnut soils; universal salinity.

**6. Переведите словосочетания с русского языка на английский:**

земельные ресурсы; земельный фонд; поверхность земли; средняя плотность населения; высокоплодородные почвы; низкоплодородные почвы; с севера на юг; лесная зона; равнинная территория; плодородная земля; более чем; лесостепь; сельскохозяйственные земли; чернозём; предкавказская территория; хлебопроизводящий район; каштановая почва; полупустыня; искусственная ирригация; низкое содержание гумуса.

**7. Вставьте пропущенное: melioration, chestnut soils, north, flat territories, average density of population, defined, forest-steppes, dwelling.**

1. Land resources may be ... as certain areas of the earth's surface.
2. The ... is 8,6 persons per square km.
3. Low-yield soils require ... .
4. Bioclimatic conditions of land zones noticeably change from ... to south.
5. Wood zones occupy about 14 % of ... of Russia.
6. More than 70 % of the territories of the country are hardly suitable for ... or agriculture.
7. ... cover more than 12 % of all flat areas of the country.
8. ... are more typical of dry steppes.

## Land-use Activities

### Vocabulary

1. **forecast** – прогноз
2. **in view of** – с учетом
3. **town-planning** – градостроительный
4. **survey** – съемка
5. **establishment** – установление
6. **border** – граница
7. **administrative-territorial formation** – административно-территориальное образование
8. **land site** – участок земли
9. **owner** – владелец
10. **drawing up** – составление
11. **landed property** – собственность на землю
12. **delimitation of the land areas** – определение точных границ земель
13. **allotment** – распределение
14. **drawing** – схема
15. **certificate of rights to the land site** – свидетельство о праве собственности на землю
16. **reclaiming the tilled soils** – рекультивация пахотных земель
17. **mudflow** – сель
18. **landslide** – оползень
19. **flooding** – наводнение
20. **bogging** – заболачивание
21. **soil fertility** – плодородие почвы
22. **settlement** – населенный пункт
23. **boundary** – граница
24. **estimation of resources** – оценка ресурсов
25. **preservation** – сохранение
26. **carry out** – выполнять
27. **irrespective of** – независимо от
28. **special-purpose designation** – целевое назначение
29. **form of ownership** – форма собственности

### 1. Переведите слова и производные от них.

- forecast (n) – forecast (v)  
 plan (n) – planning (n)  
 survey (n) – survey (v)  
 establish (v) – establishment (n)  
 border (n) – border (v)  
 own (v) – owner (n)  
 delimit (v) – delimitation (n)  
 allot (v) – allotment (n)  
 draw (v) – drawing (n)

reclaim (v) – reclaiming (n)  
 bog (n) – bogging (n)  
 fertile (adj) – fertility (n)  
 estimate (v) – estimation (n)  
 preserve (v) – preservation (n)  
 designate (v) – designation (n)

## 2. Прочитайте текст и переведите его на русский язык.

### Land-use Activities

The basic directions of land use planning in Russia include:

- development of federal and regional **forecasts**, programs of use and protection of land resources **in view of** town-planning, ecological, economic and other features;
- **survey with establishment** (restoration) on land the **borders of administrative-territorial formations**, the borders of **land sites owners**;
- **drawing up** new land use planning projects, existing **landed properties**;
- **delimitation of the land areas**, establishment of borders and **allotment** of land sites on district, registration of plans (**drawings**) of borders, preparation for the **certificate of rights to the land sites**;
- development of the projects for **reclaiming the tilled soils**, soil protection from water and wind erosion, **mudflow, landslides, flooding, bogging**, pollution by waste products of manufacture, chemical and radioactive substances, for improvement of agricultural lands, for development of new areas, preservation and increase of **soil fertility**;
- fixing and change on district of city, country and rural **settlements boundaries**;
- conducting topographical and geodetic, cartographical, soil, agrochemical, geobotanical, historical, cultural and other researching work;
- development of land use planning documents connected with **estimation of resources**, use and protection of land, **preservation** and development of historically used economic activities of small peoples and ethnic groups;
- drawing up maps and atlases of land resources conditions and use;
- land inventory.

Land use planning activity is **carried out** in all areas **irrespective of** their **special-purpose designation** and **forms of ownership** according to established order authorized by land use planning documentation.

## 3. Ответьте на вопросы к тексту.

1. What are the three basic directions of land-use in your opinion?
2. Where is land-use planning activity carried out?

## 4. Переведите словосочетания с английского языка на русский:

land-use planning; protection of land resources; administrative-territorial formation; land sites owners; landed properties; delimitation of the land areas;

registration of plans; certificate of rights to the land sites; reclaiming the tilled soils; soil protection; agricultural lands; soil fertility; researching work; economic activity; ethnic group.

**5. Переведите словосочетания с русского языка на английский:**

основное направление; программа использования; градостроительные особенности; установление границ; определение границ; оползень; регистрация планов; свидетельство о праве собственности; участок земли; эрозия; сель; наводнение; заболачивание; радиоактивные вещества; повышение плодородия почвы; документация по землеустройству; малый народ; инвентаризация земли; землеустроительная деятельность; независимо от; в установленном порядке.

**6. Вставьте пропущенное: tilled, waste, work, settlements, existing, borders, areas.**

1. Survey with establishment (restoration) on land the ... of administrative-territorial formations.
2. Drawing up ... landed properties.
3. Delimitation of the land ... .
4. Development of the projects for reclaiming the ... soils.
5. Pollution by ... products of manufacture.
6. Fixing and change on district of city, country and rural boundaries.
7. Conducting topographical and geodetic ... .

## What is Land Cadastre?

### Vocabulary

1. **manage** (v) – заниматься
2. **description** (n) – описание
3. **record** (n) – запись
4. **ownership** (n) – владение, собственность
5. **value** (n) – ценность
6. **parcel** (n) – участок
7. **establish a cadastre** – составить кадастр
8. **fiscal purposes** – в целях налогообложения
9. **valuation** (n) – оценка
10. **equitable taxation** – объективное налогообложение
11. **conveyancing** – составление нотариальных актов о передаче имущества
12. **management of land** – управление е землей
13. **encompass** (v) – включать
14. **land resource capacity** – производительная продуктивность земельных ресурсов
15. **land tenure** – землевладение
16. **land ownership** – землевладение
17. **land duration of rights** – период действия прав собственности на землю
18. **restriction** (n) – ограничение
19. **responsibility** (n) – ответственность
20. **with respect to** – в отношении
21. **leasehold** (n) – владение на правах аренды
22. **easement** (n) – право прохода, проведения освещения по чужой земле
23. **mortgage** (n) – ипотека, закладная
24. **common land tenure** – обычное землевладение
25. **communal land tenure** – общинное землепользование
26. **customary land tenure** – обычное землевладение
27. **cadastral planning** – кадастровая съемка
28. **mapping** (n) – нанесение на карту, топографическая съёмка
29. **land valuation** – оценка земли
30. **data base** – база данных
31. **resolve land disputes** – решить споры по земле
32. **custody** (n) – хранение
33. **survey instrument** – геодезический прибор
34. **satellite position fixing** – спутниковое определение местности
35. **aerial photography** – аэрофотосъёмка
36. **photogrammetry** (n) – фотограмметрия
37. **lower the costs** – снизить затраты
38. **manipulation** (n) – применение
39. **trained personnel** – обученный персонал
40. **facilities** (n, pl) – средства обслуживания
41. **maintain the equipment** – обслуживать оборудование

### 1. Переведите слова и производные от них.

manage (v) – management (n)  
 record (n) – record (v)  
 own (adj) – owner (n) – ownership (n)  
 improve (v) – improvement (n)  
 fiscal (adj) – fiscality (n) – fiscally (adv)  
 value (v) – valuation (n)  
 tax (n) – taxation (n)  
 convey (v) – conveyance (n) – conveyancing (n)  
 administration (n) – administrative (adj)  
 restrict (v) – restriction (n)  
 responsible (adj) – responsibility (n)  
 locate (v) – location (n)  
 improve (v) – improvement (n)  
 easy (adj) – easement (n)  
 commune (n) – communal (adj)  
 customer (n) – customary (adj)  
 survey (n) – planning (n)  
 cadastre (n) – cadastral (adj)  
 map (n) – mapping (n)  
 graphics (n) – graphic (adj)  
 dispute (n) – dispute (v)  
 fix (v) – fixing (n)  
 position (n) – positioning (n)  
 air (n) – aerial (adj)  
 low (adj) – lower (v)  
 cost (n) – cost (v)  
 access (n) – access (v)  
 manipulate (v) – manipulation (n)  
 full (adj) – fully (adv)  
 train (v) – trained (adj)  
 maintain (v) – maintenance (n)

### 2. Прочитайте текст и переведите его на русский язык.

#### What is Land Cadastre?

A Cadastre is a land information system, usually **managed** by one or more government agencies. It usually includes a geometric **description** of land parcels linked to other **records** describing the nature of the interests, and **ownership** or control of those interests. It often describes the **value** of the **parcel** and its improvements. It may be **established** for **fiscal purposes** (e.g. **valuation** and **equitable taxation**), legal purposes (**conveyancing**), to assist in the **management of land** and land use for planning and other administrative purposes.

The Land Cadastre **encompasses** such information as **land resource capacity, land tenure, land ownership** and different land uses. The Cadastre provides:

- information identifying those people who have interests in parcels of land;
- information about those interests, e.g. **land duration of rights, restrictions and responsibilities;**
- information about the parcel, e.g. location, size, improvement, value.

Land tenure is concerned with the rights, restrictions and responsibilities that people have **with respect to** the land. The Cadastre may record different forms of land tenure such as ownership, **leasehold, easements, mortgages** and different types of **common, communal or customary land tenure**.

The Planner may be responsible for:

- **cadastral planning and mapping;**
- recording of cadastral information;
- **land valuation;**
- land use planning;
- management of both the graphic and textual cadastral **data bases** ;
- **resolving land disputes;**
- **custody** and supply of cadastral information.

Modern technology, such as up-to-date **survey instruments, satellite position fixing** (Global Positioning System – GPS), **aerial photography and photogrammetry** can offer new possibilities to increase the speed and **lower the costs** for cadastral services. Computer technology can usually provide better access to information, better **manipulation** of cadastral data, better quality, and better legal and physical security. To fully utilize modern technology it is important to have **trained personnel and facilities to maintain** the equipment.

### 3. Ответьте на вопросы к тексту.

1. What is Land Cadastre?
2. What information does a Cadastre include?
3. What is land tenure?
4. What forms of land tenure can you name?
5. What is a land-use planner responsible for?
6. Can computer technology provide better access to information?
7. What modern cadastral technologies can you name?

### 4. Переведите словосочетания с английского языка на русский:

a land information system; government agencies; a geometric description; land parcel; nature of the interests; value of the parcel; fiscal purposes; land resource capacity; land tenure; land ownership; land duration of rights; with respect to the land; cadastral planning; cadastral mapping; land valuation; cadastral data base; up-to-date survey instruments; aerial photography.

**5. Переведите словосочетания с русского языка на английский:**

государственные органы; административные вопросы; составление нотариальных актов о передаче имущества; справедливое налогообложение; управление земельными ресурсами; период действия прав собственности на землю; землевладение; право прохода, проведения освещения по чужой земле; ипотека; обычное землевладение; общинное землепользование; обычное землевладение; решить земельные споры; нанесение кадастровой информации на карту; хранение и предоставление кадастровой информации; спутниковое определение местности; аэрофотосъемка; снизить затраты; современная технология; обученный персонал.

**6. Вставьте пропущенное: value, land, geometric, costs, restrictions, planning, trained.**

1. A Cadastre is a ... information system.
2. A Cadastre usually includes a ... description of land parcels.
3. A Cadastre often describes the ... of the parcel and its improvements.
4. Land tenure is concerned with the rights, ... and responsibilities that people have with respect to the land.
5. The Planner may be responsible for cadastral ... and mapping.
6. Modern technology can offer new possibilities to increase the speed and lower the ... for cadastral services.
7. To fully utilize modern technology it is important to have ... personnel.



## Дополнительные тексты

### Principles of Land-use planning

On the basis of long-term investigations some principles of land use planning are presented.

Land use planning is a dialogue, creating the prerequisites for the successful negotiation and co-operation among stakeholders.

The core task of land use planning consists of initiating a communication and co-operation process which «allows all participants to formulate their interests and objectives in the dialogue». On the basis of sound decisions a sustainable form of land use is proposed «where by the aims and interests of other participating group are taken into account to the greatest possible extent».

An important element of participation-oriented land use planning is the identification of the various groups of participants and differentiating them in terms of their use and access to land resources. In addition, their position on the social scale and their capacities, either as stakeholders or as members of authorities and other organizations have to be considered. Land use planning takes into account cultural viewpoints and builds up on local environmental knowledge.

Rural societies or groups can often provide complex indigenous knowledge of the environment. If this is the case, such local knowledge should be a part of the basis for planning and implementing a sustainable land use. Land use planning takes also into consideration traditional strategies for solving problems and conflicts.

Traditional rural societies have their own way of approaching problems and settling conflicts concerning land use. In the process of land use planning, such mechanisms have to be recognized, understood and taken into account. Land use planning requires transparency. Therefore, free access to information for all participants is a prerequisite.

Transparency in planning and the extent to which stakeholders are informed, strengthen both their willingness and capacity to participate in planning and decision-making. It increases the motivation of the people for creating sustainable results. An open exchange of information leads to discussions about objectives among the key figures and promotes the willingness to reach a consensus. The dissemination of information in the local language(s) contributes to an improved transparency. In addition, it strengthens the trust of the population in land use planning activities.

The differentiation of stakeholders and the gender approach are core principles in land use planning. A prerequisite for realistic land use planning is the detailed analysis of the various interest groups. The aim is to find out the various interests of the participants in order to create a basis for the negotiation and decision-making process. Men and women often do not have the same access to land and have specific ways of articulating themselves. Different interests are arising from the economic and social character of their role and scope of duties.

Therefore, the role of gender is an important criterion when differentiating stakeholders.

Land use planning is implementation-oriented. Land use planning has to consider how the negotiated decisions are to be implemented. Land use planning does not end with the land use plan.

The implementation of limited measures (e.g. the development of cultivation techniques which conserve land resources) plays an important role in increasing the trust of the people in the village as far as the planning process is concerned.

### **Methods of Land-use Planning**

The planning process should be based on the cadastral survey of land resources. The present situation must be taken into consideration. The land use planner is to decide what needs should be changed and how can the changes be made. He is also to find out which is the best option and how far is the plan succeeded.

This progression of questions has led to the formulation of a guide to land use planning – the planning cycle.

Land use planning is implemented at the national, regional or local level. At the national level land use policy is balanced upon the competing demands for land among different sectors of the economy – food production, export crops, wildlife conservation, housing and public amenities, roads, industry.

National development plans and budget must be taken into consideration as well as project identification and the allocation of resources for development. Sectoral agencies involved in land use must be coordinated. Legislation on such subjects as land tenure, forest clearance and water rights should be worked out by all means.

Regional level includes such siting of new developments as settlements, forest plantations and irrigation schemes. The need for improved infrastructure such as water supply, roads and marketing facilities is one of the main problems of this cycle. The development of management guidelines for improved kinds of land use on each type of land is also necessary.

Land use planning is oriented to local conditions in terms of both method and content. Planning approaches often fail because global models and implementation strategies are applied and taken over automatically and uncritically. But land use planning is not a standardized procedure which is uniform in its application world-wide. Its content is based on an initial regional or local situation analysis.

Local level provides the layout of drainage, irrigation and soil conservation work as well as the siting of specific crops on suitable lands.

## **Bottom-up and Top-down Planning**

There are two different planning strategies. Bottom-up land use planning assumes a concept which understands rural development to be a process based on self-help and self-responsibility. The population should actively participate in the process of land use planning. The result of planning and the implementation of measures can only be sustainable if plans are made with and by the people, not behind them or even against them. Planning is therefore not just a matter for experts, but should be carried out together with those affected by it. To ensure a feeling of ownership concerning self-help activities, people who are affected have to be involved in the planning process from the early beginning.

Starting at the local level, bottom-up planning means active participation of the land users who will eventually implement the land use plan already at the identification of the land use problem. The other stages of the planning cycle, help to identify and prioritize between different options.

In some cases, especially in situations involving large areas or large investments it might be more efficient to focus land use planning at higher administrative level. It is called top-down land use planning. It allows to get results of planning which will be integrated with existing planning administration and legislation.

The two planning strategies each have their own advantages and disadvantages and care should be taken not to rely upon only one strategy. Sometimes there are such actual planning situations when one should choose the most appropriate strategy to follow and often mix both of them to get the most satisfying result.

There are some of the advantages of bottom-up land use planning. They include local targets, management and benefits: people will be more enthusiastic about a plan seen as their own. More popular awareness of land use problems and opportunities are available. Plans can pay close attention to local constraints: natural resources or socio economic problems. Better information is fed upwards for higher levels of planning.

But there are also different disadvantages. Local interests some times can conflict with regional or national interests. Difficulties occur in integrating local plans within a wider framework. There is limited technical knowledge at the local level. Technical agencies need to make a big investment in widely scattered places. Local efforts may collapse because of a lack of higher-level support.

## **Land Resources**

Differences in soils quality and their suitability for various kinds of land tenure demand development of uniform system of classification. The following categories of lands may be distinguished:

1. Lands of agricultural enterprises, organizations, citizens, i.e. the territories that are directly used for agricultural purposes.
2. The lands under the jurisdiction of cities', settlements' and villages' administrations – the territories that are situated within the limits of inhabited localities.
3. The territories given to industrial enterprises, associations and organizations for realization of special tasks (industrial production, transport, communication, etc.)
4. Nature protection territories. Specially protected conservation areas with natural objects and complexes that have nature protection, scientific, aesthetic, recreational and sanitary value.
5. The wood fund lands – the territories with wood vegetation or assigned for its restoration.
6. The water fund territories: lakes, rivers, glaciers, swamp areas (except for tundra and forest-tundra zones), hydroengineering and other water reservoirs.
7. Reserve territories – these territories are not the subject of property or rent of legal or natural persons.

The total area of Russian soils subject to processes of desertification or potentially dangerous in this respect by various estimations may be from 50 up to 100 million hectares. They locate in the Volga region, Ciscaucasia, Transbaikalia and in other regions of the Russian Federation.

Sands occupy about 6,3 million hectares; they mainly lie in the territory of the Republic of Kalmykia and Astrakhansk region, on the terraces of the lower Don and its confluents, in Rostov and Volgograd regions. Ravines and gullies increase their areas from year to year (80–100 thousand hectares annually). They are distributed in many regions of the country, especially in mountain and foothill territories. In flat regions their fast formation is registered in Voronezh, Belgorod, Kursk, Orlov, Tambov, Lipetsk, Ryazan regions. Polar and boreal soil formation is most typical of the territory of the Russian Federation (the arctic, subarctic and taiga, Tulska region. The areas adjoining to the valleys of large rivers in the Volga region, are also characterized by high activity of gullies formation.

Conserved lands are mostly located in reserve territories (27 thousand hectares or 16% of the total area of conserved lands) and in the territories of agricultural enterprises, organizations and citizens – 120 thousand hectares or 70%.

## Different Cadastral Issues

There are a number of legal, technical, and operational cadastral issues that must be resolved according to the needs and constraints of each country or jurisdiction. Some of these are:

Documentation of informal or customary rights is sometimes connected to the establishment of land markets. In other cases the aim can be a document of a customary tenure system for land management purposes without changing the nature of the system or tenure relationships. In both cases it is essential that such reforms are only started after careful investigations of the need for and the consequences of the reform.

Land registration is the official recording of legally recognized interests in land and is usually a part of a cadastral system. From a legal perspective a distinction can be made between deeds registration, where the documents filed in the registry are the evidence of title, and registration of title, in which the register itself serves as the primary evidence. Title registration is usually considered as more advanced registration system, which requires more investment for introduction, but provides in principle greater security of tenure and more reliable information. Title registration usually results in lower transaction costs than deed registration systems thereby promoting a more efficient land market.

Land registration (land titling) can be undertaken sporadically at the time of each legal transaction or systematically, area by area. While the sporadic approach gives more immediate benefits to individual land holders, the systematic approach provides a wider range of benefits more quickly, especially if the land registry is a part of a more comprehensive land information system.

The basic unit in a Cadastre is known as the parcel. A parcel can be an area of land with a particular type of land use, or an area exclusively controlled by an individual or a group. A property may consist of several parcels. The flexibility of the definition of a parcel makes it possible to adapt the cadastral system to various circumstances, for instance to include large parcels to represent the interests of land use in traditional tenure systems.

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*Учебное издание*

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Английский язык  
для направления подготовки  
«Землеустройство и кадастры»

*Учебное пособие*

Учебное пособие  
к изданию в авторской редакции подготовила  
редактор Н.П. Лучинкина  
Верстка Ю.В. Новикова  
Дизайн обложки С.П. Вдовикина

Подписано в печать 24.12.2021.  
Формат 60×84/16. Усл. п.л. 1,8. Тираж 30 экз. Заказ № 2.

Отдел информационных технологий и издательской деятельности  
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