Unit 5: Agriculture, Food Production and Rural Land Use

Content Area: **Social Studies**
Course(s): **AP Human Geography**
Time Period: **February**
Length: **6 weeks**
Status: **Published**

Transfer Skills

Examine centers where domestication originated and study the processes by which domesticated crops and animals spread.

Enduring Understandings

PSO 5 Availability of resources and cultural practices influence agricultural practices and land-use patterns.

SPS 5 Agriculture has changed over time because of cultural diffusion and advances in technology.

IMP 5 Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and cultural opportunities and challenges.

Essential Questions

Why do humans settle in certain areas?

Why are industrial and service centers clustered in particular areas?

Where did agriculture originate?

How does one explain the diffusion of agriculture?

Why do people consume different foods?

In what ways has the globalization of agriculture impacted the world?

What are the impacts of aquaculture on developing nations?

What are the challenges faced in contemporary agriculture?

Content

Agricultural practices are influenced by the physical environment and climatic conditions, such as the Mediterranean climate and tropical climates.

Intensive farming practices include market gardening, plantation agriculture, and mixed crop/livestock systems.

Extensive farming practices include shifting cultivation, nomadic herding, and ranching.

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

Specific agricultural practices shape different rural land-use patterns.

Rural settlement patterns are classified as clustered, dispersed, or linear.

Rural survey methods include metes and bounds, township and range, and long lot.

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

Early hearths of domestication of plants and animals arose in the Fertile Crescent and several other regions of the world, including the Indus River Valley, Southeast Asia, and Central America.

Patterns of diffusion, such as the Columbian Exchange and the agricultural revolutions, resulted in the global spread of various plants and animals.

Agriculture has changed over time because of cultural diffusion and advances in technology.

New technology and increased food production in the second agricultural revolution led to better diets, longer

life expectancies, and more people available for work in factories.

Agriculture has changed over time because of cultural diffusion and advances in technology.

The Green Revolution was characterized in agriculture by the use of high-yield seeds, increased use of chemicals, and mechanized farming.

Agricultural production regions are defined by the extent to which they reflect subsistence or commercial practices (monocropping or monoculture).

Intensive and extensive farming practices are determined in part by land costs (bid-rent theory).

Complex commodity chains link production and consumption of agricultural products.

Technology has increased economies of scale in the agricultural sector and the carrying capacity of the land.

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

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Food and other agricultural products are part of a global supply chain.

Some countries have become highly dependent on one or more export commodities.

The main elements of global food distribution networks are affected by political relationships, infrastructure, and patterns of world trade.

Availability of resources and cultural practices influence agricultural practices and land use patterns.

Environmental effects of agricultural land use include pollution, land cover change, desertification, soil salinization, and conservation efforts.

Agricultural practices—including slash and burn, terraces, irrigation, deforestation, draining wetlands, shifting cultivation, and pastoral nomadism—alter the landscape.

Societal effects of agricultural practices include changing diets, role of women in agricultural production, and economic purpose.

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Agricultural innovations such as biotechnology, genetically modified organisms, and aquaculture have been accompanied by debates over sustainability, soil and water usage, reductions in biodiversity, and extensive fertilizer and pesticide use.

Patterns of food production and consumption are influenced by movements relating to individual food choice, such as urban farming, community-supported agriculture (CSA), organic farming, value-added specialty crops, fair trade, local-food movements, and dietary shifts.

Challenges of feeding a global population include lack of food access, as in cases of food insecurity and food deserts; problems with distribution systems; adverse weather; and land use lost to suburbanization.

The location of food-processing facilities and markets, economies of scale, distribution systems, and government policies all have economic effects on food-production practices.

The role of females in food production, distribution, and consumption varies in many places depending on the type of production involved.

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environmental, social, economic, and cultural opportunities and challenges.

Skills

Explain the significance of geographic similarities and differences among different locations and/or at different times.

Compare patterns and trends in sources to draw conclusions.

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.

Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

Explain the connection between physical geography and agricultural practices.

Identify different rural settlement patterns and methods of surveying rural settlements.

Identify major centers of domestication of plants and animals.

Early hearths of domestication of plants and animals arose in the Fertile Crescent and several other regions of the world, including the Indus River Valley, Southeast Asia, and Central America.

Explain how plants and animals diffused globally.

Explain the advances and impacts of the second agricultural revolution.

Explain the consequences of the Green Revolution on food supply and the environment in the developing world.

Explain how economic forces influence agricultural practices.

Describe how the von Thünen model is used to explain patterns of agricultural production at various scales.

Explain the interdependence among regions of agricultural production and consumption.

Explain how agricultural practices have environmental and societal consequences.

Explain challenges and debates related to the changing nature of contemporary agriculture and food-production practices.

Explain geographic variations in female roles in food production and consumption.

Resources

AP Classroom AP Classroom is a dedicated online platform designed to support teachers and students throughout their AP experience. The platform provides a variety of powerful resources and tools to provide yearlong support to teachers and enable students to receive meaningful feedback on their progress.

UNIT GUIDES Appearing in this publication and on AP Classroom, these planning guides outline all required course content and skills, organized into commonly taught units. Each unit guide suggests a sequence and pacing of content, scaffolds skill instruction across units, organizes content into topics, and provides tips on taking the AP Exam.

PERSONAL PROGRESS CHECKS Formative AP questions for every unit provide feedback to students on the areas where they need to focus. Available online, Personal Progress Checks measure knowledge and skills through multiple-choice questions with rationales to explain correct and incorrect answers, and free-response

questions with scoring information. Because the Personal Progress Checks are formative, the results of these assessments cannot be used to evaluate teacher effectiveness or assign letter grades to students, and any such misuses are grounds for losing school authorization to offer AP courses.*

PROGRESS DASHBOARD This dashboard allows teachers to review class and individual student progress throughout the year. Teachers can view class trends and see where students struggle with content and skills that will be assessed on the AP Exam. Students can view their own progress over time to improve their performance before the AP Exam.

AP QUESTION BANK This online library of real AP Exam questions provides teachers with secure questions to use in their classrooms. Teachers can find questions indexed by course topics and skills, create customized tests, and assign them online or on paper. These tests enable students to practice and get feedback on each question.

Standards

TEACH SKILL CATEGORIES: Skill categories spiral throughout the course.

1. Concepts and Processes

2. Spatial Relationships

3. Data Analysis

4. Source Analysis

5. Scale Analysis

BIG IDEAS: Big Ideas spiral across topics and units.

A. Patterns and Spatial Organization

B. Impacts and Interactions

C. Spatial Processes and Societal Change

How They Tie Together:

PSO 2- 5.1 Introduction to Agriculture

PSO 4-5.2 Settlement Patterns and Survey Methods

SPS 2- 5.3 Agricultural Origins and Diffusions

SPS 2- 5.4 The Second Agricultural Revolution 4 SPS 5.5 The Green Revolution

PSO 2- 5.6 Agricultural Production Regions

PSO 2- 5.7 Spatial Organization of Agriculture

PSO 5- 5.8 Von Thünen Model 5

PSO 5- 5.9 The Global System of Agriculture

IMP 2- 5.10 Consequences of Agricultural Practices

IMP 4- 5.11 Challenges of Contemporary Agriculture

IMP 3- 5.12 Women in Agriculture

SOC.6.1.12.B.1.a	Explain how geographic variations (e.g., climate, soil conditions, and other natural resources) impacted economic development in the New World.
SOC.6.1.12.B.13.b	Evaluate the effectiveness of environmental movements and their influence on public attitudes and environmental protection laws.
SOC.6.2.12.B.5.c	Determine the impact of migration on the way of life (e.g., social, economic, and political structures) in countries of origin and in adopted countries.
SOC.6.2.12.B.5.d	Analyze post-independence struggles in South Asia, including the struggle over the partitioning of the subcontinent into India and Pakistan, as well as later tensions over Kashmir.
SOC.6.2.12.B.5.e	Assess the role of boundary disputes and limited natural resources as sources of conflict.
SOC.6.2.12.B.6.a	Determine the global impact of increased population growth, migration, and changes in urban-rural populations on natural resources and land use.