

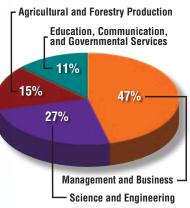
# **Employment Opportunities for College Graduates**

in Food, Renewable Energy, and the Environment United States, 2010-2015

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The agricultural, food, and renewable natural resources sectors of the U.S. economy will generate an estimated 54,400 annual openings for individuals with baccalaureate or higher degrees in food, renewable energy, and environmental specialties between 2010 and 2015. Seventy-four percent of the jobs will be in business and science occupations; 15 percent in agriculture and forestry production; and 11 percent in education, communication, and governmental services.

# **Employment Opportunities**



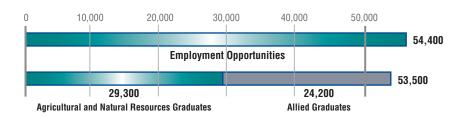
During 2010-15, five percent more college graduates with expertise in agricultural and food systems, renewable energy, and the environment will be needed when compared to 2005-10. More than enough graduates will likely be available during the next couple of years in some occupations, but a shortfall of new graduates with preparation in priority business and science specialties is forecast in the latter half of the period.

The strongest demand is anticipated for graduates with college degrees and related work experiences in agriculture, forestry, and environmental science and management. Annually, an average of 29,300 graduates are expected from colleges of agriculture

and life sciences, forestry and natural resources, and veterinary medicine. These individuals will compete for positions with approximately 24,200 qualified graduates each year from allied fields including biological sciences, engineering, health sciences, business, and communication.

Four major factors shape the market for graduates between 2010 and 2015:

- Macroeconomic conditions and retirements
- · Consumer preferences for nutritious and safe foods
- Food, energy, and environment public policy choices
- · Global market shifts in population, income, food, and energy



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# **Expected Strengths in the Job Market**

# **Management and Business**

Anticipate about 25,700 annual job openings for management and business representatives in food systems, renewable energy, and the environment. Graduates with the best job prospects have strong life science and business credentials; excellent interpersonal communication skills; and work experiences in food production and distribution systems, renewable energy, or environmental management.

# **Priority Occupations**

- · Agricultural Sales and Service Representative
- · Environmental Compliance Specialist
- · Financial Planner and Manager
- · Food Marketing Manager
- · Forest Products Manager

· Animal Pathologist

· Biological Engineer

· Environmental Scientist

· Biostatistician

· Food Scientist

- · Grain Merchandiser
- · Green Industry Products Manager
- · Human Resources Specialist
- · Land Use Planner
- · Resource and Alternative Energy Economist

# **Science and Engineering**

Expect more than 14,600 annual job openings in science, engineering, and related professional specialties. For most scientific occupations, employers require or prefer a doctoral degree. Successful candidates for positions as scientists or engineers have strong skills in basic and applied sciences, technology, engineering, and mathematics (STEM) disciplines.

## **Priority Occupations**

- Human Nutritionist
  - · Nanotechnologist
  - · Plant Geneticist and Breeder
  - · Public Practice Veterinarian
  - · Renewable Energy Engineer

# **Agricultural and Forestry Production**

Prepare for more than 7,900 annual job openings in agricultural and forestry production occupations—the foundation of the U.S. food, agricultural, and natural resource system. Fewer commercial farm and ranch operators are forecast by 2015, but a higher percentage will have a baccalaureate or higher degree. Practical work experience on farms, ranches, or in forests is an essential part of their college preparation.

#### **Priority Occupations**

- · Crop Management Consultant
- · Food Animal Veterinarian
- · Herd Manager
- · Land Use Manager
- · Poultry Production Manager

- · Precision Agriculture Specialist
- · Organic Agriculture Entrepreneur
- · Renewable Energy Crop Producer
- · Restoration Forester
- · Seed Producer

#### **Education, Communication, and Governmental Services**

Anticipate more than 6,200 annual job openings in education, communication, and governmental operations involved with agricultural and food systems, renewable resources, and the environment. Graduates who are highly skilled in multi media operations will be most competitive. Governmental agencies are expected to hire graduates with expertise in food safety and security, and natural resources and environmental management.

## **Priority Occupations**

- · Climate Change Analyst
- $\cdot \ Computer \ Graphics \ Technologist$
- · Distance Education Specialist
- · Ecotourism Specialist
- · Electronic Information Architect

- · Food Safety Information Specialist
- · Health Communicator
- · Natural Resources Conservation Specialist
- · Rural Development Specialist
- · Science Communicator

For more details, log on to:

http://www.ag.purdue.edu/usda/employment

This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under Award No. 2007-38837-18626. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

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