

2010 New ANR Core Issues Defined

Background

In December 2009, under the new leadership of Director Roger Beachy, the National Institute of Food and Agriculture (NIFA) identified five program priority areas: 1) Global Food Security and Hunger; 2) Climate Change; 3) Sustainable Energy; 4) Childhood Obesity; and 5) Food Safety. All state partners are required to report on these program areas. We had not previously identified Climate Change and Sustainable Energy as core issues in the 2005 *Core Issues and Target Opportunities* document. However, ANR has historically worked in these areas, and they were identified as being of critical importance in the 2009 Strategic Vision. Thus, in 2010 we added them for the 2011 reporting cycle in order to be able more clearly capture our efforts in these two areas.

Excerpts from UC ANR 2011-2015 federal Plan of Work:

Climate Change

The earth's temperature has risen 1 degree Fahrenheit in the last 100 years, and is projected to continue to heat up at an accelerated rate in the future. Consistent with trends worldwide, California is likely to have warmer winters and springs leading to reduced snow-pack, increasing the seasonality of water flows and directly affecting our ability to grow plants, produce food, support growing populations, and conserve natural resources. In addition, wildfires will likely increase, and other "natural disasters" will be more frequent and severe.

To learn how to adapt, manage, and mitigate the effects of climate change ANR's role is to:

- develop and encourage innovations in genetic, genomics, biotechnology, and traditional breeding approaches, producing new varieties of crops, animals and forest species that thrive in California as the climate changes.
- develop methods for determining the impacts of climate change on natural ecosystems and resulting changes in the provisions of services and products.
- develop educational programs for growers and dairies farmers and ranchers to reduce their greenhouse-gas emissions, including using less fertilizer and more cover cropping.
- develop and disseminate science-based knowledge to inform policy makers on climate change.
- develop innovative green technologies.

Sustainable Energy

California faces diminishing and more costly supplies of energy even as the demand for energy continues to rise as a result of population growth and increased world consumption. Demands from the public for renewable sources of energy and more energy-efficient agriculture and food production will have a major impact on our food production and transportation.

To improve energy security and green technologies ANR's role is to:

- research and support innovative new production technologies that minimize fossil fuel energy consumption and use renewable energy sources throughout the California food production system.
- develop innovative new technologies and marketing, genetic, genomic, engineering, and agronomic techniques to produce sustainable biofuels from forest, waste, and agricultural resources for renewable energy production, including genetic and biotech innovations from UC scientists.
- form highly interdisciplinary teams across UC, agency, and private-sector partners to generate energy savings in food and waste systems and create innovations in biofuel production.
- develop science-based policy-relevant research and information to guide lawmakers on issues related to energy.