



# NEWS RELEASE

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW  
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: [oc.news@usda.gov](mailto:oc.news@usda.gov) • Web: <http://www.usda.gov>

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Alisa Harrison (202) 720-4623  
Ed Loyd (202) 720-4623

## **USDA, NASA LAUNCH PARTNERSHIP TO ADVANCE REMOTE SENSING TECHNOLOGIES AND APPLICATIONS**

WASHINGTON, May 30, 2003—Agriculture Secretary Ann M. Veneman and National Aeronautics and Space Administration (NASA) Administrator Sean O’Keefe today launched a partnership that will utilize earth science such as remote sensing technologies to protect the environment and enhance the agricultural competitiveness of American farmers and ranchers.

Veneman and O’Keefe signed a Memorandum of Understanding (MOU) that permits USDA to draw on the best scientific and technical information available from NASA in monitoring, mapping, modeling and systems engineering. The primary purpose of this new cooperative effort is to help increase the production efficiency of farmers while continuing to reduce the cost of production by bringing more practical benefits of science and technology into agricultural applications.

“Precision agriculture practices are helping farmers improve productivity while protecting our natural resources,” said Veneman. “This partnership with NASA will make available remote sensing technologies that will advance precision agriculture.”

An immediate outcome of the new partnership is a \$1 million, 3-year program to establish Geospatial Extension Programs at land grant universities. Geospatial extension specialists work closely with NASA and USDA to address geographic information systems/remote sensing needs of the agricultural community. Among the technological advances available to farmers from precision agriculture techniques are:

- Monitors and maps that can detect and record changes in yields, soil attributes or crop conditions, including pest infestations and water nutrient stress.
- Technologies that use information from sensors to vary the application rate and timing for seeds, fertilizers, pesticides and irrigation water.
- Vehicle guidance systems that provide on-the-go sensing for weed and pest populations and detect crop traits, such as protein or oil content, during harvest.

"NASA is pleased to be part of this worthwhile effort, which will benefit all Americans," said NASA Administrator Sean O'Keefe. "NASA's unique ability to view the Earth from space will enhance our ability to predict climate, weather and natural hazards, as well as to mitigate and assess the effects of natural and human-induced disasters. The information we provide will allow our research partners to make critical, accurate and timely decisions."

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This joint endeavor could also spawn information that will contribute to project plans for NASA's Earth Science Enterprise, an initiative to develop a scientific understanding of the Earth's response to natural or human-induced changes.

Veneman said that such technology would also be highlighted at the upcoming Ministerial and Expo on Agricultural Science and Technology June 23-25 in Sacramento, Calif. where ministers from over 180 countries will discuss and share science and technological innovation in agriculture. For more information on the conference, you can visit <http://www.fas.usda.gov>.

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