

A Digital Library for Rural America (Draft - Tom Kalil 11/16/98)

The goal of this initiative would be to dramatically increase the quantity, quality and accessibility of networked information related to agriculture and rural development - leveraging USDA's existing investment in research and education at our nation's land-grant colleges.

Recently, R&D agencies and a variety of private sector firms have made substantial investments in digital library technology. This technology will revolutionize the way information (text, multimedia, geo-spatial information, databases, etc.) is published, organized, and retrieved. A USDA initiative in this area could leverage this technology by:

- Creating digital libraries in areas of agriculture and rural development that are important to the department and to rural America (e.g. water quality, housing, business development, integrated pest management, animal husbandry, sustainable agriculture, food safety, etc.) These digital libraries could include:
 - Agricultural statistics;
 - Online journals, newsletters, and reference material;
 - Summaries of important research results;
 - Geospatial information;
 - Case studies and best practices for addressing challenges faced by rural America
 - "Alert" services (e.g. emerging plant diseases);
- Creating directories of experts that are willing to answer questions, and in the process develop databases of Frequently Asked Questions.
- Developing tools for searching and navigating this information, and presenting it in ways that are accessible to different classes of end-users (e.g. farmers, K-12 teachers, state and local officials, etc.)

This initiative would have the following benefits:

- It would leverage the Department's investment in agricultural research and rural development, since the results of these programs would be more accessible to the public. Once information is in digital form, the marginal cost of making it available to more people is essentially zero.

- It would allow rural Americans to take advantage of the "distributed expertise" of land grant colleges and other potential partners -- and update the mission of the land-grant colleges for the 21st century.
- It would undoubtedly spark the creation of "communities of interest" -- geographically separated users with a shared interest in a particular subject.
- It would increase demand for telecommunications and Internet services in rural America by expanding the volume of well-organized, high-quality information.

This proposal could build on existing efforts such as AgNIC (Agricultural Network Information Center) -- which currently has participation from the National Agricultural Library, and universities such as Cornell University, Iowa State, Purdue, University of Arizona, University of Nebraska-Lincoln, and Washington State University.

Cost: \$2 million/year additional funding at NAL to identify gaps, new services, and deploy better tools for searching and navigating, and 20-40 grants to land-grant colleges or other eligible institutions at \$200 - \$500K per year. Estimate - \$10 million/year.

For more information:

AgNIC web site: <http://www.agnic.org>

Karen Spence, "National Library for Energy Science and Technology," *D-Lib Magazine*, October 1998. <http://www.dlib.org/dlib/october98/10spence.html>. This is a description of what the Department of Energy plans to do -- which currently makes available project summaries of 15,000 R&D projects and 2 million pages of text from 30,000 reports.