National Agricultural Research, Extension, Education, and Economics Advisory Board

Office of the Executive Director Room 344-A Whitten Building NAREEE Advisory Board Office Washington, DC 20250-2255

February 27, 2008

The Honorable Edward Schafer Secretary U.S. Department of Agriculture 1400 Independence Ave., S.W. Jamie L. Whitten Building, Room 200-A Washington, D.C. 20250

Dear Secretary Schafer,

Mailing Address: STOP 2255 1400 Independence Ave. SW U.S. Department of Agriculture WASHINGTON, DC 20250-2255

Telephone: 202-720-3684 Fax: 202-720-6199

The National Agricultural Research, Extension, Education, and Economics Advisory Board (the Board) believes strongly the National Agricultural Library (NAL) is a treasured national resource. The Board recognizes the important asset the NAL represents for the American agricultural enterprise. This is a jewel in the Department which has been neglected for too long. Unfortunately, the NAL is rapidly approaching a critical juncture beyond which it may no longer be able to satisfy the information needs of the Department, much less the Nation. The enclosed recommendations are intended to stabilize and enhance this valuable asset.

In June 2007, the Board's Ad Hoc Task Force conducted a major five-year review of NAL's operations and services; the first major review since 2002. In 2002, the Board reviewed and endorsed the assessment report produced by distinguished members of an Interagency Panel chaired by Dr. Larry Vanderhoef, Chancellor of University of California-Davis. The Board's Ad Hoc Task Force found in this year's review that NAL - our country's premier U.S. agricultural library - is at a critical juncture.

For more than 20 years, budget appropriations for NAL when adjusted for inflation have been flat, which resulted in mass cancellations of core subscriptions. Only one purchase for the historic or rare Special Collections Unit of NAL has been made since 1995. Budget deficiencies have impacted a variety of NAL services; for example several value-added Information Centers have closed or been subsumed under other Centers. Further, the 1994 organizational placement of NAL under a single agency, the Agricultural Research Service, has reduced the Library's visibility to the public and status within the Department.

The Advisory Board urges USDA, with support of the House & Senate Agriculture and Appropriations committees, to take timely and aggressive actions to reposition the library within the Department and provide more adequate support. As always, I remain available to discuss our findings with you at any time.

Sincerely,

Martin A. Massengale

Chair

Enclosures

cc: Deputy Secretary Conner

M. A. Massengale

Under Secretary for REE Buchanan

U.S. House and Senate Agriculture and Appropriations committees/subcommittees

National Agricultural Research, Extension, Education and Economics Advisory Board

REVIEW AND RECOMMENDATIONS FOR THE NATIONAL AGRICULTURAL LIBRARY

From a Meeting of the Advisory Board's Ad Hoc Task Force for the National Agricultural Library Conducted during the Advisory Board Meeting,

Washington D.C., October 29 - 31, 2007

Executive Summary

The National Agricultural, Research, Extension, Education and Economics Advisory Board (the Board) conducted an extensive five-year review of USDA's National Agricultural Library (NAL). This was the first major review by the Board since 2002.

NAL not only serves the employees of the Department but was mandated by Congress to serve as the "primary agricultural information resource of the United States". This role is central to the mission of the Department. Information is the critical cross-cutting asset supporting the diverse needs for agriculture from farms to rural communities, enhancing a sustainable environment, and providing a healthy supply of inexpensive food for people in cities across the country.

The Board in its 2007 review found NAL to be a priceless national treasure at a "tipping point". NAL is rapidly approaching a point at which it will no longer be able to support the information needs of the Department, much less the nation. The following recommendations are offered as practical steps to improve this valuable asset. Some short-term measures can be taken with little additional funding, and these steps will build the necessary foundation to better serve our increasingly Internet connected society through the development of a National Digital Library for Agriculture (NDLA). We urge the Department to support this important initiative.

I. Introduction

Detailed within this report, the National Agricultural Research, Extension, Education, and Economics (NAREEE) Advisory Board provides recommendations for the revitalization of the National Agricultural Library (NAL). This advice is based on the extensive work of the Board's, Ad Hoc Task Force for NAL, whose members have dedicated considerable time and diligence in reviewing NAL's operations and services dating back to the noteworthy Assessment Report of NAL (2001). This 2001 Assessment Report was conducted by distinguished members of an Interagency Panel and chaired by Dr. Larry Vanderhoef, Chancellor, University of California – Davis. In response to the collective and retrospective review of the Board's Ad Hoc Task Force for NAL, the NAREEE Advisory Board requests the U.S. Secretary of Agriculture and the members of the U.S. House and Senate Agriculture & Appropriations committees and subcommittees to consider the following recommendations. These recommended actions are essential to sustain and revitalize the National Agricultural Library as "the primary agricultural information resource of the United States."1

A. Background on the National Agricultural Library (NAL)

The National Agricultural Library (NAL) was established by Congress in 1862 "to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word." The legislation places upon the Secretary the responsibility to "acquire and preserve in his Department all information concerning agriculture which he can obtain by means of books and correspondence." ³

In addition to the 1862 Act that established the Library within the Department of Agriculture, a 1990 statute by Congress made the Library an official national library of the United States. ⁴ NAL is one of three national libraries.

At present, NAL manages more than 3.5 million items of information, and makes more and more content available electronically on the World Wide Web. The Web sites attract more than 83 million hits per year, serving as a vital active gateway to agriculture and its many sciences.

Quite unique to libraries, NAL began establishing specialized Information Centers in 1971, with the creation of the Food and Nutrition Information Center. Information Centers at NAL offer information experts who provide value-added services to customers as well as collaborate with other agencies and organizations on projects relevant to their respective subject areas that benefit customer needs. One Center, for example, is the Alternative Farming Systems Information Center (AFSIC), that worked in collaboration with the USDA National Organic Program and the Sustainable Agriculture Research and Education Program of USDA's Cooperative State Research, Education, and Extension Service (CSREES) to develop a full-text electronic collection on organic agriculture research prior to 1942 (before synthetic chemicals became widely used), was called the "Organic Roots Project". This ongoing Project captures historic state-of-the-art information, data and knowledge that are very important and relevant for today's organic agriculture. The electronic collection is available to the public in full-text on a CD as well as through the AFSIC Web site. At

¹ 7USC3125a, 1990

² Act of May 15, 1862, as amended (The Organic Act of 1862); United States, Statutes at Large, Treaties, and Proclamations, ed. George P. Sanger (Boston: Little, Brown & Co., 1863), XII, Section 1, 387; and 7 USC Sec. 3125a.

³ Ibid., Section 3, p. 388.

⁴ Food, Agriculture, Conservation and Trade Act of 1990, P.L. 101-264.

present, there are eight specialized Information Centers at the NAL that reflect high national priorities of the Department. [Please see Appendix 1 for a Listing of NAL Information Centers.]

B. <u>Current Status – NAL is at the Tipping Point.</u>

After more than two decades of stagnant budget appropriations and with painful cutbacks already made, NAL is at the critical point in needing to make further significant cutbacks into the core collections and services unless additional support becomes available. In 2007, NAL's total budget was a mere \$22.8 million, as compared to \$314 million of the National Library of Medicine. For the last two decades NAL's budget remained essentially flat in constant 2007 dollars deflated using Gross Domestic Product (GDP), as seen in *Figure 1*.

In response to the dwindling dollars, NAL continues to make critical cutbacks in its acquisitions budget to purchase subscriptions to journals, monographic series, books, and other printed and electronic documents. Increases in costs for purchasing collection materials are dramatically higher than the consumer price index of inflation reaching as much as 18 percent (*see Figure 2*). Since 1991, NAL has faced a 44% reduction in its ability to purchase core monographic series and nearly 2,000 subscriptions have been cancelled. NAL was the only library in the United States purchasing a number of international subscriptions, which have since been cancelled. The Special Collections Unit of NAL houses historic, rare, and unique materials; only one purchase has been made in Special Collections since 1995. The lack of funds for this Unit has resulted in missed opportunities as well as the inability for thousands of materials to undergo conservation treatment.

Many of the eight specialized Information Centers at NAL are highly dependant upon private and grant funding. This poses concern for continued funding of the Information Centers and their sustainability on a year-to-year basis, despite customers' increasing demands for value-added information.

With regard to USDA facilities, the NAL building is 40 years old and in poor condition. There is ongoing concern for potential structural breaks in the 14-story building and for damage from high winds, heavy rainfall, storms, and other natural causes. Better environmental conditions (controlled temperature and humidity) are essential to protect and preserve the vast and unique collection of national agricultural materials at NAL. Space is at a premium for shelving and protecting additional materials in the collection. Finally, the energy costs to maintain the NAL building are very high.

C. Why NAL is Important

More than 35 economic studies published over 1965-2005 have shown the social rate of return to our Nation's public investment in agricultural research is 45 percent per year. This success rests on previous research investments, which are represented in published literature and data sets. It takes the collections and professionals in libraries to take full advantage of these assets.

This need for access to information was eloquently articulated by Abraham Lincoln in 1859:

"In all this, book-learning is available. A capacity and taste for reading gives access to whatever has already been discovered by others. It is the key, or one of the keys, to the already solved problems. And not only so: it gives a relish and facility for successfully pursuing the unsolved ones." 6

⁵ USDA, ERS, using data from Huffman and Evenson, 2006, and Fugile et al., 1996 (ERS Economic Brief (10), Sept., 2007, *Economic Returns to Public Agricultural Research, Fuglie, Keith O., and Heisey, Paul W.*, pp. 1-8).

⁶ Abraham Lincoln's Address before the Wisconsin State Agricultural Society, Milwaukee, September 30, 1859

It is essential to have a strong research base in place in order for American agriculture to remain competitive, highly productive, environmentally friendly, and affordable. The underpinning for agricultural research is knowledge, which is available quickly and easily in various forms. NAL is the Nation's premier gatherer, organizer, preserver and diffuser of agricultural information. NAL provides this information to the Department and the public-at-large. There is no other agricultural service that offers the breadth and detail of subject matter, utilizes a complexity of dynamic online search tools or provides thorough and relevant output to customers.

For America to potentially lose access to an active and highly functional NAL, a vital resource for agricultural information, would be a major loss for our country.

II. RECOMMENDATIONS FOR NAL

A. SHORT TERM

Short-term recommendations were identified by the Advisory Board as those that required action, but few if any funds. NAL is at the <u>critical point</u>, and therefore it is essential that responses by both USDA and Congress be seriously considered now.

→ SUPPORT THE INITIAL DEVELOPMENT OF A FULLY FUNCTIONAL AND NAL-SHARED NATIONAL DIGITAL LIBRARY FOR AGRICULTURE (NDLA).

USDA should host within the next year a *National Stakeholder Summit for the NDLA* in order to engage broad stakeholder participation in the planning and development of an NDLA "Roadmap" which will provide future direction.

In today's world, agricultural information must be made available via the Internet. Further, it is in the interests of Americans to have open access to the research that their tax dollars have supported. These interests are best served by developing a digital library, specifically a *NDLA*. A national digital library on agriculture and related subjects will preserve our Nation's research investment, will provide public access to its contents, and will offer necessary tools for users to extract useful information.

In 2002, the NAREEE Advisory Board recommended the establishment of a *NDLA*. Today, this recommendation is even more urgent.

→ REPOSITION THE NATIONAL AGRICULTURAL LIBRARY (NAL) WITHIN USDA TO INCREASE NAL'S VISIBILITY AS THE PRIMARY PROVIDER OF U.S. AGRICULTURAL INFORMATION AND KNOWLEDGE TO THE NATION AND TO THE DEPARTMENT OF AGRICULTURE, AS MANDATED BY CONGRESS.

The Advisory Board believes that the organizational placement of NAL does not allow it to serve its mandated mission. NAL strongly supports the Research, Education, and Economics mission area's as well as all other USDA programs. However, NAL is perceived as an ARS library because of its organizational position within ARS under the auspices of the Research, Education, and Economics mission area. NAL's lack of public visibility and critical services – to USDA and Congress – is primarily a result of organizational placement. The Board highly recommends that the Under Secretary for REE and the Secretary consider a higher level

placement for NAL within its organizational structure that is representative of its significant mission and benefits to the public.

- → INCREASE THE INFORMATION SUPPORT SYSTEM TO IMPROVE SCIENCE-BASED DECISION-MAKING ACROSS THE U.S. AGRICULTURAL ENTERPRISE.
 - USDA SHOULD ENSURE THAT EVERY MAJOR AGRICULTURAL PROGRAM AND INITIATIVE INCLUDES AN INFORMATION COMPONENT.
 - USDA AGENCIES WILL CAPITALIZE ON THE ACCESS TO INFORMATION AND RETURNS ACHIEVED THROUGH THE CONSORTIAL PURCHASING OF THE NAL DIGITOP INITIATIVE.

The Board recommends that the Department optimize the effectiveness of its programs by ensuring that USDA employees have access to the information resources and support services that they need to be better informed policymakers and researchers. This recommended action will support science-based decision-making and help reduce unnecessary duplication.

B. Long Term

The following recommendations are for ongoing actions over the long-term. These recommended actions will require federal funding and other types of resources. They are intended to provide high value impacts for the general public as well as diversified stakeholder groups across the United States and globally.

→ REQUEST FUNDING INCREASES FOR NAL OVER THE "LONG-TERM" THAT ARE ESSENTIAL FOR LEADING THE ONGOING COORDINATION OF THE VAST MULTI-INSTITUTIONAL NATIONAL DIGITAL LIBRARY FOR AGRICULTURE (NDLA) INITIATIVE.

The Board recommends that USDA support the long-term funding needs of the NDLA, an essential initiative by NAL to transform our Nation's vast agricultural publications, trusted information, knowledge, and findings from new scientific discoveries into digital form. The NDLA should provide quick and easy online access to full-text and other multi-media on agriculture for the public at-large. The NDLA should be the main focus and long-term organizing principle for the NAL. The NDLA should be composed of a large number of independent but highly interoperable electronic repositories of Land-Grant partner libraries, and other agricultural-related collections of committed public/private institutions. It will be a "shared NDLA" of U.S. agriculture materials – an "integrated Library without walls."

The Board also recommends that the House and Senate Agriculture and Appropriations committees/subcommittees of the U.S. Congress recognize the value of a nationally-shared NDLA and its potential impacts for the public good. USDA will require the support of Congress with the necessary appropriations for the NAL to conduct a highly important effort to preserve through digitization and to provide online public access of our Nation's agricultural heritage, rare manuscripts, other treasured materials, and necessary information on scientific findings from advanced agricultural research – currently housed within the walls of NAL and in Land-Grant and other agricultural collections across the country.

NAL should utilize appropriated funds to effectively coordinate with Land-Grant partner libraries and other cooperating institutions to develop an electronic network. The network will link agricultural collections across the Nation through robust search engines and cutting-edge information technologies enabling U.S. and global access to those materials and information. Funds will also be required for the digital conversion of print materials, for assuring quality control of digital copies and metadata, for maintaining and preserving digitized materials, and for assuring flexibility in employing new emerging technologies.

→ REQUEST FUNDING INCREASES FOR NAL OVER THE "LONG-TERM" TO REPAIR OR REPLACE THE ABRAHAM LINCOLN BUILDING TO ENABLE THE LONG-TERM PRESERVATION OF OUR AGRICULTURAL HERITAGE.

The Board recommends that adequate funding be provided for NAL to either renovate or replace its current facility for the long-term preservation of our agricultural heritage. Digital conversion of printed matter dramatically enhances access to the content and is rapidly becoming the preferred medium and often the only medium for today's information. Despite this trend, the need for an updated physical facility remains.

NAL houses more than 2.4 million volumes of books and periodicals; and more than 3.6 million government documents. The NAL collection ranks 11th among the top 123 research libraries with respect to "uniqueness" ahead of the Universities of Illinois, Wisconsin, Ohio State, and Princeton. The average research library holds 19,000 unique items, while NAL was found to hold more than 166,000 as determined from a sampling of records. A precise value has not been placed on the collection for insurance purposes; however, it's estimated to be worth over \$420 million and has been designated as a "Heritage Asset" for USDA.

Print copies of digital materials are held at NAL, to preserve the "last copy", thereby safeguarding the information against the consequences of catastrophic events. One such event includes being unable to migrate digital versions from obsolete formats. Paper remains the least expensive and most stable medium to preserve content.

In FY 2006 ARS and NAL retained the services of the General Services Administration for a "Requirements Development and Repositioning Study" to assess the existing forty-year old Abraham Lincoln building. The study assessed the impact of the current facility's architectural and mechanical deficiencies on the Library's mission and collections. Seven options were developed using either the existing structure or replacing the building. Basic repairs to the existing building were estimated to be nearly \$43 million with projected costs through 2026 over \$146 million; replacing the building with a modern warehouse structure and high density shelving was estimated to be \$60 million, projected to cost \$113.4 million through 2026; and replacing the building using conventional shelving was estimated at nearly \$100 million, this option was projected to cost \$159.4 million through 2026. The final decision regarding the most appropriate option will weigh a number of factors; what is important is that steps are taken now to preserve USDA's "Heritage Asset" for future generations.

C. Summary of Recommendations

- → INITIATE DEVELOPMENT OF A FULLY FUNCTIONAL AND NAL-SHARED NATIONAL DIGITAL LIBRARY FOR AGRICULTURE.
- → REQUEST FUNDING INCREASES FOR NAL OVER THE "LONG-TERM" THAT ARE ESSENTIAL FOR LEADING THE ONGOING COORDINATION OF THE VAST MULTI-INSTITUTIONAL NATIONAL DIGITAL LIBRARY FOR AGRICULTURE INITIATIVE.
- → INCREASE THE INFORMATION SUPPORT SYSTEM FOR IMPROVEMENT OF SCIENCE-BASED DECISION-MAKING ACROSS THE U.S. AGRICULTURAL ENTERPRISE.
- → REPOSITION THE NATIONAL AGRICULTURAL LIBRARY WITHIN USDA TO INCREASE NAL'S VISIBILITY AS THE PRIMARY PROVIDER OF U.S. AGRICULTURAL INFORMATION AND KNOWLEDGE TO THE NATION AND TO THE DEPARTMENT OF AGRICULTURE, AS MANDATED BY CONGRESS.
- → REQUEST FUNDING INCREASES FOR NAL OVER THE "LONG-TERM" TO REPAIR OR REPLACE THE ABRAHAM LINCOLN BUILDING FOR THE LONG-TERM PRESERVATION OF OUR AGRICULTURAL HERITAGE.

D. Conclusions

As evidenced by the above recommendations by the Advisory Board, it is clear that the National Agricultural Library's organizational position currently within the Department and the lack of awareness of NAL by USDA agencies have weakened potential activities that could have increased efficiencies and beneficial outcomes for all involved. Also, the lack of funding increases for NAL to adequately serve the Department and the Nation has seriously impacted NAL's ability to carry out its mandates as the National Agricultural Library of the United States and of the Department. The imminent loss of the NAL would be detrimental to the public's ongoing need for trusted agricultural information and would pose a high risk to agricultural research – in terms of quality, distinctiveness, efficiency, and value.

NAREEE Advisory Board Ad Hoc Task Force for the National Agricultural Library

Thomas Fretz
Walter Armbruster
John Cunningham
Marianne Smith Edge
John MacMillan
Arnold Taylor
Alton Thompson
John Salois
James Zuiches

APPENDIX 1. NAL INFORMATION CENTERS

Alternative Farming Systems
Animal Welfare
Food and Nutrition
Food Safety
Invasive Species
Rural
Technology Transfer
Water Quality

Figure 1. NAL Total Budget Deflated Using GDP for 2007 Constant Dollars

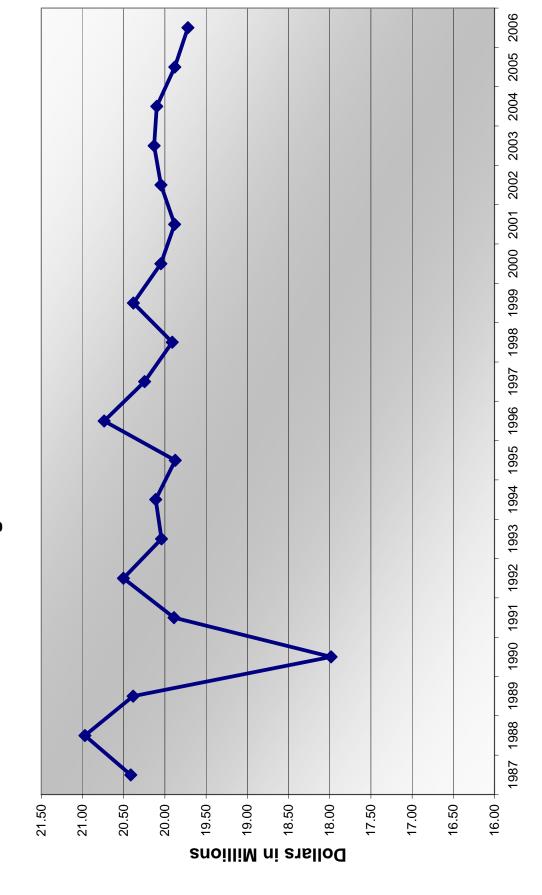


Figure 2. Journal Costs Deflated Using GDP for Constant 2000 Dollars Normalized to 1990

