Background and Report on the Process and Results of the Land-Grant University Knowledge Discovery System Virtual Planning Workshop Held on September 21-22, 2011

Workshop Background and Report

Aim of Workshop: “to collaboratively develop a plan to build and strengthen openly accessible LGU institutional repositories of key agriculture-related information, data, and resources that will be available for sharing and discovery for current and future generations.”

Institutions Represented: Colorado State University; Cornell University; Oregon State University; Purdue University; University of Alaska; University of Arizona; University of California, Davis; University of California Agriculture and Natural Resources; University of California, Berkeley; University of California, Riverside; University of Florida; University of Hawaii; University of Minnesota; University of Nevada, Reno; University of Wyoming; Utah State University; Washington State University, and the National Agricultural Library

Background: National Agriculture Knowledge Needs and Role of Land-Grant Institutions

- U.S. Land-Grant institutions house extensive resources that could be brought to bear on the challenges of our day, but current access to these resources is extremely limited.
- Important scientific resources (print & data sets) are being lost as a generation retires from the nation’s Land-Grant universities and colleges (LGUs).
- Most LGUs lack the resources to maintain institutional repositories and do not have procedures in place for providing access to or preserving institutional intellectual property, in particular agricultural experiment station (AES) and Cooperative Extension (C.E.) reports, bulletins, scientific papers, and data sets.
- “Born Digital” materials (those resources created only in digital format) are often ephemeral and not captured as part of the intellectual property of LGUs.
- Historic literature is in increasing demand, but is difficult to find. For example, there is new interest in the organic farming literature of the 1930s and 1940s.

Planning Process To Date

1) There have been discussions about and attempts to work towards an LGU system for sharing agricultural resources for more than a decade. At the 2009 Summer Meeting of the Western Deans and Directors of Colleges of Agriculture, the focus was the possibility of collaborating on ag-related institutional repositories. The Deans expressed particular interest in retaining/preserving their institutional memory and knowledge, and providing easy access to this intellectual property. Participants representing 15 institutions signed on to a call to support such an effort.

2) In July 2010, a follow-up presentation on the subject was given at the Western Deans conference. Next steps were discussed including setting a planning meeting and creating a framework “proposal” which would make it possible to market the concept at high levels in USDA and through such entities as APLU. The idea was discussed for having a small group of institutions build a prototype that could be scaled up.

3) Initial plans were to conduct an on-site conference meeting in early 2011 but due to budget and travel costs, a virtual meeting was proposed. In June 2011, follow-up letters were sent to the
original list of Western LGU agriculture & library deans, as well as those additional contacts made in
the initial round, informing them of the revised strategy for the meeting and asking them to
confirm their interest and designated representatives. The response was again positive, with 16
LGUs confirming their participation, as well as the National Agricultural Library.

4) The Planning Team from the UA and University of Florida conducted a survey of the participating
LGUs to determine the current status of institutional repository development, and particularly what
agriculture-related materials have been made openly available so they can be shared and harvested
by other systems. This information was used as the basis for the workshop agenda.

5) The focus of day one of the workshop was to confirm shared learnings from the survey, and to
identify knowledge gaps that needed to be addressed. Day two of the workshop reviewed
responses to additional questions the participants felt were not covered in the survey. Other
strategic questions and comments from day one were collected and distributed for discussion.
Participants then compiled ideas and suggestions about what the group could do together and
submitted them to the UA and UF for collation and distribution following the end of the workshop.

6) Responses were organized in six categories (purpose, organizational opportunities, organizational
actions, collection building, standards, discovery, and next steps) and provided in a table format for
participants to identify priorities. Based on the input received via email, a priorities data summary
and a summary priorities discussion report were compiled and distributed to the participants.

7) Based on this feedback from the workshop participants, a proposal for developing the first phase of
a Land-Grant University “Knowledge Commons for Agriculture” is being drafted for review by the
workshop participants and the Agricultural Administrators who will be attending the November
2011 APLU conference. The intent is to gain funding for a first phase, prototype LGU-wide Ag
Knowledge Commons.

Workshop Report Summary

The following is a narrative summary drawn from the data and comments collected from participant
recommendations for action in the following areas: (1) Purpose; (2) Organizational Opportunities; (3)
Organizational Actions; (3) Collection Building; (4) Standards; (5) Discovery; and (6) Follow-on Actions.

Institutions Providing Data: Colorado State University; Oregon State University; University of Arizona;
University of California, Davis; University of California, Riverside; University of Florida; University of
Wyoming; Washington State University, and the National Agricultural Library

Purpose:
There was essentially unanimous agreement that defining a clear purpose in terms of scope and audience
for the initiative is a first priority. A definite majority felt this purpose should focus on providing greater
and broader access to current rather than historical LGU agriculture-related resources, particularly those
from the Agricultural Experiment Stations and Cooperative Extension. There is also strong interest in
establishing as soon as possible the relationship between this initiative and other efforts such as AgNIC and
USAIN. Defining how to measure success also was seen a need to be addressed.

Organizational Opportunities:
This section had a wide distribution of responses, although two priority action areas stood out above the
rest. First, there is agreement that a Steering Committee should be established to lead the initiative which
should be defined in simple, clear terms. Also, the initiative should look sufficiently into the future so there is maximum flexibility by working on sharing existing metadata fields for harvesting and effective search capabilities, rather than developing a single system. As part of this process, however, possibilities of leveraging Google Scanning and HathiTrust projects to reduce costs should be considered, but possibly at a later date.

**Organizational Actions:**
There was considerable overlap in this section’s possible actions. Primarily, the idea is to have a registry, clearinghouse, or resource that identifies institutions with agriculture-related repositories or digital collections. However, it was noted that such an effort is already under development by AgNIC and others that should be leveraged for this purpose. Also, several participants requested establishing a forum for communication. Identifying specific user information needs was considered a priority by some.

**Collection Building:**
There was an extremely wide distribution of suggested priorities for collection building based on what should be focused on in the next six months, later in the development process, or on the back burner. In general, comments suggested that collection building largely must come from local institutional decision-making. However, responses somewhat mirror the priority setting in the previous sections in that there is an agreed need to establish a common collection development focus, particularly, in making AES and C.E. materials more widely available and in coordinating with other possibly related efforts (especially for preservation purposes).

**Standards:**
Again, there was considerable variation among the participant responses to suggested actions relating to this topic, running the gambit from very specific suggestions for metadata standards to suggestions this could be a backburner issue. However, a few action areas did stand out: (1) Determine basic interoperability standards across all participating LGUs; (2) Establish common terminology and protocols; (3) Determine if Google scanning projects are depositing those files in HathiTrust for preservation; and (4) Learn what [relevant] metadata practices have already been used.

**Discovery:**
Priorities for “discovery” were somewhat considered to be more important later in the development process for the initiative. However, a number of suggestions clustered around these topics: (1) Determine best way to link all LGU resources in simplest and least expensive way; (2) Develop simple search capability to access all LGU ag-related materials; (3) Expose content to Google; (4) Investigate use of RDF/Linked open data for discovery of content from distributed systems; and (5) Determine if a subject-based discovery system is still relevant.

**Follow-on Actions:**
In general, respondents agreed that the participants need to “write a group proposal to fund the development of shared data repository for ag-related materials”. This could be in the form of a planning grant or a larger proposal. It was also felt that the group needs to leverage its clout and national objectives and efficiencies to gain necessary funding to support such an initiative.

**NOTE:** For more details see also the *Cumulative Data from Workshop Report* and PowerPoints located on the workshop on the Workshop website, as well as the following narrative responses received from several of the participating institutions.