National Research Support Project Summary

Project Number: NRSP_TEMP001

Title: National Information Management and Support System (NIMSS)

Duration: October 2011 to September 30, 2016

Administrative Advisor(s): [William Brown S] [C. Colin Kaltenbach W] [F. William Ravlin NC] [Adel

Shirmohammadi (main) NE]

NIFA Reps:

Statement of Issues and Justification

Prerequisite Criteria

How is the NRSP consistent with the mission?

The Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) amended the Hatch Act of 1887 identified and specified the use of Multistate Research Fund (MRF) for integrated research and extension activities. The National Information Management and Support System (NIMSS) was designed to facilitate the management of these multistate research and extension activities supported by the MRF, from conception of the proposal to project termination.

How does this NRSP pertain as a national issue?

NIMSS now serves as the central repository of all MRF funded projects and activities in the country. NIMSS is a web-based application allowing (1) online submission of proposals, peer reviews and progress reports, and (2) ready access to this information. An automated e-mail notification function prompts users to take action and sends out notifications for meetings and report deadlines. Researchers, Extension educators, stakeholders and other cooperators can search the System for relevant and timely information related to multistate research projects. In addition, the public has access to research project outlines and impacts in NIMSS.

Rationale

Priority Established by ESCOP/ESS

The first version of NIMSS was previewed at the national Experiment Station Section Meeting in Idaho in September 2001. It was fully operational and was serving all the 1862 Agricultural Experiment Stations by 2002. Subsequently, with the success of the first version, more functions were incorporated and a second version was released in August 2004 allowing for customization for each particular group of users. The 1890s research institutions and Cooperative Extension were added and given similar access to fully utilize NIMSS. NIMSS is now currently serving all the 1862 and 1890 Land-grant institutions, allowing them to manage in a totally paperless system their multistate research portfolio.

Another significant accomplishment during the previous period is the development of a Web Service which allows NIFA to download data from NIMSS and integrate them into their management dashboard. This application will continue to be used and explored for further integration of both systems for the purpose of pre-populating federal forms.

Relevance to stakeholders

The data collected through NIMSS covers a wide range of agricultural and related information including agriculture, forestry, natural resources, rural life, human nutrition, food safety, human health and other consumer concerns. Maintaining and enhancing NIMSS will provide substantial direct benefits to administrators of State Agricultural Experiment Stations (SAES), Cooperative Extension Service (CES), participating scientists, federal agencies, and many others utilizing this system. There will also be indirect benefits to the public through increased access to information on agricultural and related information.

Implementation

Objectives

- 1. Sustain activities to improve the timeliness and integrity of information in the NIMSS database through improved operational, technical and managerial procedures.
- 2. Support the flow of data and information into the NIMSS database
- 3. Provide the facilities necessary to allow SAES and NIFA to access and utilize the NIMSS database effectively and efficiently more effectively document and communicate impacts of the multistate research activities

Projected Outcomes

- 1. At any given time, there are about 300 active multistate research projects and activities recorded in NIMSS. At its peak period, NIMSS gets 28,000 hits per day, and an average of 15,000 hits per day during normal operations. Data transferred varied from 2GB to 4GB per day, during slow to heavy periods. New users register daily and the number of registered active, frequent users is recorded at 8,200 and growing. NIMSS has become the communication tool of choice for the hundreds of multistate project participants to communicate with each other about their projects. This project will continue to serve this clientele and the public during this project period, allowing for timely submission of proposals and reports, conduct of peer reviews, meeting notifications, participation and access to information in real time.
- 2. During the next five years, new functionalities will be introduced in NIMSS to improve the speed of data download and transition between forms. Object-oriented programming style (OOPS) will be used and the site will be enhanced using RIA technology (Rich Internet Technology).
- 3. Administrative Advisor access has been expanded to include Cooperative Extension Directors serving as Co-Advisors. As more and more extension participation are foreseen in these multistate activities, reporting of their participation will continue to be enhanced in NIMSS. Summary reports/tables will be built to accommodate their reporting needs.
- 4. Data sharing with NIFA will continue using Web Service, NIFA uses this information to pre -populate their Management Dashboard. This application continues to be explored as it significantly minimizes having to enter the same data multiple times in different reporting forms in NIFA systems.
- 5. Participation will continue to be expanded to include those outside the Land-grant family, and will include federal and state partners, producers, commodity groups, foundations and foreign scientists. NIMSS will serve as an effective communication tool to share research data and hence, ease the application of new discoveries and technology transfer.
- 6. We have collected information on hundreds of scientists working in multistate projects in specific Knowledge Areas (KAs), Subject of Investigation (SOI) and Field of Science (FOS). NIMSS now serves as a national repository of experts and their specializations. This capability will be explored further to build programs to analyze where expertise can be tapped to address national and regional priorities and to solve emerging problems.
- 7. NIMSS will be used more effectively in collecting meaningful impacts from the multistate research projects. NIMSS will be transformed into an even more effective tool in reporting the accomplishments and impacts of agricultural research carried out by the Land-grant institutions.

Management, Budget, and Business Plan

General oversight, policy development, proposal preparation and budget recommendation will be provided by a Management Committee composed of: four Administrative Advisors, one of each representing each of the four SAES regions; an ARD Director; a Cooperative Extension Director; the NIMSS Manager; the four System Administrators; two director's administrative assistants who use NIMSS routinely; and two communicators/writers to advise the impact reporting program. The Administrative Advisors will elect one of their representatives to be the Lead Advisor and Chair of the Committee. NIFA will name one or more non-voting representatives to the committee.

NIMSS is managed by each of the Regional Associations serving the State Agricultural Experiment Stations (SAES). The Regional System Administrators handle the day-to-day tasks related to maintaining the system and answer queries from their users. The Northeast Region is responsible at the national level for upgrading and troubleshooting of the system.

Funding for NRSP-1 will be provided through an off-the-top allocation from the Hatch Multistate Research Fund. An annual budget request will be submitted to SAES Directors and voted on by the Directors at their annual fall meeting. NRSP-1 will provide important administrative support services to research administrators, project participants and other users of NIMSS. Funding for NRSP-1 is seen as an administrative expense and alternative sources of funding are not anticipated.

Integration

NIMSS was designed to facilitate the management of integrated research and extension activities supported by the Hatch Multistate Research Fund. It was originally accessed by 1862 SAES participants. It has been expanded to provide access by Cooperative Extension and 1890 research institutions. The program can also be expanded to accommodate integrated education activities when the need arises.

Outreach, Communications and Assessment

Input from SAES administrators and scientists on issues of policy, planning, and management of NIMSS is an essential element in sustaining it as an effective management information system. The approval of this NRSP provides the mechanism to support the representation of user interests and provide a forum to assess the effectiveness of the outreach of the NIMSS program.

The Regional System Administrators will serve as the primary contact and source of information and training for university administrators, program managers, investigators, business officers, and station staff using NIMSS. Assessment of outcomes for the targeted objectives of this NRSP will most often be subjective in nature. Many of the pursuits of this effort will not provide opportunities for physical measurement in any meaningful quantitative fashion. Some objectives will be realized with implementation of new system modules or reengineering efforts associated with targeted components or functionality. The implementations are indicators of basic successes in the life of the project but in subsequent years the measures of effectiveness and efficiency will be more elusive.

The NRSP-1 Management Committee will serve as stakeholder representatives in addressing assessment issues and to help evaluate the effectiveness of outreach efforts. The representatives will be responsible for collecting information from the institutions in their respective regions or associations to reflect the effectiveness of the NIMSS program in meeting their needs and objectives. The Committee will provide an annual report outlining the accomplishments of the previous year in support of the objectives at the ESS fall meeting. A copy of the report will accompany the annual budget request.