

**Michigan State University
Food Security III Cooperative Agreement**

Associate Award Proposal to USAID/WARP

**Increasing the Impact of the Research of INSAH and its West African Partners
by Making it More Accessible via the Internet**

February 13, 2005

EXECUTIVE SUMMARY

This proposal outlines a 19-month program of work that will increase the payoff to the substantial investment that USAID, INSAH/CILSS, and their partners have made in INSAH's development of databases and research on demography, agricultural development, and natural resource management, by making that information much more broadly available over the Internet. The project will also significantly strengthen the capacity of INSAH staff and INSAH's national partners to exploit the Internet productively for their research and outreach activities. The project, carried out jointly by INSAH and Michigan State University as an Associate Award under the Food Security III Cooperative Agreement, will focus on five objectives:

- Making key INSAH databases (on demographics, the directory of Sahelian experts and innovations, and the directory of approved pesticides) available in searchable form over the Internet;
- Increasing the availability of INSAH publications on line, through posting them in pdf format on the INSAH website and making hot links to them on the Food Security and Food Policy Information Portal (FSIP) for Africa.
- Working on a pilot basis with national researchers in Mali and Burkina Faso who are members of INSAH networks to develop procedures that INSAH and its partners can use to increase the accessibility of the national partners' publications and reports on the web via links to the INSAH website and the FSIP.
- Working with INSAH to help make available to INSAH-affiliated researchers in national research systems key full-text as well as bibliographic resources (such as FAO's AGORA system that gives national researchers in Africa free on-line access to over 500 scientific journals in the area of agriculture and natural resource management) and learning materials in a broad range of professional skill areas available via the FSIP.
- Evaluating the feasibility and cost-effectiveness of making key RESADOC publications, currently available only in microfiche, accessible electronically.

The work will take place between March 1, 2005 and September 30, 2006.

1.0 RATIONALE AND OBJECTIVES

This proposal outlines a 19-month project (from March 1, 2005 through September 30, 2006) to increase the payoff to the investment made over many years by INSAH/CILSS, USAID, and other INSAH partners (including NARS) in developing databases and research related to agricultural development, demographics, and natural resource management in West Africa. Such information is only valuable if it is available to those who need it for critical decisions, either for policy or for business. Yet much of this information is not widely diffused, limiting its usefulness for decision-making. The proposed activity will make this information much more widely available through the Internet and carry out activities to publicize and demonstrate its existence and usefulness to potential users. The project thus supports INSAH's strategic objective of adding value to its previous and current research efforts ("valorisation des résultats de recherche.") The project will not only make the work of INSAH and its national partners much more visible to key West African decision makers and to the outside world, but it will also help researchers at INSAH and its West African partners strengthen their skills to make better use of the wide range of research and training materials in the area of agricultural research and policy analysis that are currently available on the Internet, thereby strengthening the quality of their future analyses. In so doing, the project will directly contribute to the following three WARP strategic objectives:

- Build West African human and institutional capacity to shape agricultural policy and research;
- Strengthen West African capacity for trade policy formulation and implementation;
- Improve channels of communication between researchers, policy analysts, and public and private sector actors.

2.0 BACKGROUND

For many years, USAID and other donors have supported INSAH's research programs with its national partners in the CILSS member states. These programs have led to the development of important databases and research results on population, agricultural development and natural resource management in West Africa. INSAH's accumulation of databases and important bibliographic resources began in the 1970s, with the creation of RESADOC, the Sahelian microfiche based network for development publications and information that was coordinated by the Institute (see Annex 1). More recently, INSAH has devoted considerable effort to compiling electronic databases. For example, INSAH currently has computerized databases on the demographic, socio-economic, and health profiles of the CILSS countries, the Sahelian Pesticide Committee's list of pesticides approved for importation and for different uses in the CILSS member states, and a directory of Sahelian agricultural specialists and technical innovations. In addition, INSAH has worked with its NARS partners to produce a large number of research reports, monographs, and INSAH's journals, *Sahelian Studies and Research* and *PopSahel*, on critical development issues facing the countries of West Africa. Most of this information, however, is not easily and widely available to potential users. The computerized databases, for example, are only available at INSAH via an in-house intranet, and most of the publications are available only in hard-copy, as the INSAH website (<http://www.insah.org/index.html>) provides only citations and summaries (except for the INSAH annual report and research program

descriptions). The payoff to all this research is thus severely limited, as those who could make use of these scientific efforts often face difficulty in obtaining the information. For example, during the 2004 locust crisis in the Sahel, there would have been a high payoff to having information on line about what pesticides were approved for which uses; as it happened, officials interested in this question had to write to INSAH and make individual inquiries rather than finding the information they needed directly on the Internet.

At the same time, recent advances in the development of software and training resources that help users compress files and standardize their formats for compatible printing on virtually all printers (e.g., Adobe Acrobat) and in the technology for developing “dynamic websites” using programs such as ColdFusion, significantly increase the flexibility of making databases and publications available over the Internet. Equally importantly, these technologies also reduce the time needed to update and maintain the websites on which the data and publications are posted. Recent examples of the use of this dynamic web programming include the Food Security and Food Policy Information Portal for Africa, or FSIP (<http://www.aec.msu.edu/agecon/fs2/test/index.cfm>), a joint project of Michigan State University, the UN Economic Commission for Africa and several regional African policy research networks, including INSAH’s AGROSOC program (see Annex 2); and the Mali nutrition site (www.malinut.net) maintained by the Malian Ministry of Health.

The phenomenal growth of the World Wide Web has greatly increased the potential to: (a) diffuse scientific material produced by West African scientists (including previously hard-to-access “gray literature”—technical reports that typically are not widely nor commercially published) to their next-door neighbors and to the rest of the world, thereby increasing West African input into both scientific and policy debates; (b) make accessible to West African scientists a huge range of scientific and library material that is increasingly available on line; and (c) permit those scientists to gain access a vast array of research and training material, covering topics as diverse as how to carry out an effective Internet searches in a particular topic area to how to write and present effective outreach materials to policy makers. The great challenges in using the Internet productively to exploit these opportunities are (a) knowing how and where to place one’s material on the web to assure its visibility and (b) having a way to filter what is useful from what is not; the Internet’s openness is both its strength and its weakness, as one can spend hours trying to sort the wheat from the chaff. The FSIP (see Annex 2) is designed to address both these challenges, and this project will use it as a tool to help shine the spotlight on INSAH’s scientific accomplishments and to improve access of INSAH and its partner scientists to the vast array of scientific and training materials now available on the web. In so doing, the project will make the work of these West Africans more visible to each other and to others outside the sub-region, thereby fostering south-to-south and south-to-north learning about the agricultural sciences, food security and policy reform and reduce duplication of effort among African researchers and policy makers.

3.0 PROPOSED ACTIVITIES AND OUTPUTS

This project will focus on five major activities:

- Making key INSAH databases (on demographics, the directory of Sahelian experts and innovations, and the directory of approved pesticides) available in searchable form over the Internet;
- Increasing the availability of INSAH publications on line, through posting them in pdf format on the INSAH website and making hot links to them on the Food Security and Food Policy Information Portal (FSIP) for Africa.
- Working on a pilot basis with national researchers in Mali and Burkina Faso who are members of INSAH networks to develop procedures that INSAH and its partners can use to increase the accessibility of the national partners' publications and reports on the web via links to the INSAH website and the FSIP.
- Working with INSAH to help make available to INSAH-affiliated researchers in national research systems key full-text as well as bibliographic resources (such as FAO's AGORA system that gives national researchers in Africa free on-line access to over 500 scientific journals in the area of agriculture and natural resource management) and learning materials in a broad range of professional skill areas available via the FSIP.
- Evaluating the feasibility and cost-effectiveness of making key RESADOC publications, currently available only in microfiche, accessible electronically.

3.1 Putting the Databases on Line

This will be the major focus of activities in 2005. The effort will be jointly financed by a WARP Associate Award to FS III and INSAH through complementary funding provided directly to the institute by USAID/WARP. FS III will launch the activity by hiring a consultant from the Italian firm DASC, which developed the Malinut.net site. That site, in its "fond documentaire" section, has exactly the type of searchable database structure that INSAH and MSU believe would be most useful for the INSAH site. The advantages of contracting with DASC for the initial design are that (a) the head of the company, Dario Baredi, who would conduct the initial design, has extensive experience working in Mali (on nutrition issues for the World Bank) and hence is familiar with the computer and internet environment of the country; (b) the company has already designed the Malinut.net site and trained the local webmaster; by having a similar design and training INSAH staff in its maintenance, there would begin to build a local critical mass of people in Bamako with knowledge of this type of website, who could mutually help each other; and (c) the website design uses similar design principles with the FSIP, so the interfacing of the two sites should be straightforward.

The project will start with a two week visit to Bamako by the consultant. The output of this consultancy will be a design of the new database component of the INSAH site, substantial training of the INSAH webmaster and plans for next steps. This consultancy would occur in early March 2005. Subsequent consultations and local support in implementing the design would be covered under the INSAH grant, with the MSU grant covering the cost of any additional software needed by INSAH to implement the plan.

The objective would be to have the three databases on-line by December 2005. Given the possibility of a recurrence of the locust infestation in 2005, it would make most sense to give top priority to getting the pesticide database on line first. The exact sequencing of the work, however, will be worked out with INSAH. In addition, AGRHYMET in Niamey also has

several electronic databases on agricultural production and agro-climatologic variables in the CILSS countries. Developing procedures for posting the INSAH electronic databases to the Internet could serve as a template for the eventual posting of the AGRHYMET databases as well.

The project will also support the development of promotional materials (to be sent electronically to potential users) explaining how to use the on-line databases. Presentations will be prepared for various workshops and conferences (e.g., the annual meeting on the Prevention and Management of Food Crises in the Sahel) to make analysts and policy makers more aware of the existence of the on-line databases and how they can be used to better inform decision-makers.

3.2 Making Full-Text Versions of INSAH Publications More Widely Available on Line

INSAH has made considerable progress over the past two years in updating its website and posting a broad array of material describing INSAH's program. (See figure 1). MSU specialists will work with INSAH's webmaster and publications staff to push this process further, by developing and implementing a plan to make many of INSAH's key publications available on line. MSU staff members have extensive experience in this area, via their work on the FSIP and FS III's own website (<http://www.aec.msu.edu/agecon/fs2/index.htm>), which has over a thousand downloadable publications. This component will also begin in March, 2005, with a trip by an MSU specialist (Steve Longabaugh) to work with INSAH staff on development of a plan, to install a new high-speed scanner and train a secretary in its use (for documents not already in electronic format), to provide additional training (if needed) to secretarial staff in use of Adobe Acrobat software, and to work with the webmaster on a strategy for storing the documents on the server and posting them to the web (folder design, optimizing the pdfs for downloading, etc.) MSU will provide a second consultant (Mbaye Yade) to provide up to a month of follow-on work with INSAH to (a) develop a plan for sequentially getting all the major publications on line; (b) work with the publications staff to assemble the electronic files and identify any software issues that need to be addressed in converting existing publications into pdfs, and (c) identify any additional training needs of the secretarial staff to carry out the conversions. Work in implementing this conversion and posting will continue throughout the life of the project, with periodic backstopping missions from MSU.

Figure 1. INSAH's Website



The goal will be to have most of INSAH's monographs and other reports for which electronic versions exist on line by the end of 2005. In 2006, work will focus on getting on line selected older monographs and reports, for which electronic copies do not currently exist, as well as INSAH's periodicals (*Sahelian Research and Studies* and *PopSahel*). MSU and INSAH will need to analyze any revenue implications for the Institute of moving to on-line publication (potential lost sales of hard copies). MSU's preliminary hypothesis is that these revenue losses will be small and more than offset by the benefits of increased visibility and utility of INSAH's research results, thereby achieving an overall and cost-effective improvement in service to local and regional stakeholders.

3.3 Expanding the Visibility of INSAH's National Partners' Work

INSAH's mandate calls on it to help strengthen the capacity of national research systems to carry out research and policy outreach in the areas of sustainable agricultural growth, demographics, and natural resource management, largely through networking and technical support. Yet these national partners face the same problem as INSAH, in that many of their publications and reports are not widely available in electronic format, thereby (a) limiting the impact of their research on national decision-making and on the analyses carried out for international organizations, such as

the World Bank, and (b) leading to duplication of efforts across countries and “reinventing of the wheel,” which raises the cost of research and wastes resources. To overcome these problems, the project will work with a few key INSAH partners in Mali (in year 1) to develop methods to make their documents available for download via the web (via their own websites, through the INSAH website, and/or via the FSIP.¹) The FSIP has developed draft a draft webpage (see figure 3 in Annex 2), through which national researchers can submit suggestions for additional web sites, research and policy papers and related internet sources of information. There are also draft procedures to submit papers and data sets to a Regional Editor for posting to a website that will allow the work to be made available (downloadable) to others via the FSIP or a regional website (such as INSAH’s). The pilot efforts in Mali will allow INSAH and MSU to refine the procedures, which can then be used with additional partners to make their publications more widely available and give greater visibility to the joint INSAH/national research efforts, thereby adding value to both the national and regional efforts. Once the procedures are developed in 2005, in 2006 they will be extended to work with other partners in Mali and Burkina Faso. If additional funding becomes available, either from WARP or bilateral USAIDs, the effort can be expanded to other NARS within the CILSS member states.

3.4 Strengthening the Access of INSAH and its Partners to Full-Text Documents and Learning Tools to Improve Applied Research and Policy Outreach

This component of the project will improve the skills of West African technical and social scientists to use the wealth of scientific knowledge and experience currently available on the Internet more effectively to carry out research, policy analysis, and policy outreach. The key tool to achieve these objectives will be the Food Security and Food Policy Information Portal for Africa, or FSIP (<http://www.aec.msu.edu/agecon/fs2/test/index.cfm>), a joint project of Michigan State University, the UN Economic Commission for Africa, and several regional African policy research networks, including INSAH. This site gives researchers and policy makers a one-stop location for (a) data and analytical reports on food security and food policy for every country in Africa; (b) a location where they can share their own work with colleagues across the world; (c) training materials in a broad range of practical professional skill-building areas, including more effective use of the Internet for research and policy analysis; and (d) a forum to share experiences on how to improve the effectiveness of policy extension efforts. The site offers all these services in English, French, and Portuguese.

Start-up activities will focus on strengthening INSAH’s capacity to (1) act as an agent for training members of its associated networks in the use of the Internet for improved research, policy analysis, and outreach and (2) serve as a broker to facilitate national partner’s access to AGORA and similar on-line resources that require special sign-up. This work will be conducted in conjunction with INSAH’s food security program within AGROSOC. Activities during the first year of the project will target a region-wide audience using a combination of email, list-serve, e-conferences and special Internet training sessions added on to previously scheduled regional workshops and conferences. The key objective of these regional activities will be to raise awareness and use of the INSAH website, the FSIP, and the FAO-sponsored AGORA

¹ A logical partner to start with would be the Food and Nutrition Monitoring Division (DSSAN) of the Malian Ministry of Health, which has collaborated with both INSAH and MSU on a prior study on the linkages between agricultural growth and child nutritional status, and which maintains the Malinut.net website.

facility for accessing professional journals free of charge. More specifically regional activities will:

- Promote greater use of AGORA (to be done in close consultation with FAO) by:
 - Contacting all INSAH affiliate institutions to inform them of AGORA, translate and helping facilitate the distribution of French and Portuguese language versions of a CD/DVD about using AGORA, and assist institutions with AGORA registration when necessary.
 - Contacting staff of these institutions after registration to publicize AGORA further and assist in communicating with FAO/AGORA with any access problems encountered.
- Raise awareness of the databases and other information to be available via the INSAH website as well as the FSIP through email messages, distribution of brochures, encouraging journalists to write about them, and training sessions attached to selected regional workshops and conferences. This approach of “adding on” presentations to existing conferences will keep costs down by reducing the need for the project to finance travel of participants to stand-alone workshops and increase the number of people trained.²
- Make national partners aware of the wide range of training materials accessible on the FSIP which can greatly increase their productivity in carrying out their research and outreach activities.
- Monitor and evaluate progress being made on INSAH website and the FSIP by querying users and potential users on access problems, relevance of current content, suggestions for additional content, ideas on increasing content from African researchers and analysts, and ideas on using the portal to improve research and policy outreach.

In year 2, the project will convene a workshop at INSAH to bring together the researchers, analysts, and librarians who have been most active in the email exchanges, list-serve, and e-conference activities of the first year to assist with developing long-term strategies to broaden the use of the Internet for research, analysis, and outreach and to ensure the sustainability of efforts underway to improve the West African content. Among the issues likely to be addressed are:

- INSAH website, FSIP, and AGORA access and use by participants: Progress, problems, and strategies for addressing the problems
- Strategies for increasing the use of the Internet for policy outreach,
- Strategies for increasing African content on the Internet,
- The role of national, regional, and international organizations in expanding and maintaining availability of African food security and food policy full-text documents and databases on the Internet.

² Some examples under consideration: The annual West African Regional Market Outlook Conference and the Réunion annuelle du Réseau de Prévention et de Gestion des Crises Alimentaires.

This workshop will also be used to develop country-level strategies and work plans for raising awareness and use of the INSAH website and databases and the portal and increasing country-level content on the Internet. Lessons learned from country-level activities in Mali during the first year (see below) will provide some guidance on best practices for rapidly expanding awareness, use, and content. A particular effort will be made to increase reports of policy success stories that would contribute to the objective of using the Internet to carry out more effective policy outreach.

The target audience for these regional activities and workshop participants will be members of the networks who have worked with MSU and INSAH in the past (e.g., members of PRISAS, RESADOC, SADAOC, NARS). It will be important to involve a mix of researchers, policy analysts, and librarians in the activities. This workshop will also be coordinated (and perhaps jointly conducted) to the maximum extent possible with FAO/AGORA, INASP, CTA and UNECA.

3.5 Evaluating the Feasibility and Cost Effectiveness of Putting Selected RESADOC Publications on Line

Much of the INSAH documentation is not in digital format (such as the RESADOC database); this documentation may be difficult to move to the web. During the first year of the project, technical options for converting microfiche to digital format will be explored. The project will evaluate the potential volume of material that would have to be digitized, estimate costs, review how such material would be catalogued, set priorities for what material is the most important to digitize, and then propose a plan to do so, along with an estimated budget and a plan to mobilize the extra funding necessary.³ At the same time, the project will also develop estimates of the costs of posting the electronic databases from AGRHYMET.

4.0 TIMING

The activity will take place over 19 months, from March 1, 2005 through September 30, 2006. During 2005, the focus of the activities will be on getting the three INSAH databases on line, posting key INSAH monographs and reports on the Internet, and developing the pilot approaches to post key publications of INSAH's national partners. The project will also work with the national partners to help them to get access to AGORA, including helping to identify participants for AGORA's planned 2005 workshop in Francophone Africa. In 2006, the program will continue and expand the posting of INSAH and partner publications, begin working with INSAH partners to publicize the learning tools on the FSIP, and carry out the evaluations of the potential for conversion of key RESADOC information into digital form and its posting on the Internet.

5.0 EVALUATION AND LOOKING FORWARD

Throughout the entire two years of the project, INSAH/MSU will be using a variety of methods to evaluate growth in the use of the INSAH website, AGORA and the FSIP and to solicit

³ Some preliminary investigations into equipment available for easily converting microfiche to digital format suggest that doing this on a large scale may be very expensive; the basic equipment alone costs \$65,000.

feedback from trainees, participants in e-conferences, and recipients of project emails and brochures on their experiences with these research tools. A special effort will be made toward the end of the second year to solicit feedback on the usefulness of the INSAH databases, the various INSAH and partner publications, and the policy outreach tutorials and case studies available through the portal using an e-conference or list serve. At the end of the second year INSAH/MSU will prepare a report on the results of these monitoring and evaluation activities that will identify the strengths and weaknesses of the different approaches used to raise awareness, improve internet search skills, increase content, and create a community of learning to improve policy outreach. Results will be used by INSAH and collaborators to improve the INSAH website, national partner sites, and the FSIP and related support activities and to evaluate what follow-on activities, if any, are warranted. If the evaluation documents a high payoff to project activities and strong demand for follow-on actions, INSAH and MSU will develop proposals for future activities.

In addition to the summary of monitoring and evaluation results, INSAH/MSU will prepare a project report that includes a description of how country-level and regional organizations have organized the posting of data and documents on the web (including recommendations for improvements), and a discussion of what is needed to ensure the sustainability of the regional and country-level activities required to expand scientific exchange and food policy outreach via the Internet.

6.0 BUDGET AND PROPOSED FUNDING MECHANISM

As shown on the attached budget, carrying out this set of activities will require a total of \$270,000 over 19 months. MSU proposes that this activity be funded as an Associate Award to the USAID-MSU Food Security III Leader with Associate (LWA) Cooperative Agreement (FS III). The FS III LWA provides an administratively easy way of implementing the activity quickly (because the Leader Agreement has already been fully competed, there is no need to go through a second competitive bid procedure). INSAH and MSU will lay out their respective roles and responsibilities in the project as an amendment to the Memorandum of Understanding between the two organizations that has governed their collaboration under previous activities of the Food Security Cooperative Agreements.

ANNEX 1.

INSAH'S EXPERIENCE WITH THE STORAGE AND DISSEMINATION OF SCIENTIFIC LITERATURE

INSAH has long recognized the importance of improving West African access to scientific literature on a broad range of topics related to food security (agriculture, natural resource management, population, climate change, etc.). Without good access to the global body of scientific literature (including unpublished work by African scholars), African researchers and policy analysts are unable to learn from what has already been done. Without institutional structures capable of storing and disseminating the results of Sahelian-generated scientific literature, there is no institutional memory for future generations to access, and West African researchers are unable to give visibility to their own work and get feedback on it. Many of INSAH's activities have addressed these challenges, but two are particularly relevant to the current proposal.

In the 1980s, INSAH helped create RESADOC (Réseau Sahélien d'Information et de Documentation Scientifiques et Techniques), which linked CILSS member countries together in a network of national, regional, and international documentation services committed to facilitating the storage of documentation on Sahelian development issues and scientific exchange among Sahelian researchers. The system, developed in pre-Internet days, was based on microfiche technology. RESADOC made important advances in gathering and storing scientific literature and is considered one of the richest sources of information on development in the Sahel. However, exchange of microfiche documents across countries remained a challenge. Consequently, the various nodes of the network did not benefit to the extent anticipated and the documentation was not widely available to Sahelian researchers, much less to the general public.

Another approach to expanding access to scientific information is the SQR (query/response) program created in 1985 by CTA (Centre Technique de Coopération Agricole et Rurale) and now being decentralized from Europe to partners in the CTA network. In West Africa, INSAH is a key CTA partner in the decentralization effort along with AGRHYMET in Niger and IER in Mali. The overall objective of the SQR program is to facilitate the access and use of scientific information to further agricultural and rural development. The SQR service assists participating institutions develop skills and procedures to encourage submission of and develop high quality responses to requests for information from the general public. The five priority areas covered by the SQR service are:

- Intensification and optimization of production
- Strengthening of NARS
- Environmental protection and natural resource management
- Promotion of market-centered activities
- Mobilization of civil society

SQR services are available to a wide range of actors: government, teachers, students, journalists, NGOs, producer organizations, and commercial enterprises and their associations. An important differentiating characteristic of the SQR program is its “extension” characteristic; a key objective is to make scientific information generated by agricultural researchers available and relevant to

the general public, particularly people who might not have the Internet access or skills to search for information on their own. INSAH's librarian, the contact person for the queries, responds to the written or phone requests by (1) searching INSAH databases and documentation, (2) referring the question to network experts on the topic, and/or (3) looking for help on the Internet. The program, which began at the end of 2003, has received most of its queries from students, with a few from teachers, journalists, and private entrepreneurs or farmers looking for technical information on production and processing technologies.

Current SQR program objectives include publicizing the service to expand the clientele base (INSAH handled approximately 170 queries in 2003) and improving access to documentation required for satisfactory responses. Providing librarians and other resource persons in the SQR system training in how to use the Food Security and Food Policy Information Portal for Africa (FSIP) would go a long way toward improving access to a wider range of documentation and reducing the costs of replying to queries. As the SQR program broadens its clientele, sustainability of the program will become an issue because more staff time will be required to formulate the growing number of replies. The FSIP can make a substantial contribution to the long-run sustainability of this outreach program by reducing the costs of formulating replies, while simultaneously making the same information available directly to a much larger audience of researchers and policy analysts who tend to have better Internet access than the general public. The potential contribution of the portal will grow as CTA expands the decentralization of its SQR program to other West Africa countries.⁴ Over the long-term, as access to the Internet expands in West Africa, teaching better Internet search skills to those who are currently making inquiries through the SQR system is probably a more sustainable solution than simply expanding the number of resource librarians engaged in the system. The long-range goal is to help librarians become a more effective teaching and facilitating interface between subject matter materials, on-line access to full text materials and improved searching skills of individual scientists and other clients of virtual libraries.

⁴ Current participants are: Mali (Institut d'Economie Rurale), Niger (AGRHYMET), Benin (Faculté des Sciences Agronomiques), Ghana (Ghana Agricultural Information Service or GAINS), and Nigeria (Nigerian Extension and Research Liaison Service at Ahmadu Bello University).

ANNEX 2.

OVERVIEW OF THE FOOD SECURITY AND FOOD POLICY INFORMATION PORTAL FOR AFRICA (FSIP)

The advent of the Internet and recent reductions in the costs and increases in the speed of Internet service in Africa have changed the way most of us think about information storage and dissemination. Realizing the potential of these technological advances, the Food Security III Cooperative Agreement at MSU joined forces with the UN Economic Commission for Africa's Sustainable Development Division (UNECA/SDD) and five regional African networks (including INSAH, SADAOC, and REPA in West Africa) to design and put into operation an Internet information portal responding to the needs of individuals and institutions working on food security issues in Africa. The broad outlines of the design were developed at a meeting of potential participants (including an INSAH representative) hosted by UNECA in Addis Ababa in January 2003. The overall portal objective is to assist African food security and food policy researchers to:

- Rapidly find important and high quality Internet sources of data and information to assist in their analytical work;
- Make data and research results produced by African researchers available to a world-wide audience;
- Improve skills needed for quality research, policy analysis and policy outreach using the Internet as both a vehicle for training and a source of data and information.
- Overcome language barriers that inhibit the exchange of scientific and policy analysis documents across Africa by providing an on-line informational translation feature for documents posted to or linked to the Portal.

It is anticipated that the portal will help build learning communities of researchers and policy analysts through increased cross-country and cross-region interactions and the use of web-based tools for building policy skills.

The first year of portal development has been devoted to designing the portal, defining the role of participating institutions, developing a plan for transferring portal management from MSU/FSIII to UNECA, and developing portal content.⁵ Although the portal is still "under construction," it already provides links to a tremendous amount of information. At present, there are three broad areas of portal content:

- Country pages providing information and website links by topics that are specific to each African country,
- Topic pages providing links to websites, downloadable data and documents on 23 major food security/food policy subcomponents or topic areas of interest to agricultural scientists and food policy analysts,
- Training materials in English, French and Portuguese, providing links to tutorials designed to improve both Internet search skills and general professional skills.

⁵ See <http://www.aec.msu.edu/agecon/fs2/test/en/portalexplanation.pdf>.

Figure 1 is an illustration of a “country page” for Burkina Faso, listing the various topic areas covered on the left and the tutorials available on the right; the center provides a general introduction to the country page. Figure 2 provides an illustration of the links found under the “agricultural research” topic reached from the Burkina Faso country page, including a list of the “best” Internet sources of information on this topic for Burkina Faso. There is also a facility to provide rapid “informational translations” (to/from a large number of languages, including French, English, and Portuguese) of linked materials that are in HTML format. Similar pages are available on the Portal for every country in Africa.

Figure 3 illustrates the draft procedures through which partners in national research systems can submit papers or data for posting, either directly to UNECA/MSU or, preferably through a regional editor/webmaster, in an organization like INSAH. MSU and INSAH will refine these procedures in year 1 of the project. Figure 4 provides an example of the learning materials available via FSIP, showing some of the links to sites providing training, in English, French, and Portuguese, on conducting productive Internet-based research.

Consulting any country web page on the portal (<http://www.aec.msu.edu/agecon/fs2/test>) reveals the potential benefits to a food security analyst of using this portal: rapid access to publicly available data sets such as World Bank social development indicators, or national production, price, and climate series; links to country-specific sources of information and current news; rapid search of recent publications for specific food security topics, with or without a country focus; and instructions on accessing published journal articles free of charge through AGORA, among many others. A visit to the site also reveals that there are areas requiring additional work, particularly the need for adding country and topic links to work by African analysts to increase the visibility of their work (much of which falls into the category of “gray” literature that is not yet available on the web).

Annex Figure 1. English Versions of Opening Country Page for Burkina Faso (viewable on line at: <http://www.aec.msu.edu/agecon/fs2/test/links.cfm?Lang=en&Country=5&Topic=1>)

The screenshot shows a web browser window displaying the 'Food Security and Food Policy Information Portal for Africa'. The page is for Burkina Faso and includes a navigation menu on the left, a search bar on the right, and a main content area with a welcome message and a list of topics.

UN-ECA DISD & SDD in cooperation with African Food Security/Policy Networks & MSU Agricultural Economics

Home > Burkina Faso > Introduction

English Français Português

Food Security and Food Policy Information Portal for Africa

Network Hubs : ASARECA/ECAPAPA CILSS-INSAH/AGROSOC CHA-WCA/REPA SADAC SADC/FAHRPAN UN-ECA/SDD

Choose A Country [v]

Burkina Faso
Introduction

Welcome to the Food Security and Food Policy Information Portal for Africa!

The objective of this directory is to assist country/region-specific African food security and food policy researchers to:

- Find important and high quality internet sources of data and information to assist in their country/topic analytical work;
- Offer to others in Africa (and elsewhere) important country/topic level work they are doing;
- Improve their professional skills for research and policy outreach. This includes online tutorials and downloadable training materials on conducting research quality and "deep" internet searching to find new data and information that is constantly and increasingly becoming available in digital format via the internet.

[Read more about this collaborative effort](#)

A few basic guidelines about directory organization and how to navigate to find what you want. To access information for another country/region, click "Home" in the top left hand corner or use the pull down window "Choose a Country" on the top left of all inside pages. The Directory covers all African countries, as well as 5 regions (East, Southern, West/Central, North and Pan-African). To access information related to one of the food security and food policy Support Networks, click on "Home" and select the Support Network you want. The internet resources available to you from the Directory are shown in the boxes on the left and right of the page, representing four categories of information:

I. Topics For A Specific Country/Region. The left hand box contains various food security/food policy topics of interest. Clicking on a topic will take you to its unique page presenting seven types of hot-linked resources:

- Web Sites: Country/Region-Specific;
- Web Sites: Topic-Specific;
- Research Papers: Country/Region-Specific;
- Research Papers: Topic-Specific;
- Policy Briefs & Papers: Country/Region-Specific;
- Policy Brief & Papers: Topic-Specific;
- Suggestions and hot links to sites for Building Your Own Professional Research and Policy Dialogue Skills (and to make this as helpful as possible, the suggestions are specific to individual topic areas). This category also has a facility for you to submit to the directory.

Choose a Topic

- Introduction
- Current News
- Early Warning
- Government
- Food/Agriculture
 - Production
 - Research
 - Biotechnology
 - Extension
 - Marketing
 - Trade
 - Finance
 - Agribusiness
- Rural Development
- Poverty Reduction
- Gender/WID
- Natural Resources
- Environment
- African Studies
- Donor Portals
- Population
- Health/Nutrition
- HIV/AIDS
- Education
- Maps & GIS
- ICT

Search Now

- Quick Search the Web
- Quick Search this Site

Building Professional Skills

- Internet Search
- Library Info
- Distance Learning
- Economics/Social Sciences
- Food Security/Food Policy
- Statistical Analysis
- Software Help
- Language Translation
- Management Resources
- Policy Research
- Policy Briefs
- Presentations
- Posters
- Writing
- Journalism
- Proposals/Funds

Suggestions for...

- Web Sites
- Research Papers
- Policy Briefs
- Internet Search Techniques
- Reporting Non-Working Links

This is a working demonstration site. Many sections are under development and incomplete.

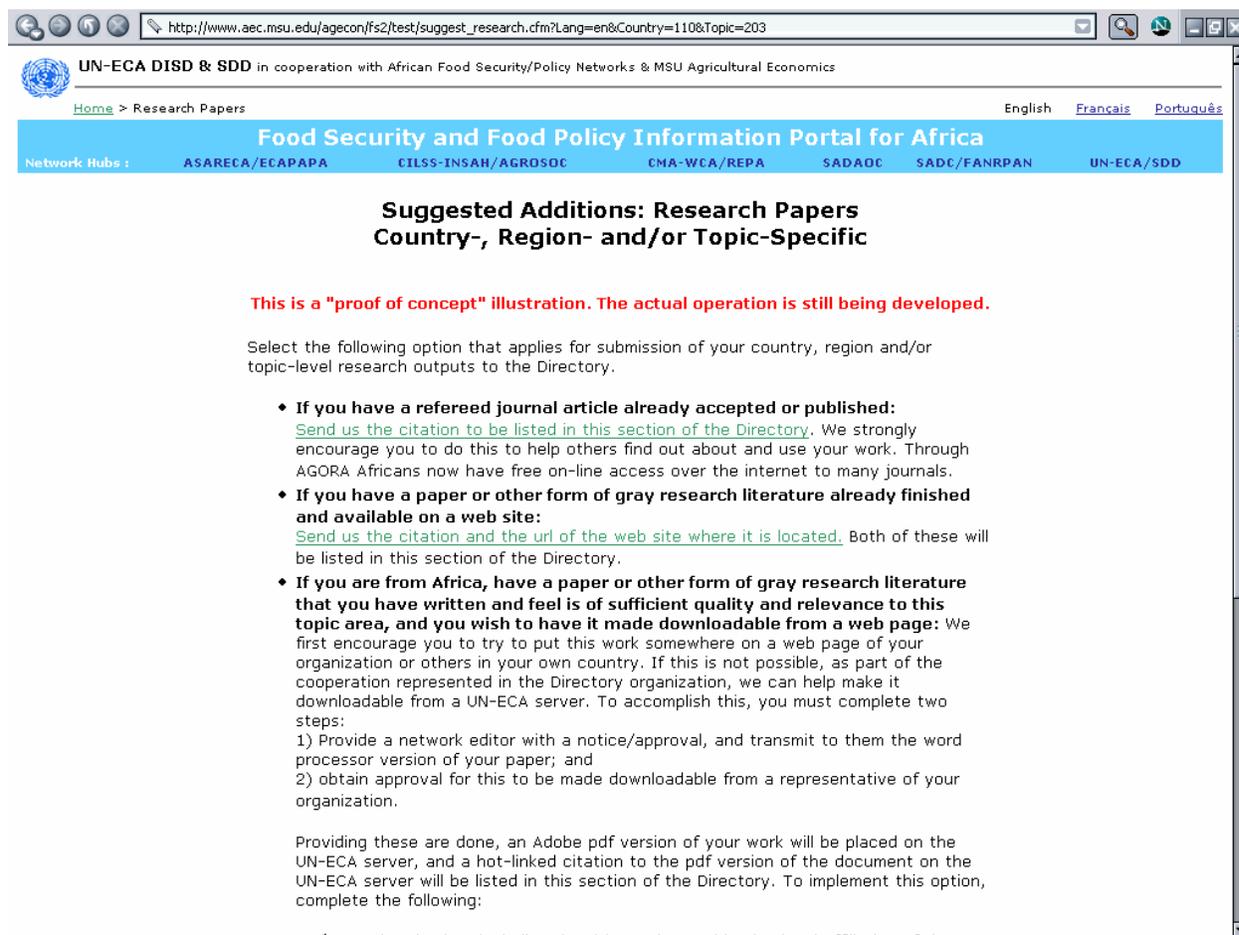
Annex Figure 2. French Version of Agricultural Research Page for Burkina Faso (viewable on line at:

<http://www.aec.msu.edu/agecon/fs2/test/links.cfm?Lang=fr&Country=5&Topic=6&Section=0>)

The screenshot shows a web browser window displaying the French version of the Agricultural Research Page for Burkina Faso. The page is titled "Portail d'Information pour la Sécurité Alimentaire et les Politiques Alimentaires pour l'Afrique". The URL in the address bar is <http://www.aec.msu.edu/agecon/fs2/test/links.cfm?Lang=fr&Country=5&Topic=6>. The page is organized into several sections:

- Navigation and Header:** Includes the UN-ECA DISD & SDD logo and text: "UN-ECA DISD & SDD en collaboration avec les réseaux africains de sécurité/politiques alimentaires et le département d'Economie Agricole de MSU". It also features a language selector (English, Français, Portugais) and a network center selector (ASARECA/ECAPAPA, CILSS-INSAH/AGROSDC, CMA-WCA/REPA, SADADC, SADC/FANRPAN, UN-ECA/SDD).
- Main Content Area:**
 - Country Selection:** A dropdown menu labeled "Choisissez un Pays" is set to "Burkina Faso".
 - Theme Selection:** A dropdown menu labeled "Choisissez un Thème" lists various topics such as Introduction, Actualité, Alertes Précoces, Gouvernement, Agro-Alimentaire, Production, Recherche, Biotechnologie, Encadrement, Commercialisation, Commerce, Finance, Agro-Industrie, Développement Rural, Réduction de la Pauvreté, FED, Ressources Naturelles, Environnement, Etudes Africaines, Portails des Donateurs, Population, Santé/Nutrition, SIDA/HIV, Education, Cartes & SIG, and TIC.
 - Liens présentées (Presented Links):**
 - Sites Web: Spécifiques par Pays (Web Sites: Specific by Country):** Lists links for LRPV, INERA, CNSF, UNECA, WISARD, and AROW.
 - Sites Web: Spécifiques par Thème (Web Sites: Specific by Theme):** Lists links for Forum for Agricultural Research in Africa, ISNAR, ICASA, and CGIAR.
 - Articles de Recherche: Spécifiques par Pays (Research Articles: Specific by Country):** States "Aucun lien de ce type n'est disponible pour le moment" (No link of this type is available for the moment).
 - Articles de Recherche: Spécifiques par Thème (Research Articles: Specific by Theme):** Lists an article titled "The Future of Genetically Modified Crops Lessons from the Green Revolution" by Felicia Wu and William Butz.
 - Synthèses et Articles de Politiques: Spécifiques par Pays (Syntheses and Policy Articles: Specific by Country):** States "Aucun lien de ce type n'est disponible pour le moment".
 - Synthèses et Articles de Politiques: Spécifiques par Thème (Syntheses and Policy Articles: Specific by Theme):** States "Aucun lien de ce type n'est disponible pour le moment".
 - Développer vos propres Compétences de Recherche (Develop your own Research Competencies):** A section for developing research skills.
 - Rechercher Maintenant (Search Now):** Includes "Recherche Rapide Sur le Web" and "Recherche Rapide Sur le Site".
 - Développer Vos Compétences Professionnelles (Develop Your Professional Competencies):** Lists various professional development resources like "Recherche Web", "Infos des Bibliothèques", "Apprentissage à Distance", "Economie/Sciences Sociales", "Sécurité Alimentaire/Politiques Alimentaires", "Analyse Statistique", "Aide au Niveau des Logiciels", "Traduction des Langues", "Ressources de Gestion", "Recherches sur les Politiques", "Notes de Synthèse", "Présentations", "Affiches", "Écriture", "Journalisme", and "Propositions/Financements".
 - Suggestions Pour... (Suggestions For...):** Lists "Sites Web", "Articles de Recherche", and "Synthèses de Politiques".
- Right Side Note:** A red text box states: "Ceci est un site de démonstration. Certaines sections sont en construction et incomplètes." (This is a demonstration site. Some sections are under construction and incomplete.)

Annex Figure 3. Draft Procedures for National Partners to Add Publications to the FSIP



http://www.aec.msu.edu/agecon/fs2/test/suggest_research.cfm?Lang=en&Country=110&Topic=203

UN-ECA DISD & SDD in cooperation with African Food Security/Policy Networks & MSU Agricultural Economics

Home > Research Papers English Français Português

Food Security and Food Policy Information Portal for Africa

Network Hubs : ASARECA/ECAPAPA CILSS-INSAH/AGRDSOC CMA-WCA/REPA SADADC SADC/FANRPAN UN-ECA/SDD

Suggested Additions: Research Papers Country-, Region- and/or Topic-Specific

This is a "proof of concept" illustration. The actual operation is still being developed.

Select the following option that applies for submission of your country, region and/or topic-level research outputs to the Directory.

- **If you have a refereed journal article already accepted or published:**
[Send us the citation to be listed in this section of the Directory.](#) We strongly encourage you to do this to help others find out about and use your work. Through AGORA Africans now have free on-line access over the internet to many journals.
- **If you have a paper or other form of gray research literature already finished and available on a web site:**
[Send us the citation and the url of the web site where it is located.](#) Both of these will be listed in this section of the Directory.
- **If you are from Africa, have a paper or other form of gray research literature that you have written and feel is of sufficient quality and relevance to this topic area, and you wish to have it made downloadable from a web page:** We first encourage you to try to put this work somewhere on a web page of your organization or others in your own country. If this is not possible, as part of the cooperation represented in the Directory organization, we can help make it downloadable from a UN-ECA server. To accomplish this, you must complete two steps:
 - 1) Provide a network editor with a notice/approval, and transmit to them the word processor version of your paper; and
 - 2) obtain approval for this to be made downloadable from a representative of your organization.

Providing these are done, an Adobe pdf version of your work will be placed on the UN-ECA server, and a hot-linked citation to the pdf version of the document on the UN-ECA server will be listed in this section of the Directory. To implement this option, complete the following:

 1. Send the citation, including the title, author and institutional affiliation, of the

Annex Figure 4. FSIP Page on Internet Search Tools

The screenshot shows a web browser window displaying the 'Internet Search Tools' page. The URL in the address bar is <http://www.aec.msu.edu/agecon/fs2/test/links.cfm?Lang=en&Country=110&Topic=102&Section=0>. The page header identifies the organization as 'UN-ECA DISD & SDD in cooperation with African Food Security/Policy Networks & MSU Agricultural Economics'. The main title is 'Food Security and Food Policy Information Portal for Africa'. Below the title, there are network hubs for ASARECA/ECAPAPA, CILSS-INSAH/AGROSDC, CMA-WCA/REPA, SADAOC, SADC/FANRPAN, and UN-ECA/SDD. A 'Choose A Country' dropdown menu is present. The left sidebar lists various topics under 'Choose a Topic', including Introduction, Current News, Early Warning, Government, Food/Agriculture, Rural Development, Poverty Reduction, Gender/WID, Natural Resources, Environment, African Studies, Donor Portals, Population, Health/Nutrition, HIV/AIDS, Education, Maps & GIS, and ICT. The main content area is titled 'Internet Search Tools' and features 'Featured Links' for English, French, and Portuguese. The English section lists links to U.C. Berkeley Library, Ferdowsi University of Mashhad, University of Albany, and Noodletools. The French section lists links to Université de Sherbrooke, Bibliothèque nationale de France, and Bibliothèque de l'Université Laval. The Portuguese section lists links to Pesquisas, COMO ACHAR o que deseja na Internet, Pesquisa nos servidores Web da Universidade de Coimbra, Sites de busca no Brasil e Portugal, and LUSOFONO.NET. A right sidebar contains 'Search Now' and 'Building Professional Skills' sections. The 'Search Now' section includes links for 'Quick Search the Web' and 'Quick Search this Site'. The 'Building Professional Skills' section includes links for 'Internet Search', 'Library Info', 'Distance Learning', 'Economics/Social Sciences', 'Food Security/Food Policy', 'Statistical Analysis', 'Software Help', 'Language Translation', 'Management Resources', 'Policy Research', 'Policy Briefs', 'Presentations', 'Posters', 'Writing', 'Journalism', and 'Proposals/Funds'. Below this is a 'Suggestions for...' section with links for 'Web Sites', 'Research Papers', 'Policy Briefs', 'Internet Search Techniques', and 'Reporting Non-Working Links'. A notice on the right states: 'This is a working demonstration site. Many sections are under development and incomplete.'