

UC DAVIS

AGRICULTURAL SUSTAINABILITY INSTITUTE

College of Agricultural and Environmental Sciences

Second Annual Narrative Report to the W.K. Kellogg Foundation

Inter-Institutional Network for Food, Agriculture, and Sustainability (INFAS)

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The Inter-institutional Network for Food, Agriculture and Sustainability (INFAS) is a national network of scholars with an overall purpose of science, outreach and education to ensure resilience in the US food system. The Network has been created to identify, assess and make visible critical trends and vulnerabilities in agriculture and food system sustainability, and to engage resources and capabilities to forge collaborative solutions. INFAS members recognize that needs will shift over time and the Network will need to be flexible to remain relevant. Endowed support will provide the consistent funding needed to ensure long term commitment to the Network which will leverage past and forthcoming WKKF investment at institutions across the United States.

Overarching goals include:

- *A corps of diverse, well trained individuals prepared to lead initiatives to address agriculture and food system challenges.* In the past project year INFAS members, and other collaborators, worked to develop a national food assessment project proposal for submission to the US National Science Foundation's (NSF) Sustainability Research Network (SRN) competition. The process involved an extensive number of collaborators to provide additional multidisciplinary expertise and regional representation. The assessment project, entitled 'Resilience, Resistance, and Risk in the U.S. Food System,' evolved from preliminary INFAS discussions initiated during the INFAS-hosted National Symposium on Food Systems and Sustainability hosted by ASI at UC Davis in 2010. A goal of the project is to incubate a new generation of scholars, leaders and practitioners that are multidisciplinary, multigenerational, and multi-institutional to forge collaborative solutions across communities, including those with highly vulnerable populations. A specific aim is to increase university enrollment of students with diverse backgrounds and perspectives that are prepared to identify and address emerging sustainability challenges in agriculture and the food system.
- *A stronger, broader consensus on priorities for research, education and outreach in food and agriculture which are relevant to society.* During the past year, INFAS acted to establish specific priorities for research, education and outreach through the development of the 'Resilience, Resistance, and Risk in the U.S. Food System' proposal, described above. The overarching goal of the proposal is to orchestrate the first national food system assessment for the US including organizing a national conversation on the ethics and values associated with food, the food system, US food security, and the US role in global food security; and building a systems understanding of the drivers and processes governing this complex system. Knowledge from the project's first phase will direct the quantification and verification of indicators and inform food system models. This first national conversation strives to develop a stronger, broader consensus on priorities that are relevant to society by directly involving diverse societal groups across the US.
- *Science-based evidence in support of food system sustainability—including improved access to healthy food for all US children, with particular emphasis on improved outcomes for our most vulnerable children —available to community advocates and policy makers.*

As described previously, INFAS members developed a project proposal during the last year to collect and analyze science-based evidence in support of food system sustainability. A primary goal is to give voice to diverse perspectives through engagement, outreach, and systematic networking. The project is particularly focused on improving food-related conditions (e.g. hunger and limited access to nutritious food) that constrain opportunities for vulnerable children.

- *Increased media attention on the issues of agriculture and the food system.* (1) In the past year, a preliminary INFAS webpage was established that now lists contact information for INFAS members and their institutions. It also features resources and outcomes from two past national symposia on Food Systems and Sustainability including YouTube videos of speakers involved in symposium panels. (2) Recently, several INFAS members have initiated a MOOC (Massively Open Online Course) on Sustainable Agriculture. Organizers of the fledgling venture describe it as ‘a place where we meet, share, discuss and explore the complex world of sustainable agriculture, its cultural and political implications as well as environmental and economic realities.’ The main goal is to engage a broad community of stakeholders involved and interested in the various facets of sustainable agriculture through a forum that is open to everyone who can access a phone and an internet connection.
- *Policy makers at all levels are better informed about farm and food policy choices and their consequences, particularly those which affect child hunger and malnutrition in the US.* The ‘Resilience, Resistance, and Risk in the U.S. Food System’ proposal was reviewed by the NSF, shared with the Kellogg Foundation, and there are plans to discuss the project with officers at the US Department of Agriculture. This is a first step towards providing information to policy makers. Initiation of the project is expected to lead, in the future, to specific knowledge to share with policy makers.

Objectives to achieve these overarching goals include:

- Identify and engage potential new INFAS members and young scholars who would benefit from networking with the group.
- Develop scholars who engage effectively with local communities, advocacy groups, policy makers and others in developing and conducting research, education and outreach projects
- Build INFAS as a supportive community representing institutions and organizations committed to the development and support of food and agricultural systems that sustain the health of people, society and the natural environment.
- Design projects and secure additional funding for a series of major collaborative initiatives that will increase awareness and understanding of trends and interactions that affect health and resilience of vulnerable communities and populations.
- Develop methods to allow communication among group members and between group members and society
- Create permanent capacity for collaborative, critical analyses of programs and policies to accelerate the transition to food system sustainability and social justice.

Progress Toward Goals

1. **Was an effective governance structure established?** Yes, an INFAS executive committee was established in the past year of the project. The ten person committee includes six regular and four ex officio members. The regular members will advise Thomas Tomich, *ex officio* member and ASI Director, on the allocation of endowment and startup funds and facilitate feedback and communication from Network members to Tomich and the Dean of the UC Davis College of Agricultural and Environmental Sciences regarding the management of the endowment proceeds and INFAS activities.

See Activity D, below, for more details on the committee structure.

2. **How were issues identified for the network to address or coordinate joint activities and responses?** The inaugural INFAS meeting took place at the conclusion of the second National Symposium on Food Systems and Sustainability hosted by the Agricultural Sustainability Network at UC Davis (Nov. 9-10, 2010). INFAS members met to synthesize what was learned during the two day Symposium, entitled 'Making the Invisible Visible,' which featured over 80 participants including students, faculty, community organizers, extension specialists, farmers, storytellers, and staff. The event engaged participants in activities centered around four themes: youth, power, justice and resilience which helped identify food system issues and facilitate discussion to develop an understanding of connections and disconnects across the food system. During the INFAS portion of the meeting INFAS members focused on approaches to forge collaborative solutions for the development and support of food and agricultural systems to sustain health, society, and the environment. The group reached a consensus on two major action items: to hire a part-time network Coordinator dedicated to ensuring the project's success and to develop an INFAS project. Several topics were discussed including a Food Systems assessment project and a project to compile and analyze research findings that challenge assumptions common in the alternative sustainable agriculture community. Ultimately, a project, entitled Resilience, Resistance, and Risk in the U.S. Food System, was developed during this reporting period and a pre-proposal was submitted to the National Science Foundation. The proposal incorporated aspects of both projects initially discussed during the INFAS inaugural meeting.
3. **Is there evidence that providing for the endowed chairs to function as a network has raised the national profile of the science of sustainability?** Not to date; however the last project year focused primarily on the development of the first grant proposal which was submitted to the NSF. We expect this next year to focus more on efforts that will raise the national profile of sustainability since the Executive Committee has now formed.

In addition, if not already addressed, please consider the following:

1. **Activities:** Describe activities undertaken this year, including the outcomes and lessons you have learned from this year's experiences. If some intended activities were not undertaken, please note them and explain why they were not pursued. Describe any new activities or modifications and why they were added.
 - A. Development of a project pre-proposal for NSF's Sustainability Research Networks (SRN) competition. *This activity relates to several objectives described more fully in the project summary including: identifying and engaging potential new INFAS members; developing scholars who engage effectively with local communities etc. in developing and conducting research; building INFAS as a supportive community representing institutions and organizations; and designing projects and securing additional funding for major collaborative initiatives.* INFAS members, ASI staff at UC Davis, and collaborators across several US institutions developed a project and pre-proposal entitled 'Resilience, Resistance and Risk in the US Food System.' The overarching goal of the SRN is to orchestrate the first national food system assessment for the US including organizing a national conversation on the ethics and values associated with food, the food system, US food security, and the US role in global food security; and building a mechanistic and systems understanding of the drivers and processes governing this complex system. The project will inform the international discourse on food security

through empirical measures solidly grounded in science and developed coordinately with a wide range of stakeholders including those that are vulnerable and historically marginalized. The project involves synthesizing and critically assessing existing research on land use, agricultural production, public health, environmental quality, human wellbeing, (and other indicators) in both rural and urban areas, and the social and cultural implications associated with the US food system. Importantly, the project will highlight critical information gaps and facilitate development of the participatory and assessment frameworks needed for the social science research component involving the diverse ethics and values of food. These frameworks, developed with diverse stakeholder input, will direct the project's second phase- to quantify, test and verify, and seek consensus on the indicators and conceptual and mechanistic models for drivers governing the complexity and emergent behavior of food system change and security.

Outcome: Network members that worked on the proposal agreed that the extensive communication, writing, and proposal development process was positive and highly useful to frame issues and approaches important to INFAS. While the pre-proposal was unsuccessful in the first phase of the NSF competition, INFAS members are committed to the project and are now exploring other funding sources.

Lessons Learned: It's too early to reflect on this aspect. We plan to discuss the activity and outcome during the annual INFAS and Executive Committee meetings in May, 2012.

- B. Recruitment of an INFAS Coordinator. *This activity supports all INFAS objectives by directly facilitating the actions of the Network, especially through support of effective communication among group members and between group members and society.* INFAS members previously determined that a half-time Coordinator was essential to assist the network in pursuing its goals and objectives and facilitate sharing of knowledge within the network and with the broader public. In the past project year INFAS members provided input to develop an appropriate job description and a search was conducted through the Agricultural Sustainability Institute (ASI) at UC Davis.

Outcome: A half-time Coordinator was hired and started in January, 2012. The Coordinator comes to the position with several years of experience coordinating similar inter-institutional academic networks and is expected to effectively facilitate INFAS.

Lessons Learned: Due in part to the non-traditional undertaking (developing an inter-institutional network), we underestimated the timeframe required to develop the appropriate job description which would be acceptable to the constraints of the University's Human Resources infrastructure. We previously expected that a Coordinator would be hired by late summer, 2011, but the actual timeframe was somewhat longer, with the search opening in October and final hire completed at the end of December.

- C. Development of the INFAS webpage. *This activity supports the objective to develop methods to allow communication among group members and between group members and society.* A preliminary INFAS webpage (<http://asi.ucdavis.edu/programs/infas>) was established in the past project year to serve as the primary site for INFAS information dissemination. Currently the site lists twenty-two INFAS members and institutions with links to related programs in sustainable food and agricultural systems and features information and outcomes of two National Symposia on Food Systems and Sustainability hosted by ASI at UC Davis (achieved through major support by the Kellogg Foundation.) INFAS was established around the first symposium and held its inaugural meeting at the second symposium. Extensive media communications from the first symposium are

available to the public at the INFAS webpage including videos of the four thematic panels and individual presentations by each of the 18 speakers. Available for download are briefing materials prepared in advance by each speaker which provide contextual information on (1) key measures and indicators that need to be tracked, (2) reliable data sources, (3) the current state and time trend for key indicators and their implications for society, and (4) the status of our knowledge/ignorance on current data, tracking mechanisms, assessments, etc. The webpage links to an online discussion site to facilitate interactions and discussion among meeting participants. The webpage also features information from the second, INFAS-hosted, National Symposium entitled 'Making the Invisible Visible', including a meeting report and other resources. The second symposium differed from the first in two key ways: (1) a significant proportion of invited participants were young- i.e. students at the undergraduate and graduate levels, and (2) participants went on site visits related to the symposium themes of 'youth', 'power', 'justice', and 'resilience' to allow for the identification of components of the food system that may be invisible, or less visible (to participants, to society), and begin to consider how these aspects might inform research, policy, education and other societal choices. Site visits spanned a broad range of relevant locations including the UC Davis Student Farm (established in 1977), the California Farm Bureau Federation, the Central California Regional Obesity Prevention Program, and Hedgerow Farms, Northern California's largest native grassland seed production farm.

Outcome: A preliminary webpage was established prior to the hiring of the INFAS Coordinator. Upon her hire, updating the webpage became a top priority in support of objectives relating to communication within the network and with the public. The webpage will be expanded and augmented further in the next project year.

Lessons Learned: Effective and timely webpage communication requires sufficient staff resources, which are now provided by project-funded coordination.

- D. Establishment of the INFAS Executive Committee. *This activity addresses the objectives described more fully in the project summary including building INFAS as a supportive community representing institutions and organizations, and supporting effective communication among group members and between group members and society.* An INFAS executive committee was established in the previous project year. The ten person committee includes six regular and four ex officio members. The regular members will advise Thomas Tomich, *ex officio* member and ASI Director, on the allocation of endowment and startup funds and facilitate feedback and communication from Network members to Tomich and the Dean of the UC Davis College of Agricultural and Environmental Sciences regarding the management of the endowment proceeds and INFAS activities. The regular committee, which will elect its chair, consists of INFAS member spanning the US: Patricia Allen (West- University of California, Santa Cruz), Bruce Milne (Southwest- University of New Mexico, WKKF chair), Casey Hoy (North Central- Ohio State University/Ohio Agricultural Research and Development Center, WKKF chair), Helene Murray (North Central- University of Minnesota), Molly Anderson (Northeast- College of the Pacific, Partridge chair), and John O'Sullivan (Southeast- North Carolina A&T State University, WKKF chair). These six initial committee members will serve staggered terms to allow overlap and provide continuity (two serving for two years, two for three years, and two for four years.) New members that replace retiring members will serve three year terms thereby establishing a rotation with two new members joining four experienced members each year. The remaining 4 *ex officio*

members include Tomich; a graduate student representative (to be identified); Shorlette Ammons, CEFS, Goldsboro, North Carolina (an extension and outreach representative); and a member from the Real Food Challenge (RFC, to be identified). RFC is a network of students and universities working towards building a healthy, fair, and green food economy.

Outcome: The executive committee was formed in February, 2012. It is expected to meet virtually in person following the WKKF Food and Community Networking meeting scheduled for May 22-24, 2012, in Asheville, North Carolina.

Lessons Learned: Development of a governing body is facilitated through dedicated staff effort, now provided by project-funded coordination.

2. Outcomes: If you have modified your intended outcomes, indicate the changes. *Noted above*
3. Environment/Challenges/Opportunities: Describe factors or circumstances (positive and/or negative) within your environment affecting progress toward achieving goals either generally or as they relate to specific activities. What challenges and opportunities have developed and how are they being approached?
 - A- INFAS members recognized early on that the lack of specific support staff dedicated to the network was a challenge to effectively implementing the goals of the network. The institutional human resources bureaucracy at UC Davis also presented a challenge to conducting a time-efficient job search for an INFAS Coordinator. The issues were successfully dealt with and an appropriate hire was made; however, the timeframe was extended beyond what was originally anticipated.
 - B- INFAS members were disappointed, and surprised, to learn that the food assessment project proposal (described previously) did not pass the first round of screening by NSF. Members felt that the Sustainability Research Network competition was a good fit for the INFAS proposal and that the project was relevant, novel, ambitious, and worthy. We've recently received the reviews from the NSF panel and shared them with INFAS. While reviewers were impressed by the assessment's approach to seek stakeholder input, this also presented a problem to them as well. Neither the reviewers (nor the panel) seemed to understand assessment methodology, in which research questions are framed in response to stakeholders needs and, in turn, appropriate methods follow from that. Instead, they seem to have been looking for a classical deductive design, with issues (and hence data needs and methods) all determined without input from stakeholders. We plan to discuss the next steps at our meeting in Asheville (May), which will include the possibility of revising the proposal to better meet the needs of traditional reviewers. Furthermore, members firmly believe that the exercise of putting together this proposal was educational and worthwhile and they are committed to the goals of the proposal and to performing the assessment. Possible approaches being considered include adding specific hypotheses, e.g. process-oriented that could be tested by implementing the assessment, or more substantive canonical hypotheses; subdividing the larger proposal into smaller, regional pieces; approaching additional funding agencies; and refocusing the project.
4. Collaboration: If your project is collaborating with other organizations or institutions, describe how these relationships are helping or hindering your progress toward addressing

needs.

The project is fundamentally a collaborative endeavor between people located across the United States. In the past project year, INFAS members successfully collaborated to develop a food assessment proposal. In all project years, collaboration between INFAS members and others will be key to the project's success.

5. Observations: Please share any other observations not noted above.

Future Plans

1. List the project and evaluation activities you intend to pursue during the next reporting period for each intended goal/outcome and note whether and how they involve modifications. (This list is what you will report on next year.)
 - INFAS annual meeting- Goals/outcomes this will address: communication among members and between members and society; building INFAS as a supportive community; identify and engage potential new INFAS members and young scholars who would benefit from networking with the group.
 - Re-submit the R3 proposal to one or more agencies/groups- Goals/outcomes this will address: stronger broader consensus for research, education and outreach in food and agriculture; science-based evidence in support of food system sustainability; Design projects and secure additional funding for a series of major collaborative initiatives that will increase awareness and understanding of trends and interactions that affect health and resilience of vulnerable communities and populations.
 - Expand and improve the INFAS webpage- Goals/outcomes this will address: communication among members and between members and society; possibly increased media attention on agriculture and the food system.
 - INFAS webinars, or distinguished speaker series at different INFAS sites and posted at INFAS webpage. Goals/outcomes this will address: developing scholars to engage effectively with relevant members of the community (policy makers, general public, young scholars, etc.); creating broader consensus for research, education and outreach in food and ag; building INFAS as a supportive community; develop communication; increase media attention; better informed policy makers; develop corps of diverse, well-trained individuals prepared to lead initiatives.
 - Participate in Agri-MOOC (Massively Open Online Course) - Goals/outcomes this will address: communication among members and between members and society; stronger broader consensus for research, education and outreach in food and agriculture; possibly increased media attention on agriculture and the food system.
2. What will be done this coming year to increase the likelihood that the project will be self-sustaining by the end of the grant period?

The project is funded by an endowment which ensures stable funding for staff support and some member networking. Additionally, many INFAS members hold endowed faculty positions ensuring continuity of representation from many of the member institutions. We are confident INFAS will continue to strengthen and grow.

3. What indications are there that this project can (or cannot) be adopted elsewhere?

There is no clear indication yet whether this project can (or should) be adopted elsewhere but since it is national in scope, and open to new members, it would not be obviously advantageous, or resource-efficient, to recreate INFAS domestically.

Dissemination

1. What information or evaluation findings from your project have been made available to the field and how?

The INFAS website developed in the past project year disseminates information about INFAS, its members, and their activities. The now site lists the current 22 INFAS member institutions and their 25 INFAS members. The site also contains information from the national symposia held in 2009 and 2010 on the topics of food systems and sustainability.

In the past project year, INFAS members submitted a proposal to conduct a food system evaluation project. The proposal was sent to the National Science Foundation which reviewed the project idea (and ultimately rejected it in its current form.)

2. What plans do you have, if any, at this time for disseminating information about your project during the next year and at the conclusion of Foundation funding?

We plan to expand the publicly-accessible INFAS webpage. The INFAS food system evaluation proposal will be circulated to members at other funding agencies and funding groups. In the future, as this project is conducted, it will include significant elements of communication and dissemination of information.

Other

1. Please list issues that you would like to discuss with your Foundation program officer.

n/a

2. If helpful, attach any “selective” electronic appendices which help to clarify information contained in the body of the report – please be selective. Please do not include copies of newspaper articles, brochure, or detailed statistical reports related to the project or hard copies, videos or films unless significant and discussed/requested by your program officer.

n/a

3. If you are required by your grant commitment agreement to submit a separate evaluation report, please upload it into the web form as indicated in the Evaluation section.