

Consortium of U.S. Universities and Institutions in Cooperation with China for Agriculture

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Abstract. The Workshops described herein have sought to maximize interactions among scholars of both the US and China with a purpose to reach consensus and to develop a “systems perspective” through an integration of ideas. A principal goal is to create a scientific network that becomes a central element in the interaction between institutions—increasing the level of rationality in our international relations while enhancing the impact of science in the decision making processes for sustainable agriculture and development.

Keywords. China, Chinese agriculture, collaboration in agriculture and sustainable development, sustainable agricultural systems, Consortium of Chinese agricultural universities, Consortium of US Land Grant Universities

Introduction

Sustainable agricultural systems are a priority for both China and the U S. China's arable land per capita is less than 0.1 hectare. In the 21st century, China's population will be between 1.5 -1.6 billion, which with economic development increases the tension between population and arable land. In China resource management and environmental problems include: an eroding base of arable land; limited water resources; soil and water erosion; land desertification; farmland pollution; grassland degradation; loss of biodiversity; poor agriculture infrastructure; frequent natural calamities; surplus rural labor; low labor productivity and low farmer incomes; and agricultural technology which is inconsistent with needs of sustainable development. The U S shares many of these same problems.

Workshops

A Planning Workshop on Agro-Scientific Research Cooperation between China and the United States was held in Shanghai, PRC on October 12-14, 1997 as the result of a cooperative effort involving key agricultural leaders from selected institutions in China and Cornell University. Dr. Cheng Xu, (then) Director General for Education from the Ministry of Agriculture in China provided the leadership from the Chinese side and Dr. Norman Scott, (then) Vice President for Research and Advanced Studies, provided leadership from Cornell University. The workshop was designed to bring together key agricultural leaders from major institutions in China and Cornell to address scientific opportunities for agricultural development.

The main purpose of the workshop was to begin developing a framework for long-term collaborations that support sustainable food systems for China's agricultural and economic development. The objectives were:

- to develop familiarity among participants of the planning workshop
- to develop a deeper understanding of the "Ten Major Areas" for agricultural science research during the period of the Ninth Five-Year Plan (1996-2000) and the relationships among them
- to develop a framework and objectives for future collaboration among participants and
- to develop a plan for a more comprehensive conference to identify specific project activities and funding opportunities.

Building on the Shanghai Planning Workshop, the follow-up Workshop, ***“Collaboration in Sustainable Agriculture and Development in China and US,”*** was held in Ithaca, NY on July 20-23, 1998 with the three objectives:

- to identify key problems and opportunities for achieving sustainable agriculture and development in the 21st century in the two countries, assessing where there can be joint research and problem-solving and learning from each other's experiences and discoveries,
- to formulate a plan for collaborative research and investigation in areas that can involve other institutions and partners, and
- to plan collaborative work in a Jiangsu pilot program to integrate initiatives for the goal of sustainable agriculture and development.

Much of the work of this Workshop was conducted in small group working groups to promote scientist-to-scientist interactions in six areas:

- economic and institutional analysis,
- animal science and research including biotechnology and nutrient management innovations,
- plant science and research including biotechnology,
- integrated crop management for sustainable development,
- land and water management and conservation, and
- postharvest technologies for storage, processing and preservation, including food safety issues.

China's Agenda 21 seeks to address strategies to support sustainable development. It is easy to get wrapped up in an endless debate trying to define sustainable development. I believe sustainable development is a process---an evolving process rather than a simple definition. It is a fundamental design (redesign) of both technological and social processes. I particularly like Weston's [1993] description of the concept and impetus for action:

“Sustainable development is a process of change in which the direction of investment, the orientation of technology, the allocation of resources, and the development and functioning of institutions meet present needs and aspirations without endangering the capacity of natural systems to absorb the effects of human activities, and without compromising the ability of future generations to meet their own needs and aspirations.”

The challenge is to create a sustainable entrepreneurship that combines energy, environment, commercial, industrial, and agricultural know-how and innovation. This requires a high level of systems analysis through participation of teams of scientists and engineers from China and the US to build collaborative efforts. The 1998 Workshop was designed to maximize interactions among scholars of both countries and to reach consensus and to develop a “systems perspective” from integration of ideas. “Thought pieces” were developed in advance to help initiate and stimulate discussion. The Report from the 1998 Workshop is at <http://www.bee.cornell.edu/sustain/csad/> under the heading Workshop I. Entrusted by the Department of Scientific Technology and Education, Ministry of Agriculture, People's

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Republic of China, Nanjing Agricultural University coordinated the *Second Workshop on Collaboration in Sustainable Agriculture and Development in China and the U.S in Yangzhou, an ancient city of Jiangsu Province, P. R. China, August 9-12, 1999*. Based on the previous two workshops this Yangzhou Workshop had three objectives:

- to develop specific scientific proposals within the six science areas for joint research collaborations among scientists and engineers in both countries;
- to create an interactive framework which integrates the projects in plants, animals, land and water resources and postharvest systems with economic and institutional aspects of sustainable agriculture and developments;
- to build a consortium of Chinese and U.S. universities, agencies, foundations and groups to implement sustainable agriculture and development research, education and outreach.

The Yangzhou Workshop was a significant step in development of a practical and operational approach to sustainable agriculture and development. The concurrent discussions of the six working groups generated over 30 project “proposals.” Issues ranged from information and communications technology to diet and health. These proposal and the details of the Yangzhou Workshop are found at the web site: <http://www.bee.cornell.edu/sustain/csad/> under Workshop II.

Consortium of US Universities and Institutions in Cooperation with China for Agriculture (UCCA)

The concept for organizing consortia of universities and institutions in both China and the U. S. was initiated by Dr. T. C. Tso of International Development and Education in Agriculture and Life Sciences (IDEALS). IDEALS is a not-for-profit organization established in 1984 that has contributed significantly to agricultural exchange between U. S. and China. A proposal for the establishment of a U. S. consortium was sent in August of 2000 to the Deans of some sixty U. S. Colleges of Agriculture and other institutions by IDEALS. Nine universities/institutions responded positively and an inaugural meeting of what is now known as UCCA was held Jan 13, 2001 at the World Bank, Washington, DC, courtesy of CGIAR.

Representatives of seven Chinese Agricultural Universities, along with Dr. Tso, held an organizational meeting Nov. 2, 2000 at the China Agricultural University, Beijing, China to discuss the formation of a Consortium of Chinese Universities. The representatives immediately agreed to establish “The Consortium of Chinese Agricultural Universities for International Cooperation” to work with the U. S. counterpart consortium for the promotion of better and more fruitful cooperation on agriculture education, research, and technology. The Chinese Consortium and UCCA have agreed to establish linkages and opportunities among the institutions of the two Consortia to strengthen teaching, research, and outreach in agriculture and life sciences and related fields and to broaden the international experiences of persons of both Consortia. See www.bee.cornell.edu/ucca/

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for minutes of all UCCA meetings, the UCCA Charter and the UCCA/Chinese Consortium Cooperative Agreement.

Objectives of UCCA

From its inception in January 2001 the Consortium of US Universities and Institutions in Cooperation with China for Agriculture (UCCA) has sought to be a new “vehicle” to engage universities and institutions in a collaboration to address sustainable agriculture and development. The objectives of the Consortium are to: promote collaborative research, education and outreach; facilitate international meetings; promote broad information and materials exchanges; facilitate faculty and student exchanges; serve as a clearinghouse for facilitation of visits; identify unique opportunities for agribusiness and trade development and participate in new institutional and program developments.

Charter

The UCCA Charter is found on the web site: www.bee.cornell.edu/ucca/.

Members

There is a desire to keep the membership small, at least in the infancy of UCCA. The member institutions and the respective institutional representatives are:

University of California, Davis - Patrick Brown phbrown@ucdavis.edu

Cornell University - Norman R. Scott nrs5@cornell.edu

Iowa State University - Denise Bjelland bjelland@iastate.edu

University of Maryland – James Hanson jhanson@arec.umd.edu

Michigan State University – Weijun Zhao zhaow@pilot.msu.edu

University of Minnesota – John R. Vreyens vreyens@tc.umn.edu

North Carolina State University – Jason Shih jason@poultry.poulsci.ncsu.edu

Ohio State University – David Hansen hansen.4@osu.edu

Pennsylvania State Univ. – Deanna Behring dmb37@psu.edu

Purdue University – David J. Sammons djs@agad.purdue.edu

University of Wisconsin – Kenneth Shapiro kshapiro@cals.wisc.edu

Texas A&M University – Douglas Loh – loh@tamu.edu

IDEALS – T. C. Tso – ideals@erols.com

UCCA Secretariat, IDEALS – George L. Steffens – gsteff@idealsinstitute.org

Consortium of Chinese Agricultural Universities for International Cooperation

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The Chinese “sister” consortium was formed during a meeting with Dr. T.C. Tso in Beijing on November 2, 2000.

Members

The member institutions and institutional representatives are:

China Agricultural University – Shuren Jiang shuren@cau.edu.cn

China Academy Agricultural Science – Qingguang Lu luqingguang@mail.caas.net.cn

Huazhong Agricultural University – Youliang Yuan fao@mail.hzau.edu.cn

Nanjing Agricultural University – Zhiming Yan ietc@njau.edu.cn

Northwest Sci-Tech University of Agriculture & Forestry – Shuoxin Zhang
sxzhang@nwsuaf.edu.cn

Shenyang Agricultural University – Prof. Wang saufao@mail.sy.ln.cn

South China Agricultural University – Hui Han hanhui@scau.edu.cn

Southwest Agricultural University – Fang Li diceswau@public.cta.cq.cn

Chinese Consortium Secretariat, CAU – Jingguo Wang wangjg@mail.cau.edu.cn

Agreement between UCCA & Chinese Consortium

Purpose

The purpose of the agreement is to establish linkages and opportunities among the institutions of the two Consortia to strengthen teaching, research and outreach in agriculture and life sciences and related fields and to broaden the international experiences of persons of both Consortia.

The Consortia agree to work jointly on research cooperation, exchange of professors and other scholars, educational projects, exchange of research information, development of technology and knowledge transfer, including outreach.

The agreement is available in its entirety on the web site: www.bee.cornell.edu/ucca/.

First Meeting of Joint Consortiums

The First Joint Meeting of the Chinese Consortium and UCCA was held at the China Agricultural University in Beijing, China on Nov. 6, 2001. In attendance were 20 representatives from nine Chinese Universities/Institutions (China Agricultural University; Nanjing Agricultural University; Huazhong Agricultural University; Southwest Agricultural University; South China Agricultural University; Northwest Sci-Tech. University of Agricultural & Forestry; Shenyang Agricultural University; Zhejiang University and China Academy Agricultural Sciences); and 26 representatives from eleven of the thirteen U. S. member Universities/Institutions (University California, Davis; Cornell University; University of Maryland; Michigan State University; University of Minnesota; North Carolina State University; Ohio State University; Pennsylvania

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State University; University of Wisconsin; Texas A&M University; and IDEALS (Iowa State University and Purdue University representatives were unable to attend).

Representatives of the Chinese and U. S. Universities/Institutions signed copies of the General Cooperative Agreement between the Chinese Consortium and UCCA, in both Chinese and English. An agenda of action items was developed during the daylong meeting for future areas of collaboration.

Workshop November 3-4, 2002

During the joint meeting of the US Consortium (UCCA) and the Chinese Consortium in Beijing on November 6, 2001 the attendees agreed that a significant cooperative effort of the two consortiums would be to cooperate on an initiative to develop China West. Since the November meeting, planning activities have focused on creating a practical and operational approach to make a difference in China West. The two consortiums have agreed that revitalizing the agricultural extension system in China should be the emphasis of the joint UCCA/ China Consortium Workshop to be held in Yangling, Shaanxi Province on November 3-4, 2002. The tentative title is **“Exploring New Models for Agricultural Extension Education for Western China.”** The joint meeting will focus on both the development of concepts and models for a national level extension system and the development of a pilot project in the Yangling area.

The Joint Workshop will precede the 9th China Yangling Agricultural Hi-Tech Fair on November 5-9, 2002. UCCA universities are asked to develop an appropriate poster for inclusion within an overall UCCA exhibit at the Fair.

Summary

The Workshops described herein have sought to maximize interactions among scholars of both the US and China with a purpose to reach consensus and to develop a “systems perspective” through an integration of ideas. A principal goal is to create a scientific network that becomes a central element in the interaction between institutions—increasing the level of rationality in our international relations while enhancing the impact of science in the decision making processes for sustainable agriculture and development.

More and more science and technology is increasingly seen as the driver of economic advancement. This requires modern agriculture, industry and education to adapt and develop technologies appropriate to local circumstances and to help strengthen education.

Deng Xiaoping said:

“When we cross the river, we must first feel the rocks to make sure they are secure, and then move forward taking one step at a time.”

The Workshops and interactions among the US and Chinese Consortiums have taken the first steps to build a secure footing on which we can move forward by taking a step at a time in our collaborations. We have, from these Workshops found the “rocks” on which we can build comprehensive and collaborative relationships.

Acknowledgement

The vision and wealth of Chinese experience of T.C. Tso, gained from more than 100 trips to China and meetings with Chinese leaders, which T.C. has graciously shared with me is gratefully appreciated.

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5. Web Site: Consortium of US Universities and Institutions in Cooperation with China for Agriculture UCCA): <http://www.bee.cornell.edu/ucca/>

