

# From Local to Global: The Challenge of Change in Agriculture and the Food System

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I would like to congratulate those attending this conference on coming together from universities around the world that have a food and agriculture focus. I have had the opportunity to listen to many of your comments and am intrigued by the passion you bring to the agricultural issues of your countries and by the consistency of the issues that concern you, coming as you do from so many different parts of the world.

Being the last speaker of the conference has given me an opportunity not only to listen and learn, but to change the text of my speech to comment on your comments. There are many consistent themes in your presentations. Certainly, the context changes because we are from different geographic, economic, and political environments. But here are the things that I heard you say:

1. There is a drastic need to address food supply and food security issues as your institutions look to the twenty-first century.
2. There is a need for a multifunctional agricultural sector that not only provides adequate food and nutrition but also contributes to the health and well-being of our rural communities and national economies.
3. There are concerns about the environment and natural resource development.
4. Rural economic development is desperately needed to keep people on the land.
5. There is a need for institutional change and for stronger leadership for institutional reform in your universities.
6. Navigating the new world of information technology and its expectations for distance learning and global collaborations presents new and unexpected challenges.
7. You continue to struggle with local issues even as you wrestle with the potential of globalization and being part of a global learning system.
8. Your institutions are impacted by continued dramatic swings in economic and political reform.
9. You have considerable issues with diversity and inclusivity, whether they are manifested in ethnicity or gender.
10. You wonder how you will prepare the food and agricultural professionals of the future to be responsive to a volatile and fragile global food system.

## Kellogg Foundation Activities

The W.K. Kellogg Foundation has long been a supporter of higher education and of food and agricultural systems. Established in 1930, our Foundation focused on the health and well-being of youth and families in rural communities. It focused on creating an environment in which families could thrive, causing health, education, and agricultural systems that provided a safe and nutritious diet to become the programming objectives for the Foundation. The mission of helping people help themselves established in 1930 remains the mission statement today.

Through the years we have continually demonstrated our support of higher education to use knowledge in the service of people. Outreach and the application of knowledge to the problems of people have been our focus. We helped establish the Kellogg College at Oxford for extended education and lifelong learning. We helped build 17 outreach centers that contribute to continuing education and lifelong learning throughout the United States, as well as in Honduras and Costa Rica.

We sponsor Salzburg seminars that often focus on the role of higher education in the future. Past seminars have focused on building new higher educational systems in South Africa and have looked at Eastern Europe and the effect of the rapidly changing political climate on future higher educational systems there.

We have been active in southern Africa, especially South Africa, Zimbabwe, Swaziland, Botswana, and Lesotho. Since 1985, we have supported several thousand Africans in attaining their baccalaureate degrees. As Dr. Chris Igodan suggested, both the Kellogg and Rockefeller Foundations are jointly supporting the IDEA program—capacity building for smallholder agriculturists in South Africa and Zimbabwe.

The Kellogg Foundation also has supported higher learning in the areas of health and education in Latin America and the Caribbean since 1938. Throughout the United States, we have been strong advocates of state and land-grant universities and have helped to catalyze the community college movement in the late 1960s and early 1970s. We have exhibited a strong commitment to institutional change in higher education, investing

more than \$200 million over the past 10 years in higher education throughout the world. We believe that higher education is a critical component of our twenty-first century society. We also believe that higher education is about connecting knowledge to communities. And that's why we support it so strongly.

In addition, we have a natural niche in the food and agriculture and rural development philanthropic efforts throughout the United States. We believe that our rural environment is a national treasure that needs to be nurtured and preserved so that it may serve the entire population whether they live in rural or urban settings.

## Principles of Change for Higher Education

We are all faced with the challenge of change, whether we want to be or not. If we are not actively pursuing institutional change in our universities, we are already significantly behind the times. The world will not let us be complacent. It demands change, and it demands that higher education be responsive to a changing environment.

I would like to share with you some of the higher education change principles that we have learned over the past several years. I think they may be of interest, and many of you have alluded to them during this conference.

1. **In order to change a system, you must start everywhere at once.** That is, top-level leaders and leaders at the program level must work in concert around a shared vision. To put it another way, in changing a higher education system you must address structural issues, curricula, resource allocation, access, collaboration, technology, and other variables that will influence the change you desire.

2. **Change must be value based and vision driven.** Vision and values must be determined in collaboration with the stakeholders, and the vision must be that of a preferred vision, not just trend driven. Being value based and vision driven is even more essential in times of rapidly changing systems that come about during periods of technological innovation and revolution.
3. **When people and institutions finally realize that change is imminent, they will look for new models to replicate and emulate.** Therefore, we must provide an environment for experimentation and learning not only to inform ourselves but to model behavior for others.
4. **Diversity and inclusivity are essential for innovation and creativity.** We believe that change never occurs in the middle, but always on the fringes where diverse audiences and conditions interact.
5. **There must be a critical mass (but not necessarily a majority) for change to occur.** Many movements around the world have happened with a minority of the population, but that minority was a significant enough mass to make the change visible and real.
6. **Technology enables changes to happen more quickly.**
7. **Change must occur within the resource structure of the institution—not just from philanthropic funds.**
8. **For institutional change to occur, policy must be impacted, capacity built, and budgets reallocated to new and more relevant programs.**
9. **Knowledge exists in every community, in higher education as well as in business, government, and the people we serve.** We must utilize knowledge from all sources to address complex issues.
10. **There is strength and power in collaborations and partnerships that allow complementary solution finding rather than competition for scarce resources.**
11. **The role of public higher education is changing.** Since the end of the Cold War, we believe the role of higher education is nation building, no matter if one is in the United States, Eastern Europe, or Southern Africa.

## Programs for International Change

The Kellogg Foundation is currently involved in a food systems institutional change initiative. We call it the Food Systems Professions Education initiative, and it seeks to answer the question, “How should we prepare professionals for a complex, volatile food system in the global environment of the twenty-first century?” Our underlying assumption is that agriculture is not only an applied biological science but has social, cultural, economic, and political impacts. Therefore, we must look systemically at the food and agricultural environment and the higher education institutions that purport to serve that sector of our society.

We started by creating a series of national models for institutional and community engagement around food systems and agriculture. Thirteen institutional grants were made to create these models in America’s leading land-grant universities. In all, 26 states are now involved in our initiative. We have approximately 29 land-grant universities, 150 community colleges, and over 100 state colleges and universities all trying to work together to create models of university and community partnerships focusing on food systems issues. We believe that we can change the way our universities address food systems issues by connecting them to the problems of real people in real communities.

We also instigated a comprehensive set of national support grants. One that was mentioned at this conference is the Kellogg Commission on the Future of State and Land-Grant Universities. In the Kellogg Commission, 25 land-grant presidents come together to discuss the key issues of transformation of higher education into the twenty-first century. Their discussion points include five topics: (1) Returning to Our Roots—The Undergraduate Student; (2) Returning to Our Roots—Access and Success; (3) The Engaged University; (4) the Learning Society; and (5) Creating a Responsive Campus Culture. The Kellogg Commission has become one of the most exciting change initiatives in the United States at this time.

We also have provided a grant to the Council for Agricultural Science and Technology (CAST) to work with 38 professional societies in food and agriculture related disciplines. Representatives of these disciplines are asking three pertinent questions: (1) How do you redefine scholarship to be broader than a refereed, research journal article? (2) How do you redefine membership requirements to create greater diversity and a broader membership base for the profession? (3) How does a single disciplinary organization contribute to multidisciplinary problems and issues in a global environment?

We have also provided a grant to the National Future Farmers of America (FFA) Foundation. The FFA is a kindergarten through twelfth grade public education program that provides food and agriculture instruction to approximately 800,000 young people each day. These youth are our future food systems professionals. By supporting new program innovations at K-12, we hope to create the seamless food and agriculture education program for the future.

So what has this work told us so far? What have we learned about how United States institutions can change significantly for the future? Our data tells us the 10 issues that have to be addressed as higher education makes the transition into the twenty-first century are the following:

1. Greater partnerships and collaborations between and among institutions and with the private sector;

2. Greater emphasis on sustainability in agriculture and community development;
3. Greater emphasis on learning rather than teaching as an organizing framework within the university;
4. Greater use of diversity and inclusivity in designing and planning future direction and programs;
5. Greater responsiveness to the changing demographics that impact both current services and future directions of our states and nation;
6. Curricular changes that better prepare future professionals for the challenges of a dynamic, global food system;
7. More flexible structures to allow faster response to the public agenda;
8. Changes in the faculty reward and incentive systems that allow both effectiveness and efficiency in responding to the public agenda;
9. Move to “outreach” as a parallel organizing framework to research for the future; and
10. Greater use of information systems and distance education technologies to expand both impact and access.

We believe that we live in an era of integration and disintegration; that is, new structures come together for functional purpose and then are disassembled when their usefulness is over. Our institutions must have that kind of flexibility in the future or we will be left behind. And how do we know whether or not we’re making progress? The challenge is to institutionalize such changes so that they become (1) the expected rather than the exception; (2) institutional policy as well as individual commitment; (3) rewarded rather than just highly regarded; (4) resourced by the people and organizations that find value in the work; and (5) assumed to be part of the ongoing, continuous, and dynamic change paradigm.

The verdict is still out, but institutional change happens in an evolutionary way, not in a revolutionary way. We believe that there is greater acceptance of these principles now than ever before. Peter Magrath calls us the Land-Grant Foundation, and I consider that a compliment. The Kellogg Commission is the current focal point for change dialogue in the United States and, more and more, throughout the world. “The engaged university” has become the battle cry of the new era of higher education that seeks to be a part of the social fabric of the people they serve. And, lastly, I am pleased to be asked to speak at a prestigious conference such as this one.

## Conclusions

I will close with some observations. First, I believe that you are all stronger coming together as the Global Consortium of Agricultural Universities than you are as individual institutions. Collaboration adds value and saves resources.

Second, there is a direct relationship between localization and globalization. That is, you have to be responsive both to local issues that have global impact and to global issues that require local action. In reality, food systems are both local and global. They are systems nested within systems.

Third, the current graduates of our universities will be the food systems professionals of the next 40 years. And we will see even more dramatic change in that time. Will they be ready?

Fourth, complex solutions to the world food issues will come through a combination of factors rather than any single solution. We will have to rely on the sustainability of our natural resource base protecting our capacity to grow food in the lands that we have available to us. And this raises some real questions about the viability of our rural communities, the number of farms we need, the size of those farms, the economic impact, the renewable energy sources, and the question that drives the whole issue—where will new additional land come from?

Fifth, solutions will also come from scientific breakthroughs in biotechnology and genetically modified organisms, leading to questions about biodiversity and the structure of agriculture—who will control germplasms and genetic codes in the future? Who will control the food system for not only those who can pay for food, but those who cannot?

Our solutions will come from global collaborations and global systems of education and production. These consortiums will determine who will get the food and who will not in the global resource shortages that will hit this world within the next 35-40 years.

So I hope you will take the time to wrestle with these key questions and beliefs. I can assure you that many others are already doing so. In order to be prepared, I would ask you to be deliberate and purposeful about change. Base your changes on a preferred vision for your institution, for agriculture, and for the people who depend on you to provide the knowledge and support to address their problems. I hope you will base your changes on the contextual values that keep you grounded in the culture that protects your identity and integrity. I hope you will learn from the global community and contribute to its learning as well.