



Good ‘Food Citizens’: Why Collaboration Is Key to Feeding the World

Wharton’s Djordjija Petkoski and Harvard’s **Ray Goldberg** discuss why collaboration is increasingly important in the global food system.

When it’s time to eat, most of us don’t think about all the logistics and relationships required to deliver the dish we are about to devour. But feeding the world’s population is a complex process involving a number of actors, from scientists to farmers to drivers to bankers. Indeed, the food system is the largest segment of the world’s economy. It also needs to adapt to increasing threats brought by climate change, geopolitical forces and population growth.

*Ray Goldberg, emeritus professor of agriculture and business at Harvard University, leads us through the journey in his new book, *Food Citizenship: Food System Advocates in an Era of Distrust*. He recently joined the Knowledge@Wharton radio show on Sirius XM to talk about why the system is viewed with suspicion and how collaboration is necessary to move forward. Djordjija Petkoski, senior fellow at the Zicklin Center for Business Ethics Research at Wharton and a former executive at the World Bank, is interviewed in Goldberg’s book, and he joined the discussion as well. An edited transcript of the conversation follows.*

Knowledge@Wharton: What motivated you to write a book about the global food system?

Ray Goldberg: The ability to understand the change-makers of the food system is important because most people don’t have the opportunity to know the women and men who are the change-makers. Because I’ve had these men and women in class and in seminar for 25 years, trying to work with each other and understand each other in private/public, not-for-profit and consumer advocate groups, I felt that the public and the rest of the academic community should know more about these people.

Knowledge@Wharton: You coined the term “agribusiness.” When did that word really start to come into use?

Goldberg: John Davis and I were asked by Harvard Business School to describe what the food system is. Historically, everybody looked at it as a functional operation in a vertical structure, from the seed to a loaf of bread. But they never looked at it as a global system of interdependent, interrelated activities, and there wasn’t a name for it. We decided that we had to create a name. So, Davis and I thought about it; we recognized that every part of the food system is somewhat of a business, and we called it agribusiness.

Knowledge@Wharton: Djordjija, how did you come to meet and

partner with Ray, and how did that relationship influence your work?

Djordjija Petkoski: I consider Ray my mentor. I was at Harvard at that time. I took his courses at the business school, and that really shaped my career — not just my career but also my view of the world. I think the interaction with Ray also shaped my activities inside the World Bank because sometimes these big, multi-lateral development organizations are not always well prepared to understand the needs of real people by adjusting policies to meet their requirements.

Knowledge@Wharton: The first line of the book says the global food system is the largest segment of the world’s economy. Is there wide recognition of its importance?

Goldberg: This is not fully understood by the public. The reason is that they think of [the food system] as either farming or a supermarket, but they never look at the total vertical structure that holds it together and the coordinating mechanisms that help it adjust. I felt that it was important to enable the reader to not only understand the vertical system, but more importantly to understand the people in that system and how they work together or don’t work together.

“If you don’t get that food system right, you don’t have economic development.” —Ray Goldberg

Knowledge@Wharton: How much do business schools teach about the food system?

Goldberg: Since we created the agribusiness program at Harvard Business School, there have been more than 100 different programs created throughout the world. In addition to that, the students need to be multidisciplinary in nature because it’s not just food or business. It’s health, economic development, the environment and natural resources. If you don’t get the food system right, you don’t have economic development.

Knowledge@Wharton: In many cases, you’re talking about businesses and entities from different sectors coming together for the greater good, correct?

Goldberg: Absolutely. And it's educating people with disciplines in health, nutrition, economic development, government, business and public policy to understand that. Our students understand that because they cross-register at all these various departments to better understand and be better prepared to work in the field.

Petkoski: I still believe that much more needs to be done, and it's not just a [concern] for business schools. I think it's also important for the big, multinational companies that operate in this space to clearly communicate that these are the kind of people they need for the 21st century in order to be competitive.

Knowledge@Wharton: Do we need to have even more focus on some of these cross-sector partnerships in order to head where we need to go in the next 40 to 50 years?

Goldberg: Absolutely. Just think of the promise in information technology, Silicon Valley, etc. Overnight, you get Amazon coming into this system and changing the rules. To the extent Amazon understands what an integrated food system is all about, it will be better positioned to take a leadership role in changing the system in a positive way.

Knowledge@Wharton: In this book, you interviewed people with a range of thoughts and opinions on this topic. How did you choose them?

Goldberg: I wanted to make sure that the women and men that I picked represented the change-makers in the food system. I wanted to make sure I had the most constructive critics of the food system who could enumerate all the things that were wrong with that system. I wanted to find people who were creating new relationships, such as dispute resolution, so that migrant workers and business people could work together.

Knowledge@Wharton: Why did you include Djordjija in the book?

“If they are big, if they are multinational, they have all the knowledge in the world.” –Djordjija Petkoski

Goldberg: It was critical because most of the malnourishment and poverty that exists in the world exists in the food system. At the World Bank and now at Wharton, Djordjija has been a pioneer in looking at the food system and at how a malnourished, impoverished person who is a subsistence farmer can become part of the commercial food system. He is the one who has stressed that you have to work across the system vertically and horizontally in order to make that system work more effectively, and that we need to have case studies like chain irrigation in India, where they not only help the farmers get water resources but help them have a guaranteed market.

Petkoski: [My] interaction with you and the other change-makers really helped me to start changing the way the World Bank was approaching these issues. Particularly in the context of mal-

nutrition, it was very critical to bring on board the private sector and big multinationals [to work with governments], not as a philanthropic engagement, but [because] it's something absolutely critical for them to compete. That is the critical thing I was pushing there.

Knowledge@Wharton: Djordjija, do multinational companies often think they are simply helping out by providing some resources rather than fully understanding their role in the process?

Petkoski: [There is this] illusion. If they are big, if they are multinational, they have all the knowledge in the world. The first lecture I gave at Wharton was about Nike and the problem they have with child labor. It's unbelievable. A company of that reputation [can] make these kinds of mistakes? The engagement with the private sector was also creating opportunities for these companies to understand they have to change their core business, and that change will not come without access to relevant knowledge.

Knowledge@Wharton: Ray, why has there not been enough discussion about these topics?

Goldberg: First of all, I think that it took a revolution for the medical community to realize that nutrition was more important than popping pills. It took a while for the medical schools to realize that the food system was more important than the pharmaceutical system in terms of health. ... [A] person can use food as well as pharmaceuticals to cure the problem they have.

Knowledge@Wharton: How is technology playing a role?

Goldberg: Technology is playing a role in several dimensions. It's not only playing a role in health in terms of identifying diseases and relating it to the individual human or plants or animals. It's also playing a role in evaluating land and water usage that can produce unique crops that have pharmaceutical properties, which are then enabling the farmer to make a better living by developing something that's not only food but something that fights diseases and improves the health of the consumer. In addition, the science is in its infancy in terms of productivity, in terms of providing alternatives to meat and using cell cultures so that we don't have to use so much land and water to produce animals and poultry. A whole revolution is occurring that changes who are the major change-makers, but also what they do.

The most important thing that I think you should realize is that the food system has changed from being a transactional operation to a collaborative operation. It's not just how much cheaper you can buy something or how much more you can sell something for, but how you work together to make the system more effective and more responsive to consumers' nutritional needs, economic needs, and doing it in a way that improves the environment.

Knowledge@Wharton: What are the specific benefits of collaboration on this issue?

“The food system has changed from being a transactional operation to a collaborative operation.” –Ray Goldberg

Goldberg: First of all, it’s changed the way we teach. We now have collaborations among the business school, the government school, the school of public health and the environmental people. We now have collaborations among the private sector, the public sector and the not-for-profit sector that never existed before. We also have a science that can not only change the nutrition of plants, animals and humans, but also can change how everything is produced by the very nature of understanding the components better so that we can finally have an integrated whole. We also are getting a generation of millennials who care more about the food system, who understand this better than their elders, and they are anxious to be part of that revolution. For me, it’s the most exciting time in the world for the food system.

Petkoski: Another very important angle, particularly these days, where the World Bank group and other development banks have engaged, is in innovative forms of finance. Sometimes you need a collaborative mindset because the market itself cannot immediately reward this new business model and implementation. You need some kind of breach finance to help make that [possible], and this is available now — this so-called blended finance. Still, companies have to learn through that collaborative engagement with others to develop business models that will take full advantage of these innovative forms of finance.

Let me give you a very interesting example. The Bill Gates Foundation is basically financing a privately owned company in Switzerland to develop a new product so that millions of people around the world can use toilets. This source of finance from a well-known, well-established foundation going directly to a private company is just telling you how this innovation reaches a level we couldn’t talk about maybe 10, 15 years ago.

Knowledge@Wharton: Djordjija, in the book you talk about the U.N.’s millennium development goals. Now, there are also sustainable development goals. What are they, and what some of the differences between them?

Goldberg: When the millennium development goals were launched in 2000, that was the first time I would say the United Nations and governments around the world got together to think in a more holistic way about how to deal with development issues. The success in these 15 years of implementation was mixed, but I think the learning was pretty useful so that when they launched the sustainable development goals, those could be given a more comprehensive approach. It’s 17 goals and 169 specific targets. That makes it easier to start monitoring and organizing how this collaborative effort has moved forward. But two or three major lessons they learned are that the private sector has to play an absolutely critical role; [we need] innovative forms of finance, otherwise nothing will really happen in a mass scale; and [we need to] engage young people to start taking responsibility for the future of this planet.

Knowledge@Wharton: Ray, what’s the reaction that you’re getting to the book?

Goldberg: The reaction that I get is that the value system of these people is the most surprising aspect of the book. What [readers] realize is that all of these men and women are caring about the planet, they’re caring about their fellow men, and they’re doing more than just caring. They’re hiring people who have those attributes. They look for people who want to make a difference in their organizations. Many of the chief executives of these companies don’t come from traditional business institutions. They come from nutritional [backgrounds], they come from medical schools. And the scientists themselves: Even though they know the science is important, they also know that safety is important. They say to themselves that, no matter how good they are in this science, they have to be equally or even more effective in the safety of, and in the use of, that science.

The other thing that we haven’t mentioned is that the source of funding becomes important. We have to be careful that those funds are not sourced in such a way that the people supplying the funds influence the results of the studies involved. I believe very seriously that we need a CPA [auditing] kind of activity for the food system that people can trust. ... I think what you’re seeing is a recognition by all the actors in the food system that who they are, what they are, means that they have to have a special respect for the importance of this institution to society. 