

Keynote address by Dan Bena  
Farm to Fork Royal Gala Awards Dinner  
Hosted by the Swedish American Chamber of  
Commerce

in the presence of  
TRH Princess Madeleine and  
Prince Daniel of Sweden

Co-keynote by Martha Stewart

[VIDEO: Feast or Famine, 3 minutes]

Thank you, Your Royal Highnesses, for having the vision and long-standing commitment to the cause of sustainable agriculture, environmental stewardship, and healthy lifestyles.

Thank you, also, to the Swedish-American Chamber of Commerce for hosting such a remarkable gathering not only at this Royal Gala, but also at what I am sure will be a significant and impactful “Farm to Fork” Symposium over the next couple of days.

Thank you finally to the organizers and sponsors of this event, and to my fellow keynoter, Ms. Martha Stewart, for her always insightful comments.

I thought the video, from Professor Jonathan Foley, was an appropriate way to set the context for this evening and for the next couple of days. The messages are clearly not easy to hear, and even more difficult to see—when confronted with the daunting statistics of having to feed an increasingly populous world.

Indeed, this week we have reached the well-publicized seven-billion mark of global population—well before 2050, when we expect to have an additional two billion! We currently face the paradox of one billion people hungry, while one billion are overweight or obese.

Clearly...our global food system needs serious correction.

In the video, we saw reference to what is needed to help solve the global challenges of the magnitude of those we face:

- A global dialog
- Incentives for farmers
- Precision agriculture, water recycling, and better tillage

The great news is that, across the world, we are seeing the necessary elements for genuine solutions. Certainly, Sweden has been leading the charge.

You have achieved, with Japan and Australia, among the highest life expectancies in the world...the complete elimination of hunger...and access for most of the population to healthy diets all within a national commitment to sustainable development!

And Sweden has been on the forefront of taking their ideas global! 20 years ago, the Sundsvall Conference, on the eve of Rio, highlighted for the first time the intimate links between health and environmental sustainability—a theme which, since then, continues to be supported by the Swedish government.

Major global private and public players, many working through the World Economic Forum's New Vision for Agriculture and including PepsiCo, Yara, SwissRe, WWF, and the International Food Policy Research Institute are realizing the need to focus on the nexus of agriculture, environment, and health and nutrition.

A few examples:

The recent report from the Chicago Council on Global Affairs, entitled, "Bringing Agriculture to the Table: How Agriculture and Food Can Play a Role in Preventing Chronic Disease."

According to the report, the agriculture and food system plays a significant role in the illness and early death that arise out of the imbalanced diets, empty calories, and overconsumption that are rampant in high- and middle-income countries and increasingly apparent in the nutrition and epidemiological transitions under way in developing countries.

This report describes the links between agriculture and health and demonstrates that agriculture's long-term success in surpassing the growth of demand with greater production—though not yet in Africa—is a *necessary* but not sufficient response for modern societies. Long-term human and environmental health should also be goals of agriculture.

An even more recent report by this same organization, entitled "Girls Grow: A Vital Force in Rural Economies" explicitly describes the need to empower adolescent girls to prepare them for their significant role in society—and at the nexus of agriculture, health, and environment.

Specifically, the report suggests that, as future farmers, adolescent girls and women are the key to fully realizing the productive potential of agriculture.

If, the report suggests, women farmers were given the same access to productive resources as men, the results could be significant. Some estimates:

- Women's agricultural yields could increase by 20 to 30 percent.
- National agricultural output could increase by 2.5 to 4 percent. And,
- The number of undernourished people could be reduced by 12 to 17 percent.

In fact, our own nutrition team has developed iron-fortified products for the low income consumer in India specifically aimed at reaching young women and girls so that their health and productivity--and that of their children--could increase. Results—though still early--are positive.

We saw in the video the admonition for a global dialog, with everyone represented at the table.

Earlier this year, the International Food Policy Research Institute convened a meeting of scientists and policy makers in Delhi to do just that, with the specific objective to “change the conversation,’ to encourage greater attention to the agriculture / nutrition / health nexus.”

In their interim report, the need for study at the nexus is clear. I quote:

“The connections between nutrition and health are obvious, but there are additional close connections between agriculture and nutrition, and also between agriculture and health. Productive farming systems tend to reduce rural poverty, bringing positive benefits for both nutrition and health. At the same time, farming systems without crop diversity can be a source of unbalanced nutrition, and some agricultural activities bring health risks in the form of occupational exposures to toxic chemicals, consumer exposures to chemical residues, and the downstream pollution of drinking water. Poor health can also reduce the productivity of labor in farming, reinforcing poverty and food insecurity, posing greater risks in turn to health.”

These are only a few of many examples which—thankfully—demonstrate the commitment of diverse stakeholders to explore and positively leverage the synergies which exist at the nexus of agriculture, environment, and health.

And these action-oriented agendas are all underpinned by solid analyses and credible, scientific data.

Take, for example, Jonathan Foley's treatise in this month's issue of Scientific American, entitled, "Can We Feed the World and Sustain the Planet?"

He distills the global crises down to three things which must be addressed:

1. End hunger
2. Double food production by 2050
3. Do both while drastically reducing agriculture's damage to the environment

Foley also offers five solutions:

1. Stop agriculture from consuming more tropical land
2. Boost the productivity of farms that have the lowest yields
3. Raise the efficiency of water and fertilizer use worldwide
4. Reduce per capita meat consumption
5. Reduce waste in food production and distribution

So...five solutions...simple, right?

Obviously, not, but they are solutions, none-the-less. And they provide the beginning of a strategic framework through which real change may be effected.

Couple these very action-oriented, tactical solutions with the higher-level policy recommendations just recently advocated by the World Economic Forum and International Chamber of Commerce joint G20 Task Force.

On the topic of Food Security, the Task Force urges the leaders of the Group of 20 as follows:

- That a 50% increase of investments in food value chains, totaling US\$ 80 billion from both the public and private sectors, is critical to reach by 2015. This can be

achieved by incentivizing private investment through improved risk management and policy solutions, and fulfilling public sector funding commitments.

- That improving the functioning of agricultural markets is a vital and immediate priority. This requires extensive improvement in policy and infrastructure, as well as increased transparency through improved data collection, sharing and monitoring.
- That technology innovation and distribution should be accelerated through partnerships and policy reforms, to address local needs for improved productivity, sustainability and nutrition.
- That environmental sustainability must be integrated as a core objective into all agricultural activity, addressing climate, water, land and waste issues through policy incentives, technology innovation, partnerships and best practices.
- And that a major shift to improve nutrition should be undertaken, engaging private sector technology, communications and distribution capacities also in partnership with other stakeholders.

The Task Force readily admits that many of the policies recommended above will require deeper public-private cooperation for them to be shaped and executed successfully, and that industry is willing to take an active role in defining and implementing these programs, in partnership with governments, farmers, civil society and other key stakeholders.

One thing which we know for sure was crisply summarized last month at the meeting of the Business Council for the United Nations by US Secretary of the Department of Health and Human Services, Kathleen Sebelius, when she said,

“It’s not the responsibility of the food and beverage industry alone to solve these problems...but we can’t solve them without you.”

Business must be part of the solution. But what exactly *is* the role of industry...or what *can* it be?

If you examine the common elements related to promoting the public good in the context of environment, agriculture, and health, two opportunities for national and state-level intervention emerge, where business can offer legitimate assistance:

- (1) instituting systems to promote the more efficient and effective use of natural resources, to grow more nutritious crops while assisting socio-economic development, and
- (2) promoting policies and financial vehicles to catalyze access to credit for the underserved. After all, credit is the ultimate common denominator—the underlying challenge for much of the world’s poor.

In India, PepsiCo’s team has educated farmers to adopt an agronomic practice in paddy cultivation called “direct seeding.” Rather than growing the seedlings in a nursery, planting them, and then flooding their fields, we are advocating direct seeding, which allows the seed to be planted directly into the ground, bypassing the nursery.

This also removes the need for flood irrigation, reducing water use by as much as 30 percent. We invented equipment to automate this process, and extended direct seeding to over 6,500 acres of paddy fields, saving more than 5 billion liters of water.

There is also a reduction in greenhouse gas emissions in excess of 70% using direct seeding, versus conventional methods.

Growing a staple food crop with farmer engagement, significantly less water, and far fewer greenhouse gas emissions—one example of how the private sector can add value to adaptive mechanisms at the nexus of agriculture, health, and environment.

Just last month, at the Clinton Global Initiative here in New York City, PepsiCo announced a landmark public-private partnership with the United Nations World Food Program and the United States Agency for International Development (USAID) to dramatically increase chickpea production and promote long-term nutritional and economic security in Ethiopia.

The initiative, called Enterprise EthioPEA, supports the Ethiopian government's agriculture sector development plans, and aims to dramatically increase chickpea production to address three distinct needs. Specifically, the project intends to:

1. Enable nearly 10,000 Ethiopian farmers to realize a two-fold increase in chickpea yield by applying more modern agricultural practices and irrigation techniques. This initiative will leverage PepsiCo's and USAID's deep agricultural expertise to create new domestic and export markets for Ethiopian chickpeas, and improve the overall quality of the soil farmed.
2. Develop a locally sourced, nutrient-rich, ready-to-use supplementary food (RUSF) to address malnutrition. With an initial target to reach nearly 40,000 Ethiopian children, ages 6-23 months, WFP will leverage its mass distribution capabilities to assist those most in need of nutritional support through its existing operational network. In addition, this will contribute to building capacity along the value chain, and will be a commercial opportunity for local manufacturers.
3. Scale-up and strengthen the Ethiopian chickpea supply chain, to harness the potential of a domestic and export market and increase the availability of locally-produced nutritious products for consumers. For PepsiCo, chickpea-based products are an important part of our strategy to build a \$30 billion global nutrition business by 2020, from about \$10 billion today.

The second area where the private sector and national governments can learn from each other and work together is in promoting policies and financial vehicles to catalyze access to credit for the underserved.

With credit—money—the underserved can gain access to water, food, shelter, medicines, and all the building blocks necessary for healthy, thriving communities. At its most base level, money is important for adaptation.

Unfortunately, often the populations in the most need are also thought to represent the highest credit risk, which often precludes the interest of banks and other lending institutions. One of the ways the private sector can assist is in helping to mitigate this risk.

One successful approach is to form cooperatives—collaborations of people who all have similar needs—so that there is “power in numbers.”

In India, PepsiCo did just this with 11,000 small-holder potato farmers. Our partnership with potato farmers started in 2001, covering 125 farmers in Punjab, with land holdings of 800 acres.

In 2009, we partnered with 12,000 farmers with land holdings exceeding 16,000 acres across seven states. Most farmers were small and marginal, and used age-old cultivation practices.

Through the trust such partnerships have fostered, there has been a substantial increase in farmers’ productivity and incomes, as is evidenced by a farmer retention ratio of above 90 per cent.

Our model provides farmers access to insurance, bank finance, and disease control packages and ensures attractive buy-back at pre-agreed prices, enabling them to focus on increasing productivity, and mitigating the impact of natural calamities, like crop disease and drought.

In Mexico, we have partnered with the Inter-American Development Bank (IDB), to spur social and economic growth in 26 countries across Latin America and the Caribbean.

The partnership's inaugural project was launched in Mexico with an agriculture initiative that seeks to significantly expand commercial sunflower production. The project is to create a sustainable market for sunflowers – a once-thriving commercial crop which has diminished in recent years – while providing loans and a source of income for nearly 1,000 Mexican farmers and their families.

For PepsiCo, the sunflowers will provide a source of heart-healthy high-oleic sunflower oil (HOSO) for cooking potato chips, biscuits, nuts and other snacks we produce in Mexico under the Sabritas and Gamesa-Quaker brands.

This five-year partnership marks the first time a private-sector organization has participated in the IDB's innovative regional trust funds for development activities. As part of the sunflower production program, we have committed to purchase 100 percent of the crop, for an estimated \$52 million over seven years.

Additionally, PepsiCo will invest \$2.6 million to support management of the Mexican sunflower crop and will provide technical training to the small farmers.

Financial partner Agrofinanzas, an institution specializing in supply chain finance, will make available \$40.4 million for microloans to provide the farmers working capital.

The IDB, through its Opportunities for the Majority Initiative, will provide Agrofinanzas a partial credit guarantee for up to \$5 million.

Our plan is to expand this partnership to 5,000 farmers in 2012.

In many ways, this is the proverbial “marriage made in heaven”—or, in more contemporary terms, a great example of Porter’s “shared value.”

Let me close as I began, with a reference to the opening video, and a reiteration of what will be needed for lasting solutions to myriad crises we face.

First, that the solutions will require *collaboration* by multiple and diverse stakeholders. Those factions who might have been seen as traditional adversaries must find a common ground—a common mission—and work together on the commons for the greater societal good. This is the only way that a lasting and truly sustainable solution will be found.

Second, that the solutions will also require *imagination*. Our countries have given birth to some of the greatest scientific minds in history...from Swedish physicist Anders Celsius, botanist Carolus Linnaeus, and chemist Svante Arrhenius, to American inventor Benjamin Franklin, chemist Linus Pauling, and creator of the Polio vaccine, Jonas Salk.

We must continue to nurture this creativity—we must invest in the leading thinkers of tomorrow; challenge our students and our employees with departing from the “norm”—dissuading them from doing things the way they have always been done.

As Albert Einstein has been credited with saying, “If at first the idea is not absurd, then there is no hope for it!”

Finally, the solutions to the crises we face will require determination. The passion and commitment to see an idea through to reality. Tom Hopkins, a well-known contemporary sales guru and motivational speaker has said, “The profit of great ideas comes when you turn them into reality.” Whether the “profit” in this case is financial, or more generally the remarkably positive impact on society that strategic collaborations can have, we must have the fortitude to test our ideas and put them into action.

Action for collective and lasting impact. Thank you.