

## **Building a sustainable food system**

*The following is a recap of the address given by Howard-Yana Shapiro after receiving an OTA Leadership Award at All Things Organic on May 7:*

Members of the OTA community, distinguished guests, and farmers everywhere who go to their fields daily and continue a tradition that is over 10,000 years old:

I am here today because at an early age, I was made aware of the sacredness of farming and the security of growing your own food from members of my family who had witnessed first-hand the horrors of war and the inhumanity of the concentration camps in Europe. The images of starvation and depredation are inexplicably etched in my mind. Growing potatoes, cabbage, carrots, and other food that could be stored, was part of our lives, guaranteeing that there would always be something to eat, modest as it might be. So food security and farming have been part of my life from an early age.

In 1968, as a Ford Foundation Fellow working with traditional African-American colleges in the Deep South, I was made acutely aware for the first time of the continuity of strongly held societal values through seed and seed saving of the rural African-American farmer, a type of botanical memory of vegetables that I had not ever experienced: seed as culture and history in the food you grew, the experience of food that was filled with generations of choices linked inextricably to the past. Contained in the seed was the memory of generations of individual farmers and gardeners. The seed was a demonstration of history in action. Decisions to save certain seed were influenced by taste, yield, pest and disease resistance and drought tolerance for the next agriculture cycle. I was given an opportunity to understand the past through the world of seed and seed saving. It was a seminal moment.

After that, years were spent breeding plants and studying sustainable production systems. It was always more than one system since it became apparent that no singular system was really sustainable, and we needed to take the best of many systems and improve upon them to make them our own.

These had to be localized to the place that we farmed. It was a quest that by necessity meant one had to de-mystify the majordomos of agriculture. Understanding the decision-making process to improve on the past without forgetting what was desired: healthy, great-tasting food plants, beautiful flowers and aromatic herbaceous plants. Some plants were only for ceremony and celebrations. Additionally trees became more important as the landscape began to affect my process of understanding pattern and design in nature. The more cultures I was exposed to, the more I understood the reasons that there were a handful of plants that had significantly changed the world. One cannot work on every variety, species, genus, family or order of plants that needs improvement, but with a network and a common focus, organic seed can be grown and improved upon for farmers and gardeners to use. It was a dream to one day make a business of offering the highest quality organic seeds for sale to farmers and gardeners. Add to that endeavor of producing certified organic seed, a business of certified organic food products, globally distributed and the lesson is to believe in your dreams.

To call for the preservation of biodiversity and raising the clarion call for sustainable organic agricultural systems as the mission statement for a business seemed audacious at first. In the beginning we were a social movement, a loose amalgam of like-minded idealists. Our catalog was completely unfriendly to the user and consisted of more dogma than organic agriculture. Soon the farmers involved threw out the management and took over a business that might one day be real. It always takes a few ornery individuals to pull it off. One might call it the yin and yang of business management.

At Seeds of Change, Stephen Badger was my partner in this dream. We decided that we would be a real organic seed company. Real belief in our mission and the science behind the mission would free us to do the good work. We truly believed that we could influence the organic community with certified organic seed. It was a key decision. Early on at Seeds of Change, we knew that to be a real seed company, we would have to be as good as the very best seed companies in the world. It took a disparate group of growers who grew up with us to realize the dream. We did not say “we are better than conventional farming,” meaning less bad, which is not good; we said we were doing good. And soon we recognized that as an upstart organic seed company, we must be better than our competition, and to be as good as the professional seed companies. How to measure became a constant challenge--vigor, disease resistance, germination, true lines. Quickly the social movement became a rigorous scientific process. We wanted replicable results. We were doing what we thought was necessary to be a REAL service to the organic industry. It has become a life’s work, whether we are discussing organic seed, or organic agriculture and the questions of sustainability, or discussing the myths that we have perpetuated that organic food is absolutely better for you, without clear scientific empiricism. How much scrutiny are each and every one of you willing to undertake? Everyone here tonight should push for real science in every category at the most rigorous level.

Our results should be on the cover of *Science* magazine, **if they are true**, because they will be so compelling. And here lies the issue. Are we willing to take a hard look at our agricultural practices and say that we are really sustainable?

Packing seeds on the dining room table to all hours of the night at a small farm in Northern New Mexico, getting up weeding, watering, drying seed, cleaning seed, germinating seed and so on became our life. It was not easy. No one teaches you in college how to produce seed. It was an old skill, not considered important enough to include in modern curricula. So we practiced, and practiced, selecting the best lines, propagating them and then doing it again because we knew that if the farmer and gardener trusted us for their seed, the intent of our mission would become believable. In 1997, a transition took place.

Enter Mars, Incorporated. Everyone needs a champion or champions to allow their vision to have reality and flourish. Jacquie, John and Forrest Mars assured us that what we represented at Seeds of Change would have a voice at Mars, Incorporated. We were given the opportunity to expand our work in a manner not often offered anyone. I was moved by their enthusiasm. They became trusted partners in our vision.

I have been personally quite lucky to have an individual, a partner at Mars, Incorporated, who believes similarly that given the chance, we have to not only be responsible to the business but as

well to be responsible citizens of the world. He has encouraged the thinking that we can make a change in the lives of many individuals with real verifiable science and integrity. That person is Harold Schmitz, the Chief Scientist at Mars, both my boss and my key collaborator. We have challenged each other every day of every week in order to build the opportunity to make a difference. The last four years I have worked on landscape-scale cacao agroforestry, agroecology and agroecconomics in South America, West Africa and Eastern Asia; participated in breeding programs with peanuts, tomatoes, corn, cassava, rice; worked on soil nutrition issues, water catchment and utilization, and understanding what a carbon footprint is and what is sequestration. Life is full and exceptionally challenging, growing food, growing nutrition and acting as a steward of the environment and the ecology that one life's work represents.

But while the work is extraordinary and the opportunity is exceptional one always has to challenge oneself to evaluate the reality of the potential. Can we move the world from Occum's edge? Can we influence our neighbors, our community, our landscape and eventually the policies that will build a sustainable food system, with equity for all. The challenge is not only to do this for yourself, your family and friends but also to extend ones' network as wide as your imagination and to catalyze change, changing how we view today, tomorrow and the future.

Today a new team at Seeds of Change, led by Mark Koide, is carrying out our dreams and making it theirs: new believers, new champions of organic. It is really okay to leave your dream to others to build upon.

The organic movement is a wildly successful and influential community. We have built a very successful industry. We must now recognize that we have a vast responsibility to share our knowledge widely. This is our next challenge. To understand how to spread our intellect in sustainable organic agriculture, in organic seed production, in understanding markets and working in those places it will really make a difference. Those places are characterized by the United Nations as communities where families are living on less than \$1 a day, largely suffering from malnutrition, growing crops on depleted soils with little or no access to education, and little or no hope. There are over 650 million individuals in this category. We as an industry must accept the responsibility to help change this world.

If OTA were to decide to measure the carbon footprint of all of its members and then use onset carbon sequestration models to ameliorate the footprint, we would stand above nearly every other industry in the world in our commitment to do GOOD! Imagine what might happen: critical habitat protected, billions of tree planted in the tropics to mitigate climate change, agroforestry models giving food, clothing, animal food, diversified economics for the farmer, teaching farmers how to build soil, all because we can and we should. The models are there. Why not take the lead and be global leaders? Why not commit yourself? It is all about using your money wisely for now and the future.

Lastly, I want to recognize and thank my wife Nancy and our daughter Sedra, who have been my real partners and have lived a life with me based on doing good, oftentimes away from convenience and other connectivity in far flung parts of the world.

In closing it is important for me to define an idea that is critical to whom I have become. The Hebrew word is tzedakah (from the stem tzadak, to be just or righteous), with its implications of social justice, and the English word 'charity.' In the case of 'charity,' the recipient sees himself beholden to the donor, whose action is voluntary. Tzedakah, on the other hand, has to be performed as a matter of obligation and the recipient is in no way indebted to the donor. The needy have a right to tzedakah, while those possessing means have a duty to give it. Indeed, even a poor person who receives tzedakah must in turn give tzedakah. This is how we have lived our lives. I truly thank you from the bottom of my heart for this honor tonight.