

Food Security and Community-Based Innovation

Rebecca Sweetman – Ladakh Wisdom Forum: July 25, 2015

Good morning, and thank you to welcoming me to beautiful Ladakh for this event- the Ladakh Wisdom Forum. I am particularly excited to learn from your wisdom, as over the last 15 years, I've made it my personal mission to learn as much as possible from communities all over the world who are coming up with innovative solutions to the challenges of sustainable development. These travels have taken me from the jungles of Indonesia, to the slums of Brazil, to the desert of Rajasthan, to the community gardens of Peru, and the brothels of Kolkata, all in an effort to learn what is working to solve the problems of poverty, food and water security, and human rights for all.

In 2008, I founded an NGO called The Paradigm Shift Project to help change how the world sees international development and to share the solutions that communities are coming up with to the world's toughest issues. To do this, I've chosen the medium of documentary film to share the wisdom of local communities with the world, and with each film, we make an educator's toolkit with activities that help integrate the learnings into current school curriculum all over the world. So instead of learning about globalization and international development from a textbook written by someone who may not have ever even been to a developing country, kids can now learn the challenges and solutions directly from the communities experiencing them.

I have so many experiences I'd like to share with you, especially as they relate to food security and sustainable agriculture in the face of globalization. But perhaps the most important story I'd like to share with you comes from my time living in Indonesia.

In the late 1970s, Indonesia was facing an extreme crisis due to the spike in the price of oil globally, which led to a radical increase in food and daily living costs for Indonesians. The country was facing extreme cash shortages, and in exchange for a World Bank loan, agreed to implement a set of extreme economic adaptation policies, opening the country up to international trade, and focusing on developing their foreign economic policies over their domestic ones. The policies ranged from absurd (like creating a dairy industry in a country where no one drinks milk- they even had to import the dairy cows!), to the wicked. The one thing these policies did very well, however, was ensure Indonesia would remain dependent on foreign aid and loans, and they created a market for international businesses. Unfortunately, however, these policies did little to nothing for the Indonesians themselves, except make them desire Western goods and culture.

These policies have had such long lasting and detrimental effects that they are still felt today in Indonesia. Perhaps the most notable example is with rice- the staple crop of Indonesia.

Indonesia used to have so many different varieties of rice, but now you're lucky if you can find anything beyond IR64, which is a genetically engineered hybrid

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rice variety. It was designed to produce in less time – only 105 days instead of the traditional 6 months for a heritage rice variety – which was a very attractive selling feature; now you could have 3 rice harvests in a year instead of just 2! But the long-term truth was something that wasn't advertised, and the Indonesian government was sold on the promises of short-term gains.

In exchange for that World Bank loan, the Indonesian government legislated that all farmers were to grow only this new hybrid rice, and nothing else. Before, farmers would plant one rice crop, then one legume crop like peanuts to replenish the nitrogen in the soil, and then they would plant a vegetable crop or allow the land to lay fallow for a crop cycle to allow it to regenerate. Now, they were to grow nothing but hybrid rice, every crop cycle.

The effects of this were disastrous, not only for the diet and health of Indonesians, but also for the environment. The hybrid rice variety lacked the vitamins and nutrients of the heritage varieties they were used to eating, and planting only rice meant vegetables were no longer available from the garden, and even grew scarce and expensive at the market as they were being shipped in from far away.

Planting this new hybrid rice required the heavy use of pesticides and herbicides, as the crop was not adapted to the local environment and pests, like the heritage rice varieties were. The company who created the hybrid rice variety conveniently also made these pesticides and herbicides. Now, cancer rates and birth defects are highest in farming communities. The pesticides and herbicides have killed off all of the natural predators of pests, like snakes and owls, so now it's only the rats in the rice fields that thrive in unprecedented numbers and eat most of the rice crop before it's ready to be harvested.

The pesticides and herbicides also kill all the vitality and microorganisms in the soil, which means that every crop degrades the soil, making it less viable for the next crop. This leads farmers to have to also buy chemical fertilizers, adding to the expense of the crop.

This cycle has resulted in bankrupting farmers. Even though they can in theory produce 3 crops per year instead of 2, they lose a great percentage of their crop to the rats, and have high overhead costs of pesticides, herbicides, and fertilizers. And, to make matters worse, the price they can sell hybrid rice for is only 1/3 of the price they could sell the heritage rice for. So you can do the math. No wonder people say farming is less and less profitable.

Along with this change in agriculture has been a change in the economy, with the globalization push to monetize society. Bali is a Hindu society, and the most important aspect of community for the Balinese is their ceremonies at the temple. In the old days, if you farmed coconuts, you brought coconuts to the ceremony. If you farmed rice, you brought rice. If you had ducks, you'd bring

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the duck. And the community would all feast together. Now, the temple doesn't want your rice, your coconuts, or your duck- they want your money so they can go buy food for the ceremony, which is mass-produced, unhealthy fast food that comes in single use plastic packaging. You can see where I'm going with this.

So, if you, as a broke farmer, need a big ceremony, like a cremation for a family member, you're forced to sell your land just to pay for it, which means you've just sold your only asset and your children's inheritance for a one-time event. Ceremonies aren't cheap! Some families have to now wait months to do their traditional burial rites, just so they can afford the ceremony.

However, there is an upside. The youth in society are waking up to these injustices, and are coming up with innovative solutions. Seeing the disconnect between their daily food options and agriculture, along with the environmental degradation, and perhaps also being pissed off their parents are forced to sell the land they were set to inherit just to pay for a ceremony, youth are finding ways to make farming cool and profitable again.

Many think that modernization is the downfall of traditional agricultural systems, and to some extent this can be true when modernization is seen as a material consumer culture. But I have seen that modernization can actually be the key to reviving traditional, organic, and natural agricultural systems, and to making farming both environmentally and economically sustainable.

Indonesian youth who are taking back their farming heritage are using Facebook and social media for learning best practices and marketing their organic produce, and are connecting with other organic producers online to organize weekly farmer's markets. Some have even created online stores for their products, or have developed Community Supported Agriculture systems, where subscribers receive a weekly box of fresh produce from the farm for an annual fee. They're marketing their products directly to their consumers, who are willing to pay a higher price for clean, organic, heritage foods. So, they've advanced the model from the time of their parents, where farmers couldn't directly reach consumers and had to sell to middle-men who would then sell to markets, which was another factor cutting into their profits. And they're finally being paid a fair price for their good produce.

Youth are also engineering appropriate technology to create innovations like mobile rice millers, to save farmers the cost of transporting their rice to a rice mill. I've also seen them develop biogas systems and organic composting systems to deal with waste management issues, turning waste into either a cooking fuel source or a natural fertilizer.

A little innovation goes a long way, but firstly, I think it takes the guts to stand up and say you want something different for your future, for your family's future, and for your community's future.

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Going organic is certainly a global trend, and there are millions around the world who are uniting to demand that the poor economic decisions and the exploitation of the past be abandoned. Instead, people want a future where our food sources are healthy and sustainable and just- for the producers and the consumers and the environment. So let's choose this new vision of globalization- a vision of global solidarity, where we co-create a conscious and caring world that supports us, and Mother Earth, equally. Indeed, shift is happening, and these ripples of change inspire other communities around the world to take positive action. I feel like Ladakh is one of these important global energy centres, from which change will ripple, and I look forward to hearing your ideas on how we can make that happen.

Again, thank you for having me here, and I am happy to answer any questions you may have, and to hear all your big, bold visions for the future of sustainable agriculture in Ladakh.