

From: Karen Lyke <karen.lyke@gmail.com>
Sent: Wednesday, December 30, 2009 2:50 PM
To: ATR-Agricultural Workshops <agriculturalworkshops@usdoj.gov>
Subject: commentary re agricultural practices

Good People at USDA,

Here's input re the present state and desired direction of agriculture, per the request for public comment.

The short form is **leave the small farmer alone, let him sell directly to those who choose to buy from him/her, without restrictions, by mutual and informed consent.. If any legislation is enacted, make sure it affords equal if not stronger opportunities to the small local, organic, sustainable grower, and does truly prevent environmental degradation and damage.**

Common premises of current agribusiness practices include the following:

- petroleum based (fertilizer, pesticides, heavy machinery) agriculture is "the only viable way to grow food"
- growing commodities for sale by the tanker-load is more important than growing food
- bigger is better, get big or get out
- people would starve if we didn't grow with chemical fertilizers and pesticides
- there's greater economy and efficiency in producing something in one or a few central locations, then distributing it (than production within smaller autonomous regions)
- the money based economy is more valid than subsistence with localized autonomy; that people growing their own food are "less developed."
- productivity is measured in volume, not quality
- issues of quality are to be presented best face forward, and the public should remain ignorant about the dark side of chemical based agriculture and GMO organisms.
- human (or animal or plant) health is irrelevant to soil health, and vice versa
- shelf life is more important than vital force in making food available; fresh food is somewhat of a luxury, not significantly better than preserved food
- the purpose of agribusiness is to make profit for shareholders, not feed people
- impact on the environment and human beings is irrelevant; the environment is infinitely resilient and renewable, and human beings are replaceable
- traditional methods of preserving food by cold cellaring and fermentation are outmoded. Microbes/germs are presumed to be pathogenic, otherwise irrelevant to health. Food is preserved for profit and uniformity, without regard to seasonal or concomitant physiological changes. The impact of food on health is almost deliberately dismissed, perhaps with an inkling of recognition that to acknowledge the connection will indeed bring down this house of cards.

These are the premises of an agricultural and economic system that is leading to increasing disease, poverty, starvation, and environmental degradation. They have been in effect for less than a century, and they are clearly not doing anything to improve life for individuals, for communities, or for the wellbeing of planet Earth.

In addition, food transportation and distribution are also dependent on petroleum to fuel and build vehicles as well as to pave the roads to carry them, also to maintain the immense (electricity dependent) record keeping systems to manage inventories, and refrigerate produce for year round availability. Very few people are still in a position to grow their own food or meet other basic needs, and without money, and because of disputes over access to money or land or petroleum, people are indeed starving, don't have access to food stores (storage, not shops) which are accumulating in unequal distribution sites. This is rampant in Africa; the increase in homelessness in the US is only a short step to widespread starvation in North America.

The environment is contaminated and becoming increasingly inhospitable to its residents. The only people for whom this system works are those profiting at the expense of the others, until they too are afflicted by the diseases consequent to toxic environment, and food depleted of its nutrient value because the soil is also depleted. IOW more people are struggling than are thriving, and the continued viability of life on earth is now uncertain..

The solution: discontinue "agriculture" based on petroleum dependence. Return to full cycle agriculture with animals grazing on grass, manure and compost to replenish microbial life hence fertility to the soil, AND provide heat for cold seasons as demonstrated in the Open Air Museum in Arnheim Holland in the early 1970's. Grow food in diversity -- not monoculture commodities -- locally, within relatively self sufficient communities, preserve it in spring houses and via fermentation and cold cellaring, as was done for millenia until the early 1900's. Food grown on healthy soil contains more nutrients, obviating nutrient supplements (pills etc.). It will also will keep longer in cold-cellars and support healthier microbial colonies for fermentative storage. Share according to need, somewhat tempered by participation. A cohesive community will know who the slackers and who the needy are and will adjust according. Transportation via animals and solar powered vehicles will relieve some of the burden of constructing and maintaining roads, and the environmental damage these cause.

Any legislation should ensure the right of all people to provide for their own food supply, to barter freely, and impose no restrictions that favor large producers over the small grower. Diversity as a facet of soil health will increase overall productivity, appreciated for its diverse abundance and life sustaining quality, not merely number of monoculture bushels. IOW may it not be that "everything Joel Salatin wants to do is illegal". Green jobs with green manufacturing at home (not imports) need to take the impact on human individuals and communities into consideration, and success and productivity will be reckoned by how many people thrive and are employed meaningfully based on the viability of their connection with the land and each other.

This will come to pass, either at a time of our choice and in harmony with what remains of civil society, or as more and more people become outlaws to meet their basic needs for food and human connection, the present system will collapse. It might have to go through chaos as the needs of fewer and fewer people are met, and more and more people become desperate, but it will change. Not a cheery picture, but history does repeat itself, life will prevail, and humans will go back to a soil based society as they have lived pretty happily for most of their history..

GMOs

Arguments presented in favor of using GMOs include

- increased yields -- "save the world from hunger" typically accompanies this claim
- resistance to plant predators/pests -- corn w/ Bt built in
- less pesticide use -- Round-up Ready soybeans
- uniformity and longer storage life -- tomatoes crossed with sardine genes (undoubtedly a natural and spontaneous combination!?) to reduce susceptibility to freezing
- presumed necessary to feed growing population by providing increased yield
- more profit & free time for the farmer

The reality:

- yields no better than nonGMO, sometimes less d/t abnormalities showing up in the crops. GM Corn plants failing to generate ears let along full kernel ears has been a current occurrence.
- resistance to pests might last a few seasons, until the resourceful microbes adjust and resist the pesticides
- pesticide use is increased as insects, microbes and plants adapt to pesticide applications. Unfortunately the human life span is longer, thus doesn't allow adaptation compatible with human wellbeing. With

healthy soil, there is no need to use pesticides, or there are natural non-toxic ways to protect plants, especially with intercropping, promoting for biodiversity, using wind-rows not eliminating them. In many instances the weeds targeted by pesticides are a significant source of nutrition for "subsistence" populations, also enhance growth of the intended crop through synergy through what the "weeds" put into the soil or other organisms they attract. Modifying rice so that it contains more vitamin A is a specious route to replacing the vitamin A (precursor thru carotenoids) that would have been gained from eating the weeds destroyed by herbicides. Grubs targeted as pests to kill are actually a delicacy in parts of Africa, rich in fatty acids and other valuable nutrients.

- uniformity and longer storage life -- somehow people managed to store foods across the fallow seasons very well before we had electricity everywhere and petroleum dependence. Flaver Saver tomatoes may keep forever (meaning they don't support life?!?), but their flavor and texture only promote profits, not human health.
- GMOs contaminate non GMO plants in proximal fields, pre-empt natural forms. This eliminates variety overall in plant species, leads to uniformity. When the crop fails, there are no back-up old-fashioned natural plants from which to regenerate the species. Remember the potato famine. This is a big concern especially in Mexico, where sacred native varieties are in jeopardy d/t forced use of GMO corn, eliminating them with their varied uses, varied growing seasons which matched needs of birds, insects, mammals, microbes also growing each in their own unique season linked w/ plant rhythms. Uniformity of crop reduces biodiversity in more ways than are realized, tears the threads which ultimately sustain the greater web of life. It's about more than this year's crop yield.
- necessary to feed burgeoning world population -- NO d/t
 - unsatisfactory crops thru failure -- corn ears that fail to develop seed, for example
 - unimpressive yields no better in volume than other crops, volume as a substitute for nutrient content, except that nutrient content is negative
 - toxic to those that eat them.
 - GMO plants have by definition modified protein structures. These have not coevolved with the creatures that eat them, hence don't match corresponding enzymes, other amino acid sequences, can't be digested by the animals that do eat them. This leads to allergic types responses, overactive immune systems, organ damage (gut, kidneys, liver, spleen), **CHANGES IN GUT MICROBES** which **CONTAMINATE NATURAL GUT FLORA**, producing markedly lowered viability if not direct death. GMO potatoes have been shown to promote lesions in the guts of animals consuming them, leading to digestive issues immediately, longer term damage and disease.

Cattle, wild animals (deer, small mammals) knock down fences or ignore stands of GM corn to get to natural healthy crops. Numerous instances exist of animals dying after grazing GM cotton residues, other GM crops, or stillbirths, empty amniotic sacs, offspring dying shortly after arrival.

Infertility, immune dysregulation, accelerated aging, dysregulation of genes associated with cholesterol synthesis, [faulty] insulin regulation, cell signaling, and protein formation, and changes in the liver, kidney, spleen and gastrointestinal system have all been linked to consumption of GMOs.

The argument of more profit & time for the farmer is also false. Predatory marketing requires farmers to pay a premium beyond regular seed price, plus the pesticides to use w/ the seeds, forbids saving seed for planting next year (if they're not sterile anyway). Petroleum based agriculture necessitates assuming religious scale debt. (Only God can afford to pay it off.)

Bankruptcies and suicide among farmers due to economic burdens, esp from GM crops, are very high.

Monsanto has viciously persecuted farmers whose crops have been contaminated with GMO, farmers who promote seed saving, imposing horrendous undeserved economic and psychic stress (lawsuits) burden on them. Farming has been reduced to spraying and driving, no longer a connection with the earth. It has become a disempowering literally toxic relationship with the earth, other living creatures, the community, retreating into secrecy and alienation.

Re alienation, farming has been reduced to driving and spraying, is now done with as little connection with the public as possible, great secrecy, complete with barbed wire and no trespassing signs, poison -- keep out, environmentally uninhabitable economically destroyed communities, lobbying and lies to prevent the public from knowing what's in their food -- GM sugar beets is a more recent example.

Current rampant increases in cancer and other degenerative diseases, already testify that the global economic system along with chemical agriculture is a failure. We can keep pretending that more legislature to enforce the same destructive practices is the route to take, or we can acknowledge that this isn't working, and take positive steps to reestablish agriculture as contact with the soil and the seasons, small autonomous communities producing their own food on a human scale without Ponzi scheme & scale debt.

The wealth of a nation lies in the health of its soil, and going back to agricultural practices that worked for millenia, which build the soil and don't perpetuate its destruction and erosion (into the wind or into the Mississippi delta, for example) is a necessity, not merely an amusing option. Educating the public to realize that the food they now get from corporate production is drastically changed from food of even a century ago is a first step. Some will get it, many will suffer and die in the process. Alas. Reconnection will happen. It can be at time and place of our choice, or through drastic circumstances. As human beings it is our decision.

Karen Lyke MS CCN
Whitehouse Ohio 43571
karen.lyke@gmail.com