Magnitude of the Problem

Healthy food and farming depend on two conditions and policies designed to support them:

1. Grow what is good for the earth
2. Eat what is good to grow

The existing agrifood system does the opposite. The policy legacy of fifty years promotes maximum grain yields per person and low cost edible commodities. It did what was intended. It increased grain yields per person through specialization and trade, and for twenty-five of those years seemed set to end the vulnerabilities to climate and famine of peasant systems. However, for the past twenty-five years, food insecurity has increased as livestock operations and fuels offer better grain prices than poor humans, while byproducts, such as HFCS, drive manufacturing towards unhealthy edible commodities. Worse, industrial agriculture threatens the soils, water, and biological diversity—all the natural cycles that support human civilizations. In effect, the modern food system

1. Grows what is good to sell
2. Eats what is cheap to buy

Policy Legacies: Health and Agriculture

Agricultural and health policies for fifty years or more have grown up not speaking to each other.

1. *Agricultural policies support monocultures and trade*; for fifty years or more, they have had the desired result of increasing quantities of grains and livestock (that is, calories and proteins). Unintended consequences are
   a. diets high in fats and sweeteners—for those entering food markets
   b. inadequate quantities (food insecurity)—for those unable to purchase or grow their own food
   c. Now fresh fruits and vegetables (and aquaculture) are adopting the monocultural practices pioneered by grain and intensive livestock; California is the leader, followed by Chile, Kenya, and other export success stories

2. *Health policies treat sickness*; for fifty years or more, they have made great progress in infectious diseases. Nutrition was defined as sufficiency of calories and proteins, and targeted supplements of micronutrients.
a. Only recently have health policies attended to more than quantitative dietary deficiencies; with the rise of chronic diseases related to excess fats and sugar and insufficient micronutrients, notably diabetes and heart disease, health policies and budgets face a huge challenge in refocusing on prevention and quality of diets.

b. In a pioneering policy initiative, building on decades of civil society experiments and advocacy, guided by a publicly funded volunteer Food Policy Council, the Toronto Department of Public Health is leading an effort to “embed food system thinking throughout government.”

Health as a metric for integrated public policy

It is not easy to turn the massive ships of agricultural and health policies towards sustainability. I suggest two market-based policy tugboats that might, if pulling in the same direction, make immediate, significant progress towards a sustainable food system.

1. Deepen CCT programs to include productive investment in sustainable livelihoods in regional food systems. Instead of encouraging farmers to become growers of garlic or shrimp for export—and risking their livelihoods if the WalMart or Sainsbury checker rejects their products—make cash transfers conditional on improving integrity of ecosystems and health of crops.
   a. Direct productive CCT to small farmers to improve agro-ecosystem integrity through mixed cropping systems.
      i. Farmers’ knowledge is crucial to diverse cropping systems embedded in natural cycles of soils, waters, forests, wetlands, and grasslands.
      ii. Fund scientific research to complement rather than displace farmers’ knowledge
      iii. Design extension to collaborate with farmers and to integrate their needs into research agendas.
   b. Upgrade the incomes, skills, and social esteem of occupations in healthy food and farming.
      i. Pay farmers for managing natural ecosystems. The condition is to improve agro-ecosystem efficiency. This will increase diversity of crops and healthy diets.
      ii. Clean waters full of aquatic life, healthy soils, pollinating insects and other gifts of nature are public goods; squandering them will cost dearly.
      iii. Use public education of all kinds to train new farmers, and to promote respect for farmers and other food producers.
      iv. Pay farmers to train apprentices.
   c. Extend productive investment via CCT to infrastructure for regional agrifood networks.
      i. Farmers need more than cell phones to improve their ability to get crops to market.
      ii. Invest CCT to strengthen regional food networks, including artisanal processing and food preparation, cold chains for transport, and efficient distribution to small vendors and customers.
         (a) Minimize links between growers and eaters.
         (b) Link with social CCT via food literacy for families and in school curricula.
         (c) Promote collaboration with universities to create prototypes of frontier nutrient cycling technologies such as composting, methane capture, and carbon cycling.
      iii. Measure efficiency of networked agrifood systems. A model is the well documented efficiency of the dabbawallahs of Mumbai, who deliver 100,000 individually specified hot meals across fifteen miles of dense urban settlement in two hours every working day with an error rate the envy of modern industry.
   d. Conclusion. CCT for investment in healthy food and farming creates win-win-win: stabilize rural employment, take pressure off cities and public services to cope with unemployment; promote diverse agro-ecosystems, increase food security and food quality.

2. Public procurement is a policy tool available to all levels of government in all countries to lever healthy agrifood systems. K. Morgan and R. Sonnino, (The School Food Revolution. Earthscan, 2010) call this “The Power of the Public Plate.”
a. Schools, hospitals, government offices all combine possibilities for building regional markets for healthy, sustainable foods.

b. Contracts for public catering can work incrementally to shift markets towards sustainable livelihoods and healthy foods.

c. Food served in schools combines direct provision with education about healthy diets.

d. Food served in hospitals is so obviously related to health care efficiency that it is astounding that pioneering initiatives in North America are needed to shift from unpalatable industrial meals lacking micro-nutrients to freshly prepared local foods.

**Government as platform for social innovation.** Both CCT as productive investment and strategic use of public sector food provisioning are market-based policies. Both exemplify a change from command-and-control to building platforms for the emerging social economy.

My experience in food system change in both civil society and municipal government in Toronto and Canada is that people respond enthusiastically and collaboratively to opportunities to grow food that is good for the earth, and to eat food that is good to grow.