Challenges for Food Sovereignty

Steve Suppan

Food sovereignty is an agricultural, environmental, and rural development policy framework that made its first public appearance at the 1996 World Food Summit in Rome. The initial and most persistent proponent of food sovereignty is Via Campesina (or International Peasant Movement), an organization representing small farming organizations with members from 56 countries that began its preparations for the summit at an April 1996 meeting in Mexico.[1] The means for achieving food security advocated by governments and agribusiness at the summit include dependency on developing country food imports and agricultural inputs.[2] At the summit and during later World Trade Organization negotiations, food security was bruited as a reason for further import liberalization. Discussing United States commitments to the summit's Plan of Action, former Secretary of Agriculture Dan Glickman stated, "It was with food security in mind that the United States crafted its proposal for the next round of WTO negotiations. . . .We want to give [developing countries and least developed countries] the ability to import the food they need to feed their people."[3]

This dependency was, and continues to be, unacceptable to Via Campesina and like-minded critics.[4] Since 1996, the range of issues taken up by such critics has broadened to include land tenure and distribution reform, control over genetic resources and local knowledge, human rights, and rural workers and migration. These issues, and the movement itself,

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garnered an international podium in February 2007 at the Nyéléni Forum, a meeting in Mali on the topic of food sovereignty. The following reflections do not represent Via Campesina positions but rather reflect the response of a policy analyst to some of the discussion at Nyéléni.

To judge by the Food and Agriculture Organization (FAO) report, *World Agriculture towards 2015/2030*, food sovereignty has little chance of prospering in the 21st century. According to FAO Director General Jacques Diouf, "Net cereal imports by developing countries will almost triple over the next 30 years while net meat imports might even increase by a factor of almost five."[5] This forecast of yet greater import dependency does not bode well for food sovereignty, which advances food security through local knowledge, resources, and producers rather than reliance on international trade. However, there are grounds to be skeptical of FAO's and similar projections of a huge increase in import dependency, given the methodological limitations of econometric forecasts and modeling.[6] Furthermore, such projections are often based on idealized assumptions. The absence of livestock animal disease,[7] the potential costs resulting from such disease, and the environmental damage from livestock production are important variables that are not counted in the modeling methodology.

Whatever the methodological shortcomings of these projections, their organizational sponsors seek to realize them. The FAO, the World Bank, the Bill and Melinda Gates Foundation, the Rockefeller Foundation, transnational agribusiness firms, and a host of other powerful organizations are all launching initiatives for a Second Green Revolution.[8] The world's estimated 854 million chronically food-insecure people are not the only target of this so-called revolution; it also takes aim at the challenges of feeding the nine billion people who are projected to share our planet by 2050.[9] Who could possibly criticize—much less offer alternatives to—the technologies, food supply chains, trade rules, and overall reengineering of the global food system for such a noble endeavor? What challenges do the trade policy and technology facets of this Second Green Revolution, and the concomitant increase in net food import dependency, pose to food sovereignty?

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The first Green Revolution is sometimes discussed simply as a mat-

ter of introducing agricultural technology to increase crop yields and feed the hungry.[10] The Second Green Revolution, perhaps even more than the first, is a project of exporting a "technological package" under a global governance and trade policy regime that severely limits developing country government policy options to realize food security, rural development, and employment. Food sovereignty as a policy framework for an alternative to an international trade–driven, industrialized agriculture system is hostile to import and technological dependency precisely because that system condemns peasant agriculture to extinction.[11] To explain this framework, I will develop four theses in response to four primary topics of discussion at the Nyéléni Forum: local markets and international trade, local knowledge and technology, access and control over resources, and production models.[12] These topics are aspects of food sovereignty, so one does not have a hierarchical priority over the other.

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LOCAL MARKETS AND INTERNATIONAL TRADE

First thesis: *Despite a decision by World Trade Organization (WTO) member governments in July 2004 to develop binding standards to promote food security, rural development and livelihoods, WTO members have not been able to agree on how to implement this decision. The decision reduces these three aspects of food sovereignty to criteria that would justify a Special and Differential Treatment exemption to the overall tariff reduction formula for designated "special products" in the WTO agriculture negotiations.*[13] *Trade liberalization rules view the realization of food security, rural development, and livelihoods as policies that are subordinate to rules to facilitate exports. In a food sovereignty framework, trade rules are subordinate to such policies among other food sovereignty objectives.*

The slogan perhaps most associated with food sovereignty and trade is "WTO Out of Agriculture!" That current trade-related rules impede realization of food sovereignty is illustrated by opposition to developing countries' attempts to implement the food security, rural development, and livelihood or employment criteria of food sovereignty in the agreed framework of the Doha Round of WTO negotiations.

One possible tool for implementation of food sovereignty is a tariff

reduction exemption for special products that developing countries would designate as meeting specific criteria. The special products concept was first agreed as part of the Doha Round "modalities," or issues to be negotiated in the July 2004 Framework Agreement for the Doha Work Program.[14] The special products proposal has been stymied by bargaining over trade-offs thanks to the WTO "single undertaking" structure, according to which nothing is considered agreed until a final agreement is reached. For example, India will not lower its demands on special products until the United States cuts its domestic support payments in the Farm Bill. The U.S. will not cut domestic support until and unless WTO members concede to U.S. demands for greater market access for its agribusiness, non-agricultural, and service industries exports.[15]

The Group of 33 developing countries is negotiating for the right to designate up to 20 percent of all agricultural tariff lines as special products. The U.S. has countered with an offer to allow as special products just five of the more than 1000 agricultural tariff lines—not enough to cover even one special product.

Maintaining a higher tariff is an indirect way of providing protection against agriculture export dumping, i.e., selling at a price below the cost of production. The Institute for Agriculture and Trade Policy (IATP) has calculated that U.S. agribusiness firms dumped five major crops from 1990 to 2003.[16] Tufts University researchers have shown how below-cost feedstuffs also act as an input subsidy to the broiler chicken industry.[17] Input subsidies for crops can be challenged under WTO rules, but feedstuffs as inputs to livestock are not covered by the rules.

WTO anti-dumping rules are designed to measure damage to large industrial firms that can lobby their governments for protection rather than to measure damage to farmers whose products compete against dumped agricultural exports. Oxfam, Action Aid, Christian Aid, and other NGOs have documented the damage to food security, rural development and livelihoods of dumped exports. However, only governments—not NGOs—can initiate the WTO trade dispute settlement system to seek redress for this unfair and destabilizing business practice. Few developing countries can afford the expense and can withstand the retaliation of prosecuting a WTO agricultural dumping case. Even when a case is filed to counteract damages from dumping,

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the terms of the WTO Agreement on Agriculture (AoA) only allow a nation to demonstrate that another WTO member has exceeded trade-distorting domestic support subsidies below cost-of-production prices rather than providing for direct discipline of below-cost-of-production exports.[18] Given the difficulty of proving dumping under current AoA rules, implementation of special products designation is a source of needed protection for most developing countries.

LOCAL KNOWLEDGE AND TECHNOLOGY

Second thesis: *There is little evidence in the Doha Agenda, the bilateral trade and investment agreements, or in trade-related capacity building projects of efforts to ensure that local knowledge, technology, resources, and producers will drive agricultural research and development.*

Food sovereignty puts a premium on using farmer knowledge and technology to develop indigenous crop and livestock varieties. A synthesis report from the Nyéléni Forum states that "the majority of the world's food is still being produced or harvested at relatively small scales by local communities, based on local knowledge, using locally based technologies and locally available resources."[19] A speech on behalf of Via Campesina to the International Plant Genetic Resources Treaty or Agriculture (ITPGRFA) meeting in 2007 noted how vast plantings of patented, genetically uniform seeds were threatening the local knowledge and technology base of agriculture. The speech concluded that "without an effective participation of farmers to the management [sic] of genetic resources in all countries, the ITPGRFA will remain an empty juridical tool in the hands of corporations and governments unable to prevent genetic erosion that is spreading in our fields and threatens the future of agriculture."[20]

While multilateral genetic resource and biosafety agreements struggle to be implemented, bilateral agreements are advancing quickly to place control over agricultural resources, technology, and knowledge in public-private partnerships in which the private partners are transnational corporations. For example, the Indo-U.S. Knowledge Initiative in Agricultural Research and Education, whose corporate partners are Wal-Mart, Archer Daniels Midland, and Monsanto, will send 500 Indian students to the U.S. for doctoral and post-doctoral studies in food marketing, food safety, risk management in the futures and options markets, agri-processing, and agricultural biotechnologies. India will pay the costs of their studies, but any patents on their research will belong to the universities at which they study.[21] In exchange for accepting the U.S. agricultural agenda, the U.S.

"conceded" to sell India nuclear energy technology that is unable to sell in the U.S. market. The Initiative will ensure U.S. agribusiness access to India's rich agro-biodiversity resources, while products developed from those resources will be subject to patent protections and monopoly marketing privileges similar to those in the U.S.[22]

Already, reports Devinder Sharma, a noted food and trade policy expert from India, Wal-Mart and Monsanto have indicated that they want market access rather than research and product development to be the immediate result of the Knowledge Initiative.[23] Despite considerable evidence to the contrary, the Initiative appears to assume that developing countries must depend on imported knowledge, technology, and products for their food. The public planners of the Initiative would do well to listen to those who lived through the first Green Revolution. According to a 60-year-old farmer from the state of Punjab, "The Green Revolution may have enriched the Punjab, but it has ruined the land and the small farmers and forced them to fall into debt and to migrate to the cities."[24]

Technological missionaries, notwithstanding their noble intentions of "feeding the world," come with products whose commercial monopoly is guaranteed by enforcement of patents on those products. The products in question usually are developed on the basis of traditional knowledge about genetic resources used in the patented products. Farmers are then asked to buy a genetically engineered variety of these seeds developed by local communities of farmers in recent years or possibly even hundreds of years ago. For example, Monsanto's unique Bt cotton seed, genetically engineered to produce a pesticide, costs four to five times as much as the indigenous varieties that served as the foundation seed for the Bt variety.[25] Following a price squeeze for Bt cotton in India, more than 17,000 farmers committed suicide in 2003 alone, the last year for which there are government figures.[26]

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Developing countries have proposed an amendment to the WTO intellectual property agreement to require patent applicants to disclose traditional knowledge and genetic resources used in patented products. [27] Disclosure would be a legal tool to bolster declining patent quality, a best-endeavor provision of the WTO intellectual property agreement. Scholars

have characterized incomplete or false patent documentation as part of the "patent pathology" that is preventing technological innovation.[28] Disclosure would also provide a documentary basis for licensing and reimbursement of traditional knowledge and resources that biotech and pharmaceutical companies have expropriated in the past with no compensation.

Licensing fees—to say nothing of compensation for bio-pirated resources—could contribute hundreds of millions of dollars to developing countries, the source of most agro-biodiversity. One United Nations study estimates that at least $5 billion a year in royalties should be owed to developing countries for expropriated traditional knowledge used in patented products.[29] A portion of these fees could be directed to the stewards of *in situ* conservation of bio-diversity, an essential global public good. Enforcement of multilateral rules concerning the sustainable and equitable use of traditional knowledge and practice will likely involve an "enforcement pyramid" composed of indigenous tribal, national, and international governing bodies.[30]

With the exception of Norway, developed countries—holding the vast majority of all patents—have rejected any binding rules to protect and/or license traditional knowledge. This rejection has occurred not only at the WTO but also at the World Intellectual Property Organization, where the United States, the European Union, and Japan are seeking to globalize recognition of their patents to reduce administrative costs and lock in monopolies for their products.[31] If successful, the globally enforced patent could continue to allow expropriation of local knowledge and technology with no licensing fees or technology transfer requirements.

Harmonization with U.S. seed purity standards, facilitated by grants from the U.S. Agency for International Development, will disqualify traditional-variety planters from access to credit or foreign markets. For a free market in seeds to prevail, seed standards will have to be harmonized, farmers will need to buy the "right" kind of agricultural inputs, patents will need to be enforced, and farmers will otherwise have to join the international food supply chain.[32] No wonder food sovereignty proponents cry out, "No patents on life!" Or, as said by the late plant scientist Bent Skovmand, an instigator of the underground vault in Norway protecting more than three million seed varieties, copyrighting computer-generated gene sequences is "like copyrighting each and every word in *Hamlet*, and saying no one can use any word used in *Hamlet* without paying the author."[33]

ACCESS AND CONTROL OVER RESOURCES

Third thesis: *The technological fixes of the Second Green Revolution, if they entail expropriation, privatization, and patenting of community resources, will greatly reduce, rather than expand, access to resources.*

Although food production continues to outstrip population (according to FAO), the persistence of hunger results in part from a lack of money to buy food and/or lack of access to, or control over, food producing resources.[34] Access to resources—land, water, inputs, training, post-harvesting technology, transport, financial credit, gender equality under the law, etc.—is a crucial plank of the food sovereignty platform.

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The intensification of production through transgenic varieties, and perhaps in a few years through synthetic biology,[35] requires expensive inputs whose costs can only be recovered through applications to cash crops for export. Given the increasing agricultural trade deficit for Least Developed Countries (LDCs) and the forty-year decline in agricultural commodity prices,[36] it is unlikely that most farmers will recoup the costs of transgenic varieties. These applications, even if they succeed technologically, are resource-intensive diversions and invasions for those who provide food crops and household food security in most developing countries.

Access to resources is not only a matter of social justice but of economic efficacy, if not efficiency, in the neo-classical economic sense, meaning substitution of capital and technology for labor. Without distributional equity of resources for the more than 70 percent of economically active women who work in agriculture in LDCs,[37] it may become impossible for them to continue to provide household and national food security.

The Women's Declaration on Food Sovereignty from the Nyéléni Forum states that "women, who have historically held the knowledge about agriculture and food, who continue to produce up to 80 percent of food in the poorest countries, and who today are the principal custodians of biodiversity and seeds for farming, are particularly affected by neoliberal and sexist policies."[38] Their call for women's access to resources is not an abstract issue of legal equity before the law. None of the United Nations Millennium Development Goals (MDGs) for food security, rural develop-

ment, and livelihood will be met in food-insecure developing countries without a gender-effective distribution of resources.

The World Bank/International Food Policy Research Institute report "Agriculture and Achieving the Millennium Development Goals" acknowledges MDG 3, to "promote gender equality and empower women."[39] But notwithstanding the talk of "mainstreaming gender" in multilateral technical assistance, the scale of international financial institution policy programs—to say nothing of loans for empowering women farmers and rural entrepreneurs—pales in comparison to support for contractors of the Second Green Revolution. If intergovernmental organizations and international financial institutions were to invest in securing access to indigenous resources rather than in promoting technical fixes that are directly or indirectly imported, female farmers with little access to resources, who barely manage to provide food, fiber, and medicine for their household, could likely do a great deal more.

PRODUCTION MODELS

Fourth thesis: *The so-called efficiency of industrialized agriculture depends on externalizing core environmental, public health, and social costs from prices and on taxpayer subsidies to compensate for farmgate prices that are below the cost of production. A production system that continues to count depletion of natural capital as economic growth cannot be made "green" through a technology fix.*

The Nyéléni Forum report states that "Food sovereignty and environmental stability are underpinned by agroecological production of food and the use of ecologically sensitive artisanal fisheries practices. But this form of production can only continue if society values and supports it and buys local foods whilst at the same time removing privileges and subsidies from industrial production systems that benefit transnational corporations."[40]

Agroecology, a site-specific form of largely organic agriculture production that relies on local knowledge and farmer participatory research, is dismissed as a romantic anachronism by those who believe that only industrial agriculture can "feed the world" while managing such environmental problems as agro-biodiversity erosion, soil health depletion, and water quality degradation. The opponents of agroecology cannot be persuaded by the data bank of sustainable agricultural practices organized by Professor Jules Pretty, who calculated that the cost of environmental and public health externalization for British agriculture in 1996 alone amounted to over 2.3 billion pounds sterling.[41]

Nor do the studies showing that the devastating rice blast is far more severe in monoculture plots of rice than in mixed plots disabuse critics of agroecology. Peer-reviewed, controlled experiments conducted in Yunnan province in 1998 compared the effects of crop diversity with monoculture on rice blast. Blast severity, affecting an average of 20 percent of the monoculture control fields of glutinous rice, was reduced to one percent in mixed four-variety plots, resulting in an 18 percent overall yield increase compared to the monoculture plots. Gross value per hectare of mixed rice varieties was 40 percent more than for the monoculture. By 1999, no application of fungicides was needed to control rice blast in the mixed-variety plots, and by 2000, Yunnan farmer interest in the genetic diversity experiment was such that 40,000 hectares were planted with mixed rice varieties.[42]

Instead of experimenting with less chemically dependent agroecological methods, the proponents of industrial agriculture count on taxpayers to pay the costs of their environmental and public health damage. For example, in the U.S. Department of Agriculture's 2007 Farm Bill proposal, the Environmental Quality Incentives Program (EQIP) pays part of the tab for cleaning up Concentrated Animal Feeding Operation (CAFO) environmental problems. Farmers or corporate entities with average adjusted annual gross incomes of $2.5 million or less are eligible to receive up to $450,000 in cost-share assistance. Due to congressional budget restrictions, fewer than 800 EQIP contracts paid out more than $100,000.[43] Rather than provide incentives for best environmental practices, a good part of EQIP's $1 billion budget for fiscal year 2008 will be dedicated to enabling the construction of CAFO manure management facilities.[44] Even particularly risky operations, such as hog manure lagoons in the flood plains and hurricane zones of North Carolina, will receive "disaster relief" funded by taxpayers, in order to allow the production of so-called "cheap" food. In the same farm bill, however, there is scarcely any funding or technical assistance for farmers who want to transition to organic farming.

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There is much more that can and should be said about the economics and agronomics of radically reducing the chemical and antibiotic dependence of agriculture. Even more should be said about the extent to which

agroecology can mitigate some of the worst agro-environmental and public health problems caused by industrial agriculture, such as the "dead zone" in the Gulf of Mexico caused by excessive use of nitrogen-based fertilizers—with an area the size of New Jersey—and increasing human antibiotic resistance, due in part to the non-therapeutic use of antibiotics in CAFOs and in industrial aquaculture. As Kathleen McAfee writes, "Food sovereignty is as much an ecological project as an alternative economic paradigm."[45] The recent participation of Via Campesina in the Kyoto Protocol negotiation on climate change in Bali once again has brought food sovereignty into the media spotlight.[46] Agricultural practices and "land use" (which largely comprises deforestation for plantation agriculture) together account for about 32 percent of all greenhouse gas emissions.[47] The externalization of the costs of greenhouse gas emissions is an important factor in making industrialized agriculture seem efficient. Given the overwhelming political and financial power of transnational agribusiness, perhaps the only force capable of truly globalizing food sovereignty is the fear of the costs of business as usual conducted all over the planet. ■

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