

## EDITORIAL

### FOOD, HUNGER AND THE MARKET ECONOMY

There is little need to reiterate the evident truth: that at one extreme human populations eat too much and at the other extreme many die from hunger. More cogently, is it feasible, given the will, to distribute food more equitably among and within nations? This question underlies some of the most crucial issues in public health.

Ten years ago Frances Moore Lappé and Joseph Collins (1986) addressed this issue in a small monograph, *World Hunger: 12 Myths*. While many other tomes have dwelt on the gravity of the situation since Malthus' famous dictum that the exponential growth of the global human population versus the linear growth of food supplies will lead to eventual disaster, Lappé and Collins focused on what they considered to be *common misconceptions*:

1. There's simply not enough food
2. Nature's to blame
3. There are too many mouths to feed
4. Food production and environmental conservation are in conflict
5. The green revolution is the answer
6. Justice and productivity are competing goals
7. The free market can end hunger
8. Free trade is the answer
9. People are too hungry to revolt
10. More international aid will help the hungry
11. The majority benefit from the hunger of the poor
12. Elimination of hunger in poor nations requires restriction of freedom

Behind each item in this menu there have been and still are many furious debates. In the context of changing geopolitics it is of particular relevance at this point in history to focus on of them, namely the likely consequences of the free market *pusch*, since this is currently seen by some as a panacea for global inequities. One example which reflects directly on agricultural production is the increased farm output which followed quickly upon the liberalizing reforms in China post-1978, when farmers were permitted to sell a substantial part of their products for family profit in the open market. This remains a potent example of the positive value of the private incentive.

However, the increased agricultural production in China, based on high fertilizer and pesticide usage, has not been sufficient to eliminate periodic food shortages requiring large food imports, despite one of the world's most effective population control programs: small incremental needs occur on top of a very large population base. The long term outlook must be considered problematic at best (Yabuki, 1995). China encompasses more than a fifth of the world's population, and represents one of the most disciplined approaches to food supply, but the gains attained through private incentive in agriculture will still be limited, even though without them the outlook would be worse.

The reality, of course, is that in most countries free market forces do not operate independently of public sector management or intervention (Lappé and Collins, 1986), despite the vehement protests of many key neoclassical economists like Milton Friedman, that the market, if left alone by government, will lead to equitable distribution of food, as well as other products (Ravaioli, 1995). The problem, of course, is that the market does not in practice respond to individual or community needs, it responds to *money*. Those who have money generally have power or favorable access to power.

China opened to market forces at a time when that country had already achieved considerable equity in the distribution of purchasing power, whereas many other countries have done or are now doing so on an inequitable base with food production controlled by a small number of owners of large tracts of land who hire large numbers of contract laborers. These peasant farmers have no equity in the production process, and no mechanism for gaining access to that equity. The Philippines, for example, has been such an example for generations. In contrast, Thailand was historically an agricultural country with widespread farmland ownership but in recent years that land has increasingly come under the hegemony of large agribusiness firms, with many original owners reduced to contract labor on what used to be their own land. Both patterns are widespread throughout the world, especially the second one as the market lures so many to trade short term gain in consumables for long term loss of equity in

production.

The influence of selected western farming practice, with emphasis on methods which optimize the large scale production of monoculture crops for export, has been helped enormously by the policies adopted by the World Bank and other development banks (Rich, 1994), and by technology transfer in bilateral aid programs (Cassen, 1994), especially those involving major grain exporting countries such as the United States, Canada and Australia. In the latter case it is significant that domestic soil quality is deteriorating rapidly as a result of these very technologies which depend heavily on chemical agriculture: short term gains in productivity lead to long term losses. There is evidence that small scale mixed farming, which these technologies often displace, preserves soil quality more effectively, as well as being cheaper but of course more labor intensive. (Tanabe, 1994; Ghatak and Ingersent, 1984; David and Otsuka, 1994).

Thus the market tends to push agricultural production in the direction of chemically supported cash crop monoculture, driving the world to accept western models. Such a direction favors those with money to invest rather than those with historic ties to family farms. Commodity prices rule the cash crop markets. These vacillate with the fiscal fortunes of rich nations and their bourses. In these nations, supposedly devoted to the market as a natural regulator, the down periods lead to political pressure by farmers for government intervention per price support, negating the icon of the marketeers. What they ask at such bad times is that the government should act as protector of the market, but that in good times the government should allow perfect freedom: public insurance against private loss.

What governments surely must do is act as guardians of the fundamental right of all people to eat, which is arguably the preeminent ingredient in the equation governing the basic right to life itself. The methods by which governments chose to support that right may be variable, but the underlying political economic equation should become as central a research question for collaborative effort between public health and agriculture as the technologies of food production. In reality, public health leaves the issue largely to the agricultural sector, worrying primarily about what items go to make up a sustainable diet and how the consumer can afford these items. This is a tail end approach, fiddling with the *outcome* of a potent money-mak-

ing machine rather than dealing with the machine itself, which is ineffective in the equity of food distribution, though it may be very efficient at distributing value added products to urban supermarkets for those with money to buy.

Environmental economics, perhaps justifiably, is focused primarily on land use issues in agriculture, rather on equity in food distribution (Kula, 1994; Seda, 1993). In fairness the World Health Organization has addressed some of these questions (WHO, 1992) but tends to skip the need for public health sector involvement in research in the political economy of food production and distribution.

Will genetic technology (Plucknett *et al*, 1987) change the food equation? Considerable effort has been invested in this field by both academic and large corporate interests. Assuming that the saleable endpoint is genetically manipulated seeds, the commercial concerns focus as much on methods of limiting advantageous characteristics to a single generation of seed (*ie* infertility of second generation seed produced by the farmer) as to the improved food quality of the genetically altered plants themselves. This way the farmer must purchase a fresh set of seeds for each planting, rather than setting aside a portion of the crop for planting in the next season. Again the market will operate in favor of the large companies, who can afford the up-front costs, rather than the small farmer.

The social effects of this element of genetic engineering technology rarely enters the laboratory notebooks. Such is the focused mesmeric power of gene manipulation, rationalized by the limited vision of more "efficient" crops. Combined with public policy which is guided by concern for equity this science is powerful for good; guided only by concern for profit it simply adds to the coffers of the rich and makes no contribution to social advance.

The sociology of genetic manipulation concerns not only procedures directly affecting human medicine, but also procedures affecting market forces which influence the provision of food for sustenance.

Thus the market offers no universal panacea. The incentives for private production which market economics offers need to be fused with publically guided equity, a marriage which requires considerable research effort of a novel kind. Putting together a synthesis of genetic technology, farming

#### EDITORIAL

technology, public health, market economics and political economics is largely beyond current thinking. It is particularly difficult because the western models so dominate the scene, so that even conceptualization is somewhat of a dream. However, looking ahead to the next few decades, when food resources will be strained by population increases beyond the capacity of current systems to cope, the challenge is a serious one for those who care about equity.

The response to this challenge can most effectively be driven by agricultural nations in process of transition to industrial states, where the combination of technological skills and economic imperative together offer a palette ripe for painting new pictures. There will be many variants, no single solution.

Chev Kidson

#### REFERENCES

Cassen R. *Does Aid Work? Report to an Intergovernmental Task Force*. Oxford: Clarendon Press 1994.

David CC, Otsuka K. *Modern Rice Technology and Income Distribution in Asia*. Boulder: Lynne Rienner Publisher 1994.

Ghatak S, Ingersent K. *Agriculture and Economic Development*. Worcester: Harvester Press 1984.

Kula E. *Economics of natural resources, the Environment and Policies*. London: Chapman and Hall 1994.

Lappé FM, Collins J. *World Hunger: 12 Myths*. London: Earthscan Publications 1986.

Plucknett DL, Smith NJH, Williams JT, Anishetty NM. *Gene Banks and the World's Food*. Princeton: Princeton University Press 1987.

Ravaioli C. *Economists and the Environment*. London: Zed Books 1995.

Rich B. *Mortgaging the Earth*. London: Earthscan Publications 1994.

Seda M, ed. *Environmental Management in ASEAN*. Singapore: Institute of Southeast Asian Studies 1993.

Tanabe S. *Ecology and Practical Technology: Peasant Farming Systems in Thailand*. Bangkok: White Lotus 1994.

WHO. *Our Planet, Our Health*. Geneva: World Health Organization 1992.

Yabuki S. *China's New Political Economy: The Giant Awakes*. Boulder: Westview Press 1995.