From the Green Revolution to the Gene Revolution

Under the Green Revolution, the World Bank played a leading role in converting global agriculture to a chemical-dependent, nutrient-depleting and polluting system of food production, and was a powerful force behind the massive losses in genetic diversity. Now, asserting that feeding the world is inconceivable without genetic engineering, the Bank is encouraging the use of GM crops that are designed to fit into the very systems of monoculture that have already proved so destructive.

By Luke Anderson & Christina Cobb

The Green Revolution was a joint government and corporate campaign that persuaded farmers to replace a multitude of indigenous crops with a few high-yielding varieties, dependent on expensive inputs of chemicals and fertilisers. A driving force behind this global industrialisation of agriculture, the World Bank pressured governments to adjust their agricultural policies to promote the use of the new seeds and, in order to attract farmers, seeds were often given away and loans were made for fertilisers and equipment.

Now the World Bank has convened a Biotechnology Task Force to look at ways in which it could assist with the development of agricultural genetic engineering in the Third World. It has already provided hundreds of millions of dollars to develop biotechnology in countries such as Kenya, Zimbabwe, Indonesia and Mexico, and asserts that feeding the world is inconceivable without genetic engineering.

Just as the international network of Bank-funded agricultural research centres, operating under the umbrella of the Consultative Group on International Agricultural Research (CGIAR), were central to the promotion and adoption of chemically intensive agricultural systems, now these research centres are important hubs of genetic engineering research and outreach. CGIAR's Technical Advisory Committee has recommended that "biotechnological research for development in agriculture, fisheries and forestry should be developed in which centres participate together with public and private sector organisations throughout the world, through collaborative and networking approaches."

Public-private cooperation or corruption?

As public funding dwindles, World Bank collaboration with the private sector is growing. In the case of biotechnology, the web of co-mingled public/private interests is complex and far-reaching. Multinational corporations are often involved in financing agricultural research and development projects along with the Bank.

One example of this is the International Service for the Acquisition of Agri-biotech Applications (ISAAA), which was established to promote the use of agricultural biotechnology in the third World. It is funded by, among others, the World Bank, and agri-biotech companies: Monsanto, Pioneer Hi-Bred, Novartis, AgrEvo and Cargill.

When the Bank and major corporations act in tandem, it is hard to believe the principles that guide their role in development are in the best interest of the world's poor. As Monsanto's CEO Bob Shapir recently said, in the house magazine of the International Finance Corporation: "It is truly easy to make a great deal of money dealing with very primary needs: food, shelter, clothing." And when the Bank faced US Congress funding cuts in 1995, it was quick to point out that "it doesn't just lend money, it helps developing countries become tomorrow's markets."

According to a US Treasury report, the World Bank and other multinational development banks channelled nearly US$5 billion to US firms between 1993 and 1995. One major beneficiary was Cargill, the third largest food corporation in the world. Cargill's 1995-96 sales were US$6 billion, roughly equivalent to the GNP of Pakistan, Venezuela or the Philippines, and its earnings reached almost US$1 billion with profits 34% higher than the previous year.

These are hardly credentials we would expect to qualify for the World Bank assistance, nor does it seem like a wise investment for the Bank. Judging from the reaction of rural people around the world, supporting Cargill's operations does little to meet the World Bank's vision for rural development.

The heated demonstrations against the company in 1992 attended by thousands of India's farmers (the very people the Bank is aiming to help) attest to the inappropriateness of entrusting agricultural development to agribusiness giants. The farmers were angry about the false promises made by the company of higher yields by switching to Cargill seeds, the environmental damage caused by the chemical packages required, the threat to agrobiodiversity posed by monocultures, and the confiscation of their intellectual property.

Opening the door for biopiracy

Arguing that the public-private partnerships the World Bank seeks will be impossible without strong patent protection, biotech companies are urging the Bank to fund "capacity-building," aimed at teaching Third World countries how to introduce patent systems which cover living organisms. The Bank believes that these patents could also bring economic gains to Third World countries by helping them to profit from their genetic resources.

However, the bioprospecting agreements touted by the World Bank as models for Third World countries retain many of the qualities that have characterised colonial-style trade.

In 1991, for example, Merck Pharmaceuticals signed a contract in Costa Rica, which is estimated to be home to 5-7% of all the world's species. In exchange for exclusive rights to screen, develop and patent new products from plants, micro-organisms and animals in the Costa Rican rainforests, Merck paid US$1.1 million towards a local biodiversity programme.

With an estimated half a million species in Costa Rica, this payment works out at about US$2 per species - not much for a company that had a revenue of US$8.6 billion that year. Merck also agreed to give back an unspecified percentage (believed to be 1-3%) of any royalties earned from new products developed from the rainforests. It appears that not much has changed since Native Americans were given a few trinkets in exchange for the island of Manhattan.

Poverty in the South is structurally rooted in the prevalent North-South relationships. The present systems of international resource control, commodity pricing, education, training, research, finance, banking, insurance, transportation, etc. are all components of the system that controls wealth and poverty, and which started being put in place during the slavery and colonial periods and have matured in this post-colonial period. Southern poverty, especially rural poverty, is a consequence of this.

Agri-business as usual

For all the rhetoric of the World Bank's vision for rural development, the reality is that it is unwilling to address the underlying structural causes of hunger, poverty and ecological destruction which are integral to the global economic system.

Just as the Bank played a leading role in converting global agriculture to a chemical-dependent, nutrient-depleting and polluting system of food production, it is now poised to facilitate the widespread use of genetic engineering. And just as it was a powerful force behind the massive losses in genetic diversity that accompanied the Green Revolution, it is now encouraging the use of genetically engineered crops that are designed to fit into the very systems of monoculture that have already proved so destructive.

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