World Agriculture Report, or IAASTD

By Twyla M. Hansen

Just over a year ago, a report titled the "International Assessment of Agricultural Science and Technology for Development," (IAASTD), was released to wide acceptance in the global community. The unprecedented report, at least five years in the making, was sponsored by the Food and Agriculture Organization (FAO) of the U.N., World Bank and other non-governmental agencies. Fifty-eight countries accepted this report as a tool for future policy and practical land use reform. Only three, the U.S., Canada and Australia, did not sign on to the report.

The goals IAASTD, compiled by 400 food, agriculture, business and government experts from around the world, are: "the reduction of hunger and poverty; the improvement of rural livelihoods and human health; and facilitating equitable, socially, environmentally and economically sustainable development." (1) In other words, it is an assessment of the future of global agriculture and food systems.

The IAASTD, also called "World Agriculture Report," proposes to change agribusiness as usual. The report refutes claims by biotech firms that genetic engineering is the key to feeding the world, and further recognizes the failure of toxic industrial agriculture. It embraces smaller scale, sustainable, ecologically-diverse farming systems, the multifunctional potential of rural landscapes to meet the needs of local communities, and the concept that nations and people have a right to determine their own food and agricultural policies.

Not surprisingly, agrichemical and biotech businesses have dismissed the IAASTD. A U.S. geneticist from Syngenta quit the panel toward the end because of a perceived disregard for biotechnology. But the report does not advocate that farming should return to the old inefficiencies of post-World War II. Significant gains have been made in the last sixty years in agricultural productivity to meet the demands of a growing global population; these advances are essential in moving forward. Also, according to IAASTD author and Swiss biologist Angelika Hilbeck, the last twenty years of genetically modified, herbicide-resistant and patented seeds have not lived up to their promise. Acute hunger among poor people persists in many countries.

Industrial monoculture agriculture requires large amounts of unsustainable inputs such as fossil fuels, fertilizers, pesticides and supplemental irrigation, consumes land that is often cleared of its natural vegetation to grow a few high-yielding commodity crops, resulting in loss of biodiversity and rural communities. In contrast, renewable and organic agriculture encourages biodiversity and landscape resilience, maintains soil fertility, increases soil organic matter to improve its water-holding capacity and retain nutrients, enhances natural ecosystems and purifies water, and allows more people to farm/harvest smaller land parcels, support their communities and remain economically viable.

The IAASTD essentially embraces the principles of agroecology. Agroecology is the "application of ecological concepts and principles to the design and management of sustainable food systems. An ecosystem framework is shown to be essential for determining (1) if a particular agricultural practice, input, or management decision contributes to or detracts from sustainability, and (2) the ecological basis for the functioning of the chosen management strategy over the long-term. Such an orientation is essential for developing alternatives that reduce purchased external inputs, lessen the impacts of such inputs when they are used, and establish a basis for designing systems that help farmers sustain their farms and their farming communities." (2)

Multifunctionality is a common thread among various ecological food system approaches, including agroecology, integrated natural resource management, organic and conservation agriculture and agroforestry.

(3)

We live in interesting times of tough economics, political decisions and opportunities for change. But sustainability issues in the face of climate change cannot be simply categorized as "conservative" or "liberal." The future of global agriculture—including the U.S., Canada and Australia—and the land use decisions we make now have direct consequences on the survival of our children, their children, and beyond.

To read the IAASTD brief reports on bioenergy, food security and safety, human health and nutrition, and more, go to www.agassessment.org.

Notes:

- 1. Agriculture at a Crossroads: Global Summary for Decision Makers. 2008. International Assessment of Agricultural Knowledge, Science and Technology for Development. (www.agassessment.org).
- 2. Gleissman, Stephen R. 2006. *Agroecology: The Ecology of Sustainable Food Systems*. Second Edition. CRC Press, Atlanta, GA.
- 3. Towards Multifunctional Agriculture for Social, Environmental and Economic Sustainability. 2008. International Assessment of Agricultural Knowledge, Science and Technology for Development. (www.agassessment.org).

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