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NEWS RELEASE

NEW STUDY REVEALS THAT ENVIRONMENTAL DAMAGE THREATENS FUTURE WORLD FOOD PRODUCTION

WASHINGTON, February 14, 2001—World food production is at risk from farming methods that have degraded soils, parched aquifers, polluted waters, and caused the loss of animal and plant species, according to a new report by the International Food Policy Research Institute (IFPRI) and the World Resources Institute (WRI). Soil degradation has dramatically reduced crop productivity, with severe consequences likely for poor, heavily populated countries. Agricultural lands face an enormous challenge to provide food for the expected population surge of 1.5 billion people over the next 20 years.

Using analysis of satellite-derived data, digital maps, and new ways of mapping global agriculture, this report, *Pilot Analysis of Global Ecosystems* (*PAGE*): *Agroecosystems*, is the first comprehensive audit of the world agriculture's ability to provide sufficient food, goods and services that are vital for sustaining human life.

"Our current global population, currently about 6 billion people, is expected to increase by more than one quarter over the next two decades," said **Ian Johnson**, chairman of the Consultative Group on International Agricultural Research (CGIAR) and a World Bank Vice President. "We must find ways to increase food production to sustain growing populations in developing countries. But this challenge must be accomplished without major increases in the amount of new land under cultivation, which would further threaten forests and biodiversity, and without resorting to unsustainable farming practices."

Stanley Wood, IFPRI scientist and one of the co-authors of the report, stressed that since agricultural land dominates the earth's populated landscapes, we need it to do more than produce more food. "We also rely on agricultural land to provide other goods and services, including clean water and habitat for threatened species," he said.

Wood added that agricultural lands could produce more food and help to prevent global warming by returning more carbon to the soils. "Unfortunately, many current agricultural practices actually contribute to global warming. A recent report by nearly 1,000 of the world's leading climate scientists demonstrates that global warming is increasing faster than originally estimated. In recent decades, scientists have noted an increase in the frequency and intensity of droughts in Asia and Africa," he commented.

The Pilot Analysis of Global Ecosystems: Agroecosystems also reveals that:

- Soil degradation, including nutrient depletion, erosion, and salinization, is widespread.
- Twenty to 30 percent of the world's forests areas have been converted to agriculture, resulting in extensive species and habitat loss. Agriculture is encroaching on many national parks and other protected areas.
- Agriculture consumes 70 percent of the freshwater withdrawn annually by humans. Irrigation is draining more water than is being replenished by rainfall, causing water tables to fall. Moreover, many water sources are being polluted by excessive use of fertilizers and pesticides.

"We must not continue to take nutrients out of the soil faster than we replace them. We must not continue to deplete water resources faster than they can be replenished," said **Per Pinstrup-Andersen,** Director General of IFPRI. "By analogy, you cannot continue to take more out of your bank account than you put in. Sooner or later, you'll run out of money."

Additional analyses for the report were provided by the International Center for Tropical Agriculture, UN Food and Agriculture Organization, International Fertilizer Development Center, International Institute of Applied Systems Analysis, the International Soil Reference and Information Centre, and individual experts from more than 25 countries. AVINA Foundation, the Global Environmental Facility, and the United Nations Fund for International Partnerships provided early funding for the PAGE reports.

The *PAGE Agroecosystems* report is part of a series of five technical reports that also cover fresh water, coastal, forest, and grassland ecosystems. Taken together, these reports are the first such comprehensive assessment of the state of the world's ecosystems. The PAGE reports set the stage for the Millennium Ecosystems Assessment (MEA) that will be launched this year by WRI, the United Nations Environment Program, the World Bank, the Global Environmental Facility, and other international agencies. The MEA is expected to fill in the data gaps identified by these reports through the participation of hundreds of the world's leading scientists who will be mobilized for this \$20 million, four-year effort.

Jonathan Lash, WRI president, explained the importance of this effort. "We must not ignore the goods and services that ecosystems provide. To do so would be like ignoring the hand that feeds us."