# Agriculture by Marcia Merry

## U.S. farms being 'de-energized'

*The decline in inputs per acre will reduce the population potential of the United States—and the world.*

There will be significant reductions in crop planting in the United States this summer, due to the farmers' inability to get credit, the deliberate government policy to cut output, and the mass rate of farm failures. Less obvious is the decline of energy inputs per acre that is taking place. This "de-energizing" constitutes a degradation of agriculture that will reduce population potential for the United States, and for large parts of the world.

Federal commodity programs call for an acreage reduction of 20% for feedgrains (plus an additional 15% for corn), 35% for rice, 27.5% for wheat, and 25% for cotton. The March 31 USDA crop projections estimated that 17% fewer acres of corn will be planted than last year—but this is a low estimate. In 1986, there were reportedly 76.7 million acres of corn planted. This year there will be less than 65.6 million acres. Perhaps 10% fewer acres of soybeans will be planted this year than last. In 1986, there were an estimated 61.5 million acres. This year there may be 58 million.

This scale of acreage reduction ensures that there will be reductions in farm use of fertilizers, pesticides, fuel, and other inputs. However, to cut costs, farmers are also cutting out the level of inputs on the land that they are cultivating, because they do not have the funds to farm at the higher energy-levels (of tillage, pest controls, crop preservation, and other methods) they would prefer. The following is a survey of the decline in categories of farm inputs, as reported by the U.S. Department of Agriculture, Economic Research Service.

U.S. fertilizer use will decline from June 1986, to June 1987, by at least 5%, following a 10% drop the year before. Nitrogen, phosphate, and potash use are projected at 10, 3.9, and 4.8 million tons, respectively. Fertilizer prices this spring may still average 10% lower than last year, but it won't matter to farmers who can't afford them, or who are not farming anymore.

Domestic pesticide supplies are down 4%—in line with falling use. Farm pesticide use in 1987 will range from 405 to 445 million pounds of active ingredient, compared with 475 million pounds last year.

Large quantities of grain in storage are becoming unusable due to the lack of proper conditions. The banning of ethylenedibromide (EDB) in recent years, has meant that the density of pests has practically gone out of control. Experts report that as of April 1987, the level of infestation in midwestern facilitities is at rates never before seen. Wisconsin Power Co. has a pilot program to burn corn, along with coal, because so much grain has become unusable. Irradiation of grain-for-storage would solve the problem, and provide wholesome grain reserves for the entire world, but the method has not been applied.

Expenditures for new and used farm machinery in 1986 dropped by 25%, from $5.6 billion down to $4.5 billion. In September 1986, national inventories of over-100 horsepower two-wheel drive and four-wheel drive tractors, and of self-propelled combines fell 3%, 33%, and 30%, respectively, from year earlier levels.

Farm fuel expenditures are dropping. Farm fuel use fell 4% in 1986, and will likely fall a similar amount in 1987. The dollar value of the decline last year was $1.4 billion.

Overall, what these statistics show is that the energy throughput per acre of U.S. farmland is being drastically cut back. Millions of acres are going out of cultivation, and back into grass, or weeds and brush. Past *EIR* studies have documented that in the case of corn acreage, for example, the increasing yields per acre over the last 150 years correlate measurably with the increase in energy applied per acre in successive phases of the "Agriculture Revolution."

First, there was a switch from draft animals to internal combustion driven equipment, to allow for timely tillage and harvesting. Then there was the chemical revolution, which provided soil nutrients and pesticides. Genetic research provided improved seeds and high yield hybrids.

The agriculture revolution-to-come will permit the use of man-directed energy to enhance photosynthesis at the molecular level.

However, the current degradation of farming in the United States is preventing new developments, and subverting past achievements. In the face of the known disastrous consequences of these federal farm policies, both the USDA and private channels have stepped up their propaganda about "small farms" and non-chemical organic farming, to help farmers "adjust" to "alternative" agriculture. The USDA has set up a new office for "Small Farms." The USDA library in Beltsville, Maryland—the world's largest agriculture library—has created an information retrieval system to serve the perceived new requirement for "alternative agriculture" information.