





world food production. The Indian experience is quite representative of that in other developing countries. A sea-change in the agricultural sector was brought about by the so-called Green Revolution of the Seventies. The efforts of agricultural scientists were successful in producing high-yielding varieties of seeds. The government complemented the efforts of scientists by stepping up investment in irrigation facilities. A more extensive system of irrigation, multiple cropping and the high-yielding varieties of seeds combined to bring about substantially higher food outputs.

The 'revolution' in agriculture lasted throughout the period 1965-80. Although food grain outputs continued to increase throughout the Eighties, the process has clearly lost steam. For more than a decade, the rate of increase in food output has not kept pace with the increase in population, and so there has been an actual fall in the per capita availability of food grains.

**H**ow can we improve per capita food availability? While some increase in food output may come through the spread of irrigation facilities, the easy options of accelerating food grain production are more or less exhausted.

The Green Revolution was promoted by the production of better seeds, and this is essentially what is required

all over again. Unfortunately, there have not been any dramatic technological breakthroughs in improved varieties of seeds in recent years. Government policies in the Western world have also aggravated the food crisis. The ever-rising crude oil prices and the insatiable demand for energy in the West have prompted these governments to offer rather large subsidies in the production of alternative sources of energy as this was supposed to contribute towards energy independence. This has resulted in large-scale diversion of crops away from domestic households. For instance, European countries have been blending vegetable oils with diesel. Across the Atlantic, very large quantities of maize and wheat are being used in the United States of America to make bio ethanol.

It is particularly tragic that the conversion of corn into ethanol does not even contribute towards American energy independence. Even optimistic estimates tend to show that the production of a gallon of ethanol from corn requires almost a gallon of energy. So there is hardly any net increase in the supply of energy, but a significant decrease in the supply of food.