

Agriculture by Susan Maitra

Bumper crop on the way in India

A record output marks the spread of the Green Revolution to new areas of the country.

In late April, Indian Agriculture Minister Rao Birendra Singh gave the Lok Sabha (the elected house of parliament) the revised figures for 1983-84 farm output. Instead of the anticipated 144 million tons, itself a new high and more than 10 million tons above the 1981-82 record, Indian farmers this year will harvest 149.76 million tons of grain.

This breakthrough reflects the success of the policies embodied in the Sixth Five-Year Plan (1980-85) to extend the scientific practices and capital inputs of the Green Revolution beyond the northwestern focal point of Punjab, Haryana, and western Uttar Pradesh, where they have taken hold to such good effect over the past decade. Now the output gains are being boosted by production increases in states such as Gujarat, Madhya Pradesh, and Orissa. Both wheat and rice production have figured in the increase, though oilseeds and pulses still lag.

In recent months, the winter wheat harvest and marketing got under way in earnest.

As of the end of April, market transactions in the northwestern states were eight times that of the previous year. The extremist agitation in Punjab has by all accounts not affected agriculture; though the flow of labor for the harvest was slow in the beginning, it has since picked up, and harvesting is proceeding full steam.

The Food Corporation of India, which operates the government price-

support procurement program, anticipates that, with the high production and procurement of rice and wheat, government grain stocks may reach the required 22 million tons by July. That could obviate the need for any imports this year.

The Sixth Plan incorporated an ambitious program to increase capital inputs in agriculture. Fertilizer consumption is targeted to rise by 3 million tons, pesticides by over 1 million tons, area under high-yielding varieties by more than 14 million hectares, and irrigated area by about 15 million hectares by 1985.

Emphasis has been put on the delivery of inputs to the farmers, with small and marginal farmers a special focus. A huge program of free distribution of seed "mini-kits"—this year, 4.2 million kits of cereal, pulses, and oilseeds have been distributed—has been used to popularize the improved new seed varieties.

In addition, a multi-agency program to ensure sufficient credit to farmers has been adopted. A large cooperative system much like that in the United States is being complemented by programs at both commercial and regional rural banks. Establishment of the National Bank for Agriculture and Rural Development in 1982 was central to this effort.

Both dry-land agriculture (even with realization of the full irrigation target of 131 million hectares by 2,000, more than 45% of India's farm land will remain dependent on rains) and a

qualitative leap in oilseed production (cooking oil is India's second largest import item) have also received priority attention. Concrete gains in this area should be forthcoming in the next few years.

But the most heartening thing about the record output is that it represents a widening of the base of productivity in Indian agriculture. A recent study of agricultural development in eastern Uttar Pradesh documents what is beginning to happen in such traditionally backward and undeveloped areas, which have been plagued with landlordism followed by extreme fragmentation of holdings and a lack of inputs.

With the addition of fertilizer, pesticide, and improved farm implements, farmers have turned to high-yielding varieties and multiple cropping. While this area still suffers the ravages of alternating drought and uncontrollable floods, the expansion of irrigation by nearly 1 million hectares over the past 10 years has been a great help.

Farmers now grow wheat as a second crop to sell, in addition to the traditional rice crop and vegetable cultivation. In fact, the rate of growth of wheat output in eastern Uttar Pradesh in the past 10 years has outstripped the statewide average of 8.51% and reached as high as 20% in some counties.

One Uttar Pradesh farmer interviewed recently put it succinctly: "Ten years ago, there was hardly any irrigation in this region. Now the scene is different. There is more irrigation, more people use fertilizers, and they are more easily available. And with the introduction of high-yielding variety of seeds, people have taken agriculture more seriously. We now find that there is a future in this: that you do not grow crops simply to fill your stomach."