

SUMMARY

Projections of Chinese agriculture to the year 2000 point to increased production and consumption of agricultural products, but major breakthroughs in productivity do not appear likely. Under conditions considered most plausible, rates of increase would exceed those of 1952-57 but would fall short of the Ten-Year Plan goals.

Three sets of projections are presented using different assumptions as to population growth and development strategy. The medium, or most probable, projection assumes that the Chinese leadership will continue to follow the moderate and pragmatic policies that have characterized the post-Mao period. Market restrictions would be gradually relaxed, and prices would be relatively stable. However, China would not abandon the command system of centralized economic controls or its goal of becoming a leading world power by the end of the century.

The high projection assumes a dramatic swing toward social and political liberalization and market economics. The low is based on a return to policies that relied on normative appeals and coercive pressure rather than material incentives to induce greater productivity.

Chinese agriculture has managed to meet the essential food needs of an expanding population that comprises nearly a fourth of mankind. Grain production rose 75 percent from 1952 to 1977, but the average annual increase of 2.3 percent barely exceeded the 2.1 percent rate for population growth. The increases in output were achieved by a massive injection of resources since the Great Leap Forward of 1958-60, particularly inputs originating outside agriculture.

The gross value of agricultural output rose 97 percent in 1952-77, whereas inputs were up 131 percent with the largest increases in power equipment and machinery, chemical fertilizer, and chemicals for insect and disease control. As a result, agricultural productivity, as measured by the index of total factor productivity, declined at an average rate of 0.65 percent. This is in sharp contrast to the productivity

gains recorded by Japan, South Korea, and Taiwan.

Much of the relative slowness of agricultural development can be attributed to development policies that emphasized the heavy industrial sector and allocated key economic resources administratively rather than by prices and markets. These policies have tended to weaken the incentives of workers and producers, discourage cost-reducing innovations, distort economic signals, and reduce willingness to accept risks. Bureaucratic control has encouraged irresponsiveness, rigidity, and delays.

Planners had difficulty in coping with dynamic changes in comparative advantage among regions. Development was hampered by policies of self-reliance which limited specialization, the relatively fixed boundaries of collective farms, the government-enforced immobility of labor, and transportation bottlenecks.

More rapid increases in agricultural production are called for in the Ten-Year Plan unveiled in 1978. Grain output in 1985 would be 43 percent above 1977, which would require a growth rate twice that of 1952-77. Increases of 4 to 5 percent a year in the gross value of agricultural output are envisioned.

On the demand side, the Plan calls for population growth to be reduced to less than 1 percent a year within three years, increased consumer incomes, and higher consumption of nonstaple foods. On the supply side, the Plan aims at increased fertilizer output, greater mechanization, "commercial-type" animal husbandry, and land development.

The medium projection developed in this study results in an approximate equilibrium for demand and supply of agricultural products by the end of the century. Population would grow 1.5 percent a year, faster than in the Ten-Year Plan, while household income would rise 2.5 percent a year. This would yield a 3 percent annual increase in demand for all agricultural products.

Direct demand for foodgrains is projected to rise 2.1 percent annually, but indirect demand for foodgrains would grow three

times as fast, reflecting increased livestock production.

The medium aggregate supply projection is based on the assumption that current inputs will continue to increase at about the 1952-77 annual rate of 7 percent. Reflecting further mechanization and growth in livestock, farm capital would rise 6 percent a year. The farm labor force would grow 1

percent a year, below the 1952-77 rate of 1.8 percent. The annual increase in sown area would be 0.9 percent.

The decline in agricultural productivity would be reversed under the medium projection to an increase of 0.5 percent a year. Grain output would go up to 2.9 percent a year for a total increase of 92 percent by 2000.