

varieties yields were 5.03 MT in 1975 (before the project could have had any impact), 5.53 MT in 1977 and 4.86 MT in 1978. At the Yeongnam Experimental Station, yields were 3.90 for the traditional varieties in 1968 and 4.68 in 1973. The high yielding varieties at the same station were 4.69 MT in 1974 and 5.08 MT in 1975. At the Honam Station in 1980, Tongil yields were 5.43 and other new varieties 4.39 MT/ha while japonica production was 4.74 MT.

Over the same ten-year period, barley experimental yields were to rise from 2.79 to 3.6 MT/ha and farm yields from 2.04 to 3.5 MT/ha. Barley production, however, at the Yeongnam Station was already 3.3 MT in 1972 and 3.5 MT in 1979 and 1980. The station's goal is 4.0 MT in 1981. The Honam Experimental Station reported yields for 1979 and 1980 between 3.15 and 3.95 MT/ha.

Wheat yields were to rise from 4.30 to 5.2 MT/ha on experimental farms and farm yields from 2.24 to 4.0 MT. At the Yeongnam Station crop yields before the project were again higher. They were 4.8 MT in 1971 and 4.5 in both 1979 and 1980. Their goal for 1981 is 5.5 MT.

Soybean increases on experimental plots were to increase from 1.98 MT to 3.2 MT/ha over ten years; farm production was to grow from 0.8 to 1.3 MT over the same period. At Miryang, soybean production was already 2.4 MT in 1974 (before the project began), and 2.3 MT in 1979 and 1980. Their target for 1981 is 3.5 MT/ha.

Overall, for all crops for which specific targets were set, experimental crop yields were well above the project baseline yields before the project began or prior to the time the project could have had any effect. Staff at Miryang indicated that yields on all crops have essentially remained relatively constant, having achieved heightened production by the early 1970s before the project. Concentration after that date was placed on reducing the factor of risk including an earlier maturity date and more resistance to disease and lodging.

If the project were based on too low a data base for experimental stations, what has happened to farmers' yields during this period and what is the prognosis for attaining target levels of production? The question is critical, but the answers are complex, for there were climatic and other conditions that intervened.

The project erred by failing to take into account other elements that have affected total yields. Critical factors were the high support price for rice that increased farm income appreciably and the growing demand for winter vegetables that often proved more lucrative than rice. Important as well were the lower price support for barley relative to inflation, the government's reluctance to purchase more of it, a shortage of labor that has become more acute in recent years, and social factors that make consumption of barley and potatoes less desirable than rice if farm families have higher income.<sup>5/</sup> One farmer said, "Why should we eat potatoes when we can afford to eat rice?"

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<sup>5/</sup> See Appendix E, "Profitability, Costs and Revenue of Five Crops" by Kwan S. Kim.