APPENDIX C

THE KOREAN EXPERIENCE IN INCREASED RICE PRODUCTION

by

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Korea's shift from rice-importing to self-sufficiency in a relatively short time during the early 1970s is an exceptional achievement. It is unfortunate that cold weather and rice blast late in that decade have decreased rice production to a level where the country must again import rice. The story of this rapid increase in production is remarkable and could come about only in a country like Korea where the infrastructure is well established, and where there was a relatively vast amount of technical information available for increasing production. The recent decline in production is no doubt closely linked to the desire to increase rice production in the shortest possible time span.

A. Background

Korea's recent agriculture policy has been to become and remain self-sufficient in staple food production, particularly in rice. Self-sufficiency reduces the drain of foreign exchange for food imports and lessens the dependence on food coming from surplus-producing countries. As rice is the most important food in Korea, a greater effort has been given to this crop than to some of the other food crops, such as barley, wheat, soybeans and potatoes.

The apparent solution to the ever-increasing demand for food, coupled with the limited area of arable land, is increased productivity. One method of increasing productivity is through improved agricultural technology, the basis for which is research. It was agreed that an AID-financed loan to Korea to assist in financing training of scientists, purchase of equipment and supplies, and providing qualified foreign scientists would enhance the research system. The project identified five crops with which to work, of which rice was one.

More specifically, the project identified the following targets for rice:

-- Select and develop strains that will increase the present crop experiment station yield of 4.79 metric tons per hectare (MT/ha) to 6.0 by the end of 1983, and actual farm production yields from the present average (1972) of 3.25 MT/ha to an estimated 4.5 MT/ha within the same period.

-- Develop new strains which will possess the following characteristics:

   -- a growth and maturity period shorter by ten to 15 days, and at the same time be responsive to higher fertilization levels;

   -- improved grain quality standards, including higher protein and lower amylose content, and kernel shapes more acceptable to the consumers.