

- The Tongil farmers used larger quantities and more applications of agricultural chemicals to control diseases and insects than those planting the traditional varieties.
- The total area of application of herbicides for weed control was increased and at the same time manual weed control decreased.
- The farmers' methods of irrigation have been changed from the continuously flooded condition to that of intermittent irrigation.
- Improvement in harvesting and drying was an important lesson for farmers to learn. Formerly, they stored the harvested grain without properly drying it in order to save time for barley planting. This method yielded lower quality and quantity of rice. Tongil shatters quite readily and must be threshed soon after harvesting. The farmers had to change their method and this shortened storage time in bundles reduced the shattering losses and increased the quality.
- Farmers planting Tongil have shifted their dates of sowing, transplanting and harvesting, making them all earlier than those for the farmers growing traditional rice (See Table C-3). This makes it possible to increase barley production as more rice fields can be planted with barley as a second or winter crop. However, rather than increase the area planted to barley, the Tongil rice farmers have increased the area of land planted to cash crops such as vegetables because of the greater economic benefits from vegetables compared to barley.

C. The Role of the Extension Service

The Extension Service played a critical part in the rapid and broad dissemination of information regarding the Tongil variety and the necessary technical knowledge associated with its production. Farmers' meetings, radio broadcasts, and use of the village amplifier systems and TV sets were all important means of training farmers to shift to Tongil (See Table C-6, p. C-9).

Farmers were offered technical farm training sessions during the winter months so that they were able to improve their farm management techniques. These training programs were basic to bringing the national average productivity of Tongil to nearly that of the experimental plots.

The group farming or cooperative farming program made it easier for the extension workers to perform more efficiently and effectively through group contacts rather than through individuals. The group worked together, all using the improved variety and cultural techniques to attain higher yields.