

There are approximately 35,600 farms in the region with an average size of 4.8 ha. Activities have been concentrated initially in six *municipios* near Medellin with a cultivated area of 52,000 ha.

The soils in the area have formed from volcanic ash and belong to the Andosol category. The average annual precipitation varies from 1,500-2,100 mm and falls mainly in the period from April to November. Elevations above sea level vary from 2,000-2,400 m.

Due to high rainfall, high water-holding capacity of the soils, and temperate climate, year-round crop production is possible with a wide selection of crops. Thus, intensive cropping systems are used and the land generally produces two or three harvests per year. More than 20 different cropping systems have been observed in the area. The major crops are maize, beans, and potatoes.

Technical assistance was provided to 4,801 families with 8,212 ha in 1972.

Five similar regional projects were initiated in Colombia during 1971-1972. These projects cover a wide range of both agricultural and social activities and have been designated Rural Development Projects. Project plans call for assistance to approximately 103,000 families. The Extension Service in ICA was reorganized in early 1973 as the Division of Rural Development. Fourteen additional Rural Development Projects have been approved and are presently being organized and staffed.

Cajamarca—La Libertad Project, Peru

This project was organized in early 1971, as a joint undertaking of the Agricultural Research Division of the Ministry of Agriculture, the Cooperative Maize Research Program of the Agrarian University, and the Agro-Industrial Research Institute. Field activities were initiated in September 1971.

The Project area comprises the major part of the high mountainous region of the departments of Cajamarca and La Libertad in northern Peru. The major crops are maize, wheat, barley, and potatoes. Approximately 96,000 ha of maize and wheat are grown in the area annually. The average area of cultivated land per farm is 1.4 ha.

This area is very mountainous and has a very poor road system. Initially, therefore, activities were concentrated in a region about 10 km wide extending from 15 km north of Cajamarca to 15 km south of Cajabamba. About 9,500 ha of maize and 7,500 ha of wheat are grown in this region annually.

The climate of the region varies from sub-tropical in the Condebamba Valley to temperate in the higher valleys and mountain slopes. Elevations vary from 2,000-3,500 m above sea level. Average annual rainfall varies from 650-750 mm. All of the wheat is rainfed and about one-half of the maize receives one or more irrigations.

During the past two cropping seasons, applied research on maize, wheat, and barley was conducted to develop reliable packages of production practices for the farmers in the area. There were 183 field trials in 1971-1972, and 100 field trials in 1972-1973.

The Basic Grains Program, Honduras

The Central Bank of Honduras and the National Development Bank sponsor this program, which is conducted in collaboration with the Rural Development Institute, the Department of Agriculture, and the Panamerican Agricultural School. It was organized in late 1970 and began field operations in early 1971.

The Project area consists of four *municipios* in the Francisco Morazan department. There are approximately 15,000 ha of cultivated land, with 50 percent planted in maize and 32 percent in beans. There are around 3,200 farms with an average size of 4.6 ha and total population of the area is about 40,000.

The cultivated area is concentrated in the valleys of Talanga and Siria, with soils varying from level to rolling and from poorly drained planosolic types to well-drained alluvial soils. The climate is tropical with absolute minimum temperatures of about 9° C. The average annual rainfall is around 1,100 mm, falling mainly from May through October. The cultivated land lies at elevations from 500-700 m above sea level.

The Basic Grains Program expanded its activities in early 1973 to include a second project in the department of El Paraiso. A research program was conducted that year, consisting of about 100 trials on farmers' fields to study varietal performance and production practices for maize, beans, and maize-bean associations.

Maize Program, State of Mexico, Mexico

This program was organized in early 1971 by the Government of the State of Mexico and is operated by a state institution known as DAGEM (organization for the development of crop and livestock production). This institution includes the directors of 13 agencies involved in government, credit, crop insurance, marketing, and organizing of farmers. DAGEM is operated by an Executive Commission and the coordinator of the Maize Program reports directly to this Commission.

The project area comprises the major part of the important maize producing regions in the state. It consists of three well-defined zones: Valley of Toluca, covering 34 *municipios*; Valley of Mexico, with 32 *municipios*; and the Southwestern Zone, with six *municipios*. About 430,000 ha of maize are harvested annually in these 72 *municipios*. There are approximately 240,000 farms with an average cultivated area of 2.2 ha/farm.

The soils used for growing maize in the Valleys of Toluca and Mexico were formed from volcanic materials and lie at elevations between 2,240 and 2,800 m above sea level. The cultivated area of the Southwestern Zone lies between 400 and 1,800 m above sea level. The average annual rainfall varies from 500 mm at the northern limits of the region to 1,100 mm at the southern tip of the Valley of Toluca. Frost damaging to maize may occur in the valleys of Toluca and Mexico in all months except June, July, and August.