

The Guanomex plan was to provide farmers with horse-drawn applicators and deliver the agua ammonia to their communities in 55-kg tanks that fit directly on the applicators. The farmers had to sign a promissory note on receipt of the fertilizer and agree to repay Guanomex at harvest time.

The Project technical assistance agents began to inform the farmers about the Guanomex program in early April 1973. Over 2,000 farmers volunteered to try the agua ammonia on some 5,000 ha. Several problems arose, however, including delays in installing the agua ammonia plant, and numerous difficulties in adapting the horse-drawn applicator to the conditions in Puebla. Thus, the agua ammonia was applied to only about 500 ha by about 250 farmers.

Project technicians feel that agua ammonia can be an important source of nitrogen for farmers in the Puebla area, if the price can be maintained at around 60 percent of that of solid materials. However, the horse-drawn applicator used in 1973 still has many technical flaws and will have to be improved significantly.

## THE NATIONAL AGRICULTURAL INSURANCE AGENCY

About 20 years ago, farmers of the Lagunera Region of Northern Mexico who received credit from the official banks formed a mutual crop insurance association. Each member paid a fixed amount per hectare, and in the case of crop damage, the money was distributed among those members suffering losses in accordance with the recommendations of an inspection committee named by the association. This mutual association was quite successful, and similar agencies were soon formed in other parts of the country. The first mutual association in the State of Puebla was established in 1956 and became a part of the National Agricultural Insurance Agency (ANAGSA) in 1961.

The basic purpose of ANAGSA is to complement the agricultural credit service provided by the official banks, by protecting: (a) the farmers against losses due to natural causes, and (b) the official banks against losses due to the inability of the farmers to repay their loans in unfavorable years. ANAGSA expanded its program in 1972 to include life insurance, which costs the farmer \$2.00/year and provides his family with \$400 indemnization in case of death.

Table 7.2 shows the hectares of maize insured by ANAGSA in the Puebla area, the premiums paid, and the amounts of indemnizations for the years 1966-1971. Although all farmers applying for official production credit must request crop insurance (except for one line of credit of the Agricultural Bank), ANAGSA normally rejects some of the plantings. For example, in 1971, only about two-thirds of the area receiving credit for maize production was approved for crop insurance.

The average area of maize insured by ANAGSA in 1970-1972 was more than double that of 1966-1969 (Table 7.2). The premiums paid by the farmers accounted for less than one-third of the total premiums; the remainder was paid by the federal government. The area on which indemnization was collected has fluctuated greatly, reflecting variations in climatic conditions over the years.

## Operating Procedures of ANAGSA

The procedure used by the official credit banks in requesting crop insurance for their clients is as follows: (a) each bank sends a multiple application to the insurance agency with the areas for which credit is requested and names of all farmers soliciting credit, and (b) as soon as the farmers have signed the contract and promissory notes, the Bank sends a complementary report for each farmer to the insurance agency, showing his age, beneficiary, and the number of parcels in his property that are separated by

TABLE 7.2. The insuring of maize plantings in the Puebla area in 1966-1972.

Year	Area financed by official banks ha	Area insured ha	Amount of premiums	Premiums paid by farmers	Area Indemnized ha	Amount of indemnization
1966	2,973	2723	42,832	--	271	4,421
1967	3,187	2740	45,161	--	1185	23,069
1968	3,545	2856	45,405	--	710	10,130
1969	3,118	2672	45,048	12,456	1840	51,079
1970	7,920	6139	103,408	29,598	1186	34,762
1971	11,043	7068	176,938	45,914	1532	59,304
1972	13,426	5947	--	--	--	--