

Table 7.1 shows the number of hectares financed, total amount of credit, and percentage repayment of loans within the credit operation of Impulsora, both for credit obtained directly and that obtained through Agrónomos Unidos in the years 1968-1973. Impulsora's credit program peaked in 1970 and has remained quite static since then. This has been true in spite of a growing demand from the farmers for more credit from Impulsora and an average repayment rate of about 98 percent.

Procedure Followed in Granting Credit

The procedure followed by the Impulsora in granting credit to small farmers is very attractive, since it does not require any security from the farmers. All that the Impulsora requires is a guarantee of the total operation by a responsible agency. CIMMYT provided this guarantee in 1968 when only \$6,000 was loaned. Beginning in 1969, the credit operation of the Impulsora was endorsed by the Agricultural Agent, who is the state representative of the Ministry of Agriculture.

In 1969 and 1970, the endorsement of the Agriculture Agent was not backed up by adequate funds to fully guarantee the credit operation. In 1971, however, a special fund was formed by collecting a tax of \$0.40/ton on all fertilizers sold on credit or for cash by the three official agents of Guanomex and the official credit banks. This fund is administered by the State Fertilization Committee, whose chairman is the Agricultural Agent. Since the establishment of this fund, the guarantee of the credit program of the Impulsora has been effective. When the Fertilization Committee reimburses the Impulsora for loans not repaid on time, it receives the promissory notes of the indebted farmers, with the expectation of repayment at a later date.

The Impulsora procedure for granting credit is as follows: (a) representatives of the sub-groups prepare lists of the members desiring credit, and of the number of hectares for which financing is requested; (b) the group coordinator

consolidates the lists of the different sub-groups and delivers the request to the Impulsora; (c) the technical assistance agents of the Puebla Project give the Impulsora a list of all the communities in their zones with groups requesting credit, along with the recommended fertilizer rates; (d) the secretaries of the Impulsora or the Puebla Project draw up documents for each farmer, specifying the amount of fertilizers and credit requested; (e) these documents are given to the group coordinators, who, with the representatives, obtain the signatures of the farmers; (f) the documents are then signed by the group coordinators and returned to the Impulsora; and (g) the delivery order is given, specifying the date the farmers must pick up the fertilizers at the company warehouse. In 1972, the average time required was 36 days from the preparation of lists to the issuing of the delivery order, with extremes of 3 days and 6 weeks.

Changes in Sales of 10-8-4

According to survey data, 64 percent of the farmers who applied chemical fertilizers in 1967 used the 10-8-4 mixture, containing 10 percent nitrogen (N), 8 percent phosphorus (P_2O_5), and 4 percent potassium (K_2O). Agronomic research on farmers' fields, however, has not revealed important deficiencies of potassium; thus, the Project has recommended that farmers apply only nitrogen and phosphorus. Moreover, the Project has suggested that farmers purchase nitrogenous and phosphatic materials separately and prepare their own mixtures, to obtain the right proportions of the two elements.

The relative importance of 10-8-4 in total sales of the Impulsora declined markedly in 1969. The 10-8-4 mixture represented approximately 76 percent of the total nitrogen sold by the Impulsora in the period 1966-1968, whereas only 27 percent of the nitrogen sold in the years 1969-1972 was in the form of 10-8-4. In general, there has been a shift from 10-8-4 to ammonium sulfate, superphosphate, and non-potassic mixtures, (such as 12-8-0, 10-10-0, and 5-14-0).

TABLE 7.1. The credit provided by several agencies to enable farmers to use Project recommendations for maize during the years 1968-1973.

Year	Impulsora de Puebla			National Agricultural Credit Bank			National Ejidal Credit Bank			Agricultural Bank of the South			Total	
	No. of hectares	Amount of credit	% repayment	No. of hectares	Amount of credit	% repayment	No. of hectares	Amount of credit	% repayment	No. of hectares	Amount of credit	% repayment	No. of hectares*	Amount of credit
1968	76	6,000	100.0										76	6,000
1969	2,719	165,059	96.0	687	48,802	50.0	829	50,846	55.5	1,603	105,132	50.0	5,838	369,839
1970	4,682	191,163	97.5	1,788	148,250	51.2	4,522	282,256	72.0	1,609	123,175	60.0	12,601	744,844
1971	3,228	108,807	99.5	4,950	202,972	91.6	4,920	294,347	91.0	1,172	90,080	62.0	14,438	696,206
1972	4,108	153,953	98.5	7,499	383,282	93.9	5,105	398,722	90.0	822	39,854	50.0	17,533	975,811
1973	4,220			8,207	419,452		5,410	422,584		293	14,202		20,604	

* The total number of hectares for 1971 includes 168 with credit guaranteed by the Coxtocan Hacienda; the total for 1973 includes 2,474 ha that were financed by Guanomex and the Olmeca fertilizer company.