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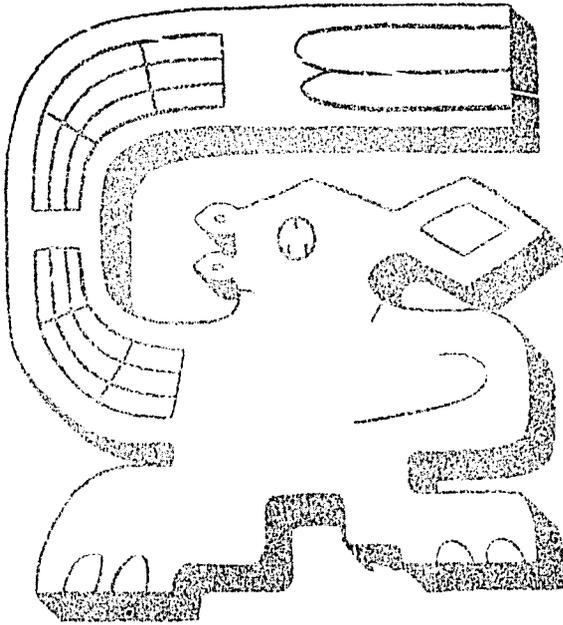
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Supervised Credit Programs For Small Farmers In Chile

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Supervised Credit Programs for Small Farmers in Chile

by CHARLES T. NISBET*

The majority of farm operators in rural Chile, with the exception of medium and large landowners and their respective managers, live and work within a traditional low-income agricultural sector. Because this sector has limited access to national markets and to institutional sources of credit, *campesinos* are frequently exploited by village merchants, rural moneylenders, and city commerce.¹

Approximately 90 percent of the country's total agricultural population (1,752,000 persons) falls within this traditional low

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¹ This condition is not peculiar to Chile but is found in most developing countries. See *New Approach to Agricultural Credit*, FAO Agricultural Development Paper No. 77, Rome, 1964. For an analysis of rural credit transactions outside the institutional credit market in Chile, see, Charles T. Nisbet, "Interest Rates and Imperfect Competition in the Informal Credit Market in Rural Chile," *Economic Development and Cultural Change*, forthcoming.

income sector.² This sector contains various tenure groups including small family farm owners, sharecroppers, renters, regular farm workers, and temporary wage earners. Characteristics of this sector are low per capita income, unstable tenure relations, little or no education, poor health, insufficient diet, rudimentary technical knowledge, and hand tools, and some draft animals.

A supervised credit system has existed in Chile since 1959. As an instrument of agricultural policy, supervised credit was established with a marked social orientation toward small farmers. The purposes of this paper are to, one, describe the three credit programs in Chile that have tried to deal with the problem of a majority of Chilean farm operators being locked out of the institutional credit market. Secondly, impressions gained during several field trips and materials gathered from lending institutions will be utilized to point out some problems and weaknesses of these credit programs. Lastly, the role and impact of supervised type credit programs will be analyzed.

The State Bank. The State Bank (Banco del Estado) was the first institutional lender to extend credit to small farm operators in Chile under a program of supervised credit. Its supervised credit program dates back to 1959, beginning on a pilot basis in Chillan (province of Nuble) and expanding to Santiago (province of Santiago and O'Higgins) and in 1962 to Los Angeles (province of Bío-Bío).

This program puts together financial and technical assistance to small and medium size farm operators (owners, renters, sharecroppers, and colonists)³ who demonstrate earning potential, work family farms, possess administrative capacity, and are interested in the improvement of farm production and their standard of living.

² Comité Interamericano de Desarrollo Agrícola (CIDA), *Chile: Tenencia de la Tierra y Desarrollo Socio-Económico del Sector Agrícola*, Santiago, 1966, p. 294.

³ In a study of 500 clients, located in the provinces of Nuble, O'Higgins, and Santiago, of the State Bank's supervised credit program in 1965, the percentage breakdown of borrowers was 27 percent owners, 10 percent renters, 25 percent sharecroppers, and 38 percent colonists of CORA (the Chilean Agrarian Reform Corporation). Ministerio de Agricultura, "Estudio de 500 Familias Prestatarias del Programa de Crédito Supervisado del Banco del Estado," Oficina de Planificación Agrícola, (mimeo), Santiago, 1966, p. 5.

To qualify for supervised credit, an applicant's net capital position must be less than 150,000 escudos.⁴ Loans under this program are not restricted to a ceiling of 50 percent of the applicant's net worth, as is true for operations in the rest of the State Bank. The amount of the loan granted is determined first by an inspector who calculates a plan of investment with the farmer on his property. Generally the loan is dispersed in allotments to insure its proper use in conjunction with the plan of investment.

During 1964, 36 percent of all loans were in kind and 64 percent in cash with 55 percent of loans going for crop exploitation and 45 percent for investment in semi-fixed and fixed capital.⁵ The average size loan per client was 2,153 escudos. For the 1964-65 agricultural year the interest on these loans was 15 percent annually⁶ with terms up to one year on crop loans and three years on capitalization loans. The guarantees are the same as exist in the rest of the bank but emphasis is placed upon co-signers and guarantees in fixed assets as opposed to a mortgage.

As of January 1, 1965, after six years of operation, the supervised credit program had reached a total of 2,295 farm operators. The average size land exploited (cultivated) by the farm operators serviced under this program was about 55 *hectáreas*. But 40 percent of the farm operators worked properties of less than 10 *hectáreas*.⁷

Table I shows total loans granted during this six year period. During 1959, 1960, and 1961 all supervised type credit was granted by the State Bank. During the last four years the relative importance of the State Bank has declined due to the bank's decision to keep its program on a small scale pilot-like basis, as well as the introduction of credit programs by INDAP and CORA. Notwith-

⁴ This is not a very meaningful limit since small farmers with 150,000 escudos (U.S. \$1 = E°3.10 as of June 1965) in net capital are practically nonexistent. Experience thus far has shown that the many borrowers under this program are medium and large farmers because this high ceiling allows them to apply for credit.

⁵ Miguel Barossi, "Programa de Crédito Agrícola Supervisado," (mimeo), Banco del Estado, Santiago, 1965.

⁶ The interest rate for non-supervised credits or ordinary agricultural credits from the institutional credit market for 1964-65 was 15 percent annually. Banco Central de Chile, *Boletín Mensual*, December, 1965.

⁷ Ministerio de Agricultura, "Estudio . . .," *op. cit.*, p. 6.

TABLE I
Agricultural credit granted through different credit programs
compared with total institutional agricultural credit from
1959 to 1965 in Chile

Year	Escudos ¹				
	(1) State Bank	(2) CORA	(3) INDAP	(4) Total Supervised Type Credit	(5) Total Institutional Credit
1959	94	—	—	94	103,624
1960	238	—	—	238	152,938
1961	461	—	—	461	213,316
1962	577	—	1,204	1,781	261,395
1963	842	827	6,146	7,815	346,862
1964	1,253	2,159	10,952	14,364	452,249
1965	1,843	2,939	25,194	29,976	601,024

Year	Percentage				
	(1) State Bank	(2) CORA	(3) INDAP	(4) Total Supervised Type Credit	(5) Supervised Credit as Percentage of Institutional Credit
1959	100.0	—	—	100.0	.0009
1960	100.0	—	—	100.0	.0016
1961	100.0	—	—	100.0	.0022
1962	32.4	—	67.6	100.0	.0068
1963	10.8	10.6	78.6	100.0	.0449
1964	8.9	15.0	76.1	100.0	.0317
1965	6.2	9.8	84.0	100.0	.0498

¹ All amounts are in thousands of escudos of each year. As of June 1965, U.S. \$1 = E°3.10 (Chilean escudos).

Sources: State Bank, Department of Economic Studies; Julio Barriga Silva, "Diagnóstico del Crédito Agrícola en Chile," unpublished thesis, Facultad de Agronomía, Universidad de Chile, Santiago, 1965, Annex 3; Superintendencia de Bancos, *Estadística Bancaria*, Santiago, January of each year; Corporación de Fomento de la Producción, Departamento de Finanzas, Sección Estadística, Instituto de Desarrollo Agropecuario; *Solicitud de Prestamo al Banco Interamericano de Desarrollo*, (Santiago: INDAP, 1965) and División Asistencia Técnica y Crédito, Corporación de la Reforma Agraria.

standing, in real terms (see Table II) the Banco del Estado increased its credits by 13 percentage points during 1962-65. The volume of funds allocated for supervised credit increased more rapidly than total loans made to agriculture by the State Bank. However, for 1964 and 1965 the supervised credit program represented less than one percent of total loans granted by the State Bank to agriculture indicating the minute size of the program.

TABLE II
Agricultural credit granted through different credit programs compared with total institutional agricultural credit from 1962-1965 in Chile (Real Prices)

Escudos ¹					
Year	(1) State Bank	(2) CORA	(3) INDAP	(4) Total Supervised Credit	(5) Total Institutional Credit
1962	1,626	—	3,392	5,018	736,947
1963	1,570	1,550	11,609	14,729	650,163
1964	1,570	2,710	13,706	17,986	568,867
1965	1,843	2,939	25,194	29,976	601,024

Indices ²					
Year	(1) State Bank	(2) CORA	(3) INDAP	(4) Total Supervised Credit	(5) Total Institutional Credit
1962	100.0	—	100.0	100.0	100.0
1963	96.5	100.0	342.1	293.5	88.2
1964	96.5	174.8	404.0	358.4	77.1
1965	113.3	189.6	742.3	597.3	81.5

¹ All amounts are in thousands of escudos of 1965. As of June 1965, U.S. \$1 = F\$3.10 (Chilean escudos). The credit figures from Table I were deflated by the General Index of Prices, base 1965 = 100. The formula for this index of prices is:

$$GPI = \frac{CPI + 2WPI}{3}$$

where: CPI = consumer price index
WPI = wholesale price index

GPI: 1965 = 100.0, 1964 = 79.50, 1963 = 53.35, 1962 = 35.47

² All indices have base year 1962 = 100 except (2) CORA which has base year 1963 = 100.

Sources: See Table I.

A Chilean observer has noted that the personnel of the State Bank in charge of the supervised credit program have been more interested in the economic aspect of credit than in the educational aspect. Hugo Ossio claims this emphasis is reflected by the preoccupation of the program's supervisors in the recovery of loans extended as opposed to the progress users are able to derive from the use of loanable funds.⁸

For the six year period only one-half of one percent of total loans were not repaid. In other words, the rate of recovery was 99.5 percent. This rate compares favorably with other banking institutions carrying out programs of supervised credit.⁹ It is interesting to note that the State Bank's rate of recovery on supervised credits is higher than the average for private commercial banks in Chile that theoretically extend credits to clients representing a lower level of risk.

The Agrarian Reform Corporation. The Corporación de la Reforma Agraria (CORA), an autonomous state enterprise, was created by the Agrarian Reform Law 15020 in November of 1962. It is under the supervision of the Superintendent of Banks and related to the government through the Ministry of Agriculture.

The Agrarian Reform Corporation began to grant supervised credit and technical assistance to its *colonos* (colonists) in 1963. The object of this program was to improve the productivity of CORA's *parceleros* (farmers of small plots) and *huerteros* (farmers of vegetable gardens) of low income who do not have access to other institutional sources of credit.

The principal functions of CORA are promoting and effecting the division of land, colonizing new lands, regrouping *minifundios*, forming agricultural settlements, foresting non-agricultural lands and proportioning credit and technical assistance to colonists.¹⁰

⁸ Hugo Ossio Sivila, "El Crédito Agrícola Supervisado en Chile," unpublished thesis, University of Chile, Santiago, 1964, p. 20.

⁹ The Agricultural and Livestock Bank of Venezuela (Banco Agrícola y Pecuário) claims a rate of loan recovery for its supervised credit program of 81 percent. See, Harold J. Christ, "Evaluation of the Supervised Credit Program in Venezuela, 1963-66," U.S.A.I.D. Report, (mimeo), March 1967, p. 18.

¹⁰ The new Agrarian Reform Bill presented by the Frei Government to Congress in 1965 called for the establishment of 100,000 new family size farms within a term of five years.

The credit operations consist of direct loans to colonos and parceleros which include facilities in the payment of land parcels and indirect loans.

CORA works in 10 semi-autonomous zones plus one agency for the province of Chiloe. Six of the 10 zones are based in the capital of the province, the rest located in towns and villages near a clustering of *colonias* and *asentamientos* (land reform settlements). Each zone is divided into areas or projects of colonias and asentamientos. Each of these areas or projects works with agricultural credit granted by CORA. In practice preference is given those asentamientos that are agricultural societies of the agrarian reform.

During 1965 CORA provided credit and technical assistance to 3,003 clients with 120 technicians.¹¹ This gives a very low client to technician ratio of 25 to 1, explaining how CORA is able to work closely with its clients. CORA technicians were found, in the field survey, not only to be numerous, but, in general, very competent and dedicated. The rapport established by CORA's technicians was far better than INDAP's.

The head of the asentamiento or the head of the cooperative is in charge of preparing the aggregate farm production plans which include calculations of the necessary working capital and capital goods. These plans are forwarded to the zonal office for review and revision before going up to the central office in Santiago for final approval.

The Agrarian Reform Corporation grants credits both directly and indirectly to the people settled on CORA lands. These parcels of land are divided into three categories: 1) supermarginal; those who have sufficient capital and entrepreneurial skills to exploit the land; 2) marginal; those who possess entrepreneurial skills to exploit the land but lack capital; and 3) submarginal; those who possess neither the entrepreneurial skills nor the capital to exploit the land. CORA extends technical assistance to all of the three groups but concentrates its efforts on the submarginal group.

CORA grants two types of credit: 1) indirect—endorsements or

¹¹ Ministerio de Agricultura, "Diagnóstico del Crédito Agrícola," Oficina de Planificación Agrícola, ODEPA, preliminary draft, Santiago, 1966, p. 19.

guarantees for credit obtained from other institutions (such as the State Bank) and in some cases credits from commercial houses. This type of credit goes principally to the supermarginals with some going to the marginal farmers; 2) direct—loans directly to individual farmers and group loans to cooperatives from CORA's own funds. This type of credit goes to farmers classified as marginal and submarginal.

The terms of payment are in accordance with the objective of the loaned funds. The most common terms are:

- a) one year at six percent to finance working capital;
- b) six years at four percent to seed pasture lands;
- c) seven years at four percent to purchase farm equipment and for construction (sheds, enclosures, storehouses);
- d) eight years at four percent to purchase livestock.

In fixing the amortization terms, CORA has followed the policy of making the largest burden of repayment fall at the time the farmer has generated his own working capital. That is, it permits him first to capitalize his profits and then later to cancel his debt. All credits of b, c, and d types are readjustable according to variations in agricultural prices.

Until 1966 the process of land redistribution under CORA was on a very small scale owing to legal limitations.¹² The limited number of new colonists and the scarcity of funds have inhibited the program of supervisory credit under CORA. Although in real terms (Table II) CORA almost doubled its total loans in 1965 over 1963, by 1965 CORA granted only 9.8 percent of total supervised credit in Chile (Table I).

The Institute of Agricultural Development. The Instituto de Desarrollo Agropecuario (INDAP) was created by the Agrarian Reform Law 15020 of 1962 as an autonomous state enterprise. The principal objective of INDAP, as stated in the law, is to provide gratuitous technical assistance and low cost loans to small and medium sized farmers—including those exploiting minifundia—as well as indigenous peoples. This is done either directly or through the corresponding cooperatives.

¹² Comité Interamericano de Desarrollo Agrícola (CIDA), *op. cit.*, p. 243.

INDAP's orientation is principally toward the small farmer. It grants supervised type credit at a six percent annual interest rate without readjustments for inflation (a negative real rate of 20 percent in 1965). Loan terms vary from short- and medium-term to long-term. Short-term loans extend to a maximum of 18 months and include loans to purchase seeds, fertilizers, pesticides, tools, and certain animals, and to pay farm operating expenses. Medium-term loans can extend to 10 years and cover fruit trees, vineyards, and farm, housing, and forestry improvements. Amortizations of long-term obligations include *años de gracia* (free years for the remission of debt), depending on the payment capacity of the farmer and the type of loan.

Administratively, INDAP divides Chile's 25 provinces into 15 "zones of operation" and 112 "work areas." Decentralization allows the programs to deal with regional peculiarities and to provide technical assistance and farm credit at the farm level directly from work area offices in the countryside. Within each work area INDAP implements its program by dealing with campesino organizations. The *comité de campesinos*, the basic organizational unit, is a group of small farmers organized by INDAP for the purpose of receiving credit and technical assistance. The committee has no legal status nor any similarity to a cooperative. It is a voluntary grouping of small farmers who come from small rural areas.¹³

During 1965 INDAP's personnel included 126 agronomists, 28 veterinarians, 596 agricultural technicians, 408 administrators, and various technicians. Most of them work in the Department of Technical Assistance and Credit which executes and controls the program.

INDAP began its program in 1962 after receiving a \$6,500,000 loan from the Social Progress Trust Fund of the Interamerican Development Bank in 1961. Table III shows the number of farmers benefitting from INDAP's program of agricultural credit. By the end of 1965 nearly 50,000 farmers depended on INDAP's financial assistance, and another 20,000 received technical assistance. These 70,000 farmers belong to 1,800 different comités dispersed

¹³ INDAP concluded that the only way to reach many farmers with technical assistance without incurring excessive per farmer costs was to work with them in groups of 20 to 60. It is expected that these comités will eventually develop into full-fledged cooperatives allowing the integration of technical assistance, credit, and marketing.

TABLE III
Total clients of INDAP's program of agricultural credit compared
with total clients of the institutional credit market 1962-1965

Year	(1) Total Clients of INDAP	(2) Total Clients of Insti- tutional Credit Market	(3) (1)/(2)
1962	16,694	61,019	27.3
1963	33,044	68,157	48.3
1964	34,931	70,397	49.3
1965	48,697	91,678	53.1

throughout rural Chile. By the end of 1965, 53 percent of all institutional borrowers were clients of INDAP's credit program.

In the early years of its program INDAP dealt with most farmers on an individual basis. Few campesino organizations existed which INDAP could work through, and the process of forming comités proved long and difficult in many regions. Cooperation in the modern sense is based on a monetary economy and market production. Many Chilean farmers carry on subsistence type agriculture and their ties with other farmers are social rather than economic. Since self-reliance and independence have ruled for years, the small farmer feels skeptical toward his neighbor when he must work together with him in an "organization" designed to gain mutual economic goals.

During the first three years of its program, most loans made by INDAP were "crop loans,"¹⁴ because the pressing need of low income farmers was for short-term credit (one agricultural cycle). The primary concern of these farmers was to obtain enough output to be able to feed their families until the next harvest—a significant problem for low income farmers who often spend up to 60 percent of their income on food.¹⁵

¹⁴ In a recent study of developing nations it was found that Chile devotes a larger percentage (85) of her institutional credit to crop loans than any other country surveyed. (INDAP was not included in calculating the above percentage.) See *Changes in Agriculture in 26 Developing Nations*, Foreign Agriculture Economic Report No. 27, USDA, Washington, November 1965, p. 85.

¹⁵ In Chile, low income families find providing for food a problem not only because they are poor but because the yearly inflation eats away at the little purchasing power they possess. During the first eight months of 1966 the Consumer Price Index rose to 17 percent (smallest eight-month rise in five years) over the previous year.

During 1966 INDAP received a loan of \$11 million from the Fund for Special Operations of the Interamerican Development Bank to expand its 1966-67 program. This new program hopes to reach a total of 81,464 campesinos, 25,388 with technical assistance and 56,076 with technical assistance and credit.

The new program alters the focus of credit policy. Three types of credit will now be given: 1) capitalization credit, 2) community credit, and 3) cooperative credit.¹⁰ The first type, which will have priority over the other two, is oriented toward investment in fixed and semi-fixed capital. The objective is to improve the internal structure of small farms in order to create a base for increasing income and the amount of produce available for the mass market. More than 10,000 small farmers are expected to receive credit for investments in beef and dairy cattle, construction (fences, poultry houses, irrigation canals), vineyards, and fruit trees, soils, and farm equipment.

The second type of credit, community credit, like the first, goes only to farmers belonging to a comité. These loans are of the "crop" type and hopefully should free many low income farmers from the hands of rural usurers. Such loans will not only provide lower interest costs, but should also alter the marketing channels for products of small farmers. Apart from funds for crop loans to members, comités may borrow to build storage facilities to assemble products for sale directly to centers of consumption. This type of loan thus carries a group responsibility.

The third type of credit under the new program, cooperative credit, is directed to more than 100 agricultural cooperatives in order to finance construction of warehouses, irrigation systems, machinery, and transport vehicles.

INDAP's total credit volume reached a record level during 1965 (see Table I). During that year INDAP granted 84 percent of the supervised type credit and INDAP's clients made up nearly half of the total clients of the institutional credit market indicating

¹⁰ For a complete discussion of the planned changes in INDAP's new program see, Instituto de Desarrollo Agropecuario, *Proyecto de Crédito Agrícola al Sector de Bajos Ingresos: Solicitud de Préstamo al Banco Interamericano de Desarrollo*, Santiago, June 1965.

the scope of its program.¹⁷ Additionally, Table II demonstrates the dramatic growth in real terms that has been experienced in the INDAP program. Note that while INDAP was experiencing growth in real terms, total institutional credit was declining.

For most small farmers, working with INDAP represents a first contact with financial institutions—one step toward a break from traditional agriculture. Providing technical assistance along with credit has forced these farmers to examine their own financial needs, another new experience for them. Small farmers now have access to technical assistance and institutional credit, most often at a negative real rate of interest because of inflation. This “free money” was a luxury previously available only to large farmers.

While talking with clients of INDAP I could see that they were convinced that the future holds some promise for economic improvement. INDAP borrowers are released somewhat from the power of local informal lenders. They believe the government has finally taken concrete action after years of talk about agrarian reform, reform which has not touched large groups of these rural people.

The INDAP program (see Table I) gives ample evidence of progress and promises a continued expansion in the future, but still only 32 percent of the low-income farm families will receive benefit of financing from the institutional credit market during 1966. This is not a criticism of progress already made, but an indication of the scope of problems ahead. Despite INDAP's effort most rural families in Chile still must turn to informal lenders¹⁸ or continue without any credit whatsoever.

Some Problems and Weaknesses of Supervised Credit Programs in Chile. The previously discussed three programs of supervised

¹⁷ INDAP compares favorably in scope to Brazil's supervised credit and extension program for low income farmers, ABCAR (Brazilian Association of Rural Credit and Assistance) which over a six year period extended 16,700 loans. INDAP in four years extended more than two and one-half times this number. This is in spite of the fact that ABCAR had a larger staff, greater capital base, and nearly eight years of pilot experience in supervised credit.

¹⁸ For evidence that small farmers tied to informal lenders for credit needs have little possibility or incentive to make their farms more productive, see *Crédito Agrícola para los Pequeños Agricultores*, FAO Agricultural Development Paper, No. 16, Rome, 1952.

credit in rural Chile have in common the objective of bringing institutional credit to the low income agricultural sector while stressing the educational aspect of supervised credit.

The clients of the three programs differ; CORA's clients are quite homogeneous, all having their parcel of land and possessing similar entrepreneurial skills. INDAP's clients are heterogeneous in the sense that they are of different tenure groups, farming various size holdings, and representing a wide range of entrepreneurial skills. The State Bank's clients are medium size farm operators, for the most part, of various tenure groups with sufficient entrepreneurial skills and economic capacity to be credit worthy and farm their properties for the purpose of marketing cash crops.¹⁹

There exists some question as to the justification for three separate supervised credit programs for rural Chile. Chile, like most other under-developed countries, is faced with a scarcity of trained personnel for administering a supervised type credit program. It seems reasonable to hypothesize that a more efficient utilization of monetary resources, also extremely scarce for these programs, and human resources could be achieved if all supervised credit activities were integrated under one organization. There would seem to be some obvious internal economies of scale present in a single organization, e.g., one bookkeeping and clerical system.

Even if three separate programs can be justified there is still the problem of coordination and cooperation. Up to now there has been a general absence of coordination among the three programs.²⁰ This can be explained in part by the fact that in none of the programs is it clear just where it is heading and why. All three of them exhibit characteristics generally associated with crash programs—INDAP especially. Also, there is evidence of jealousy and conflict between the three organizations. Cooperation and coordination are lacking. For example, several farmers claim to be receiving funds from two different organizations at the same time. The organizations assert this is contrary to their operating policies, yet they have failed to develop an information system between them that would lessen the possibility of overlap.

¹⁹ Hugo Ossio, *op. cit.*, pp. 52-53.

²⁰ A lack of coordination in the credit program up to 1963 was also noted by a Chilean observer. Hugo Ossio, *Ibid.*, pp. 54-56.

In supplying merchandise, INDAP, CORA, and the State Bank have experienced bottlenecks which have delayed delivery and caused some farmers to revert to the informal lender. When delivery of the loans in kind is unpredictable, even INDAP's offer of loans at 6 percent (against 80 to 200 percent charged by informal lenders)²¹ is not sufficient incentive for them to seek credit.

In some areas of rural Chile the buyers of produce are also the lenders of production inputs. By going to INDAP, CORA, or the State Bank for a crop loan a small farmer loses his market outlet for produce at harvest time. INDAP, CORA, and the State Bank recognize this problem of the "marketing trap" and are trying to integrate credit and marketing functions so small farmers can avoid the trap. Presently, INDAP and CORA lack facilities and personnel to carry out the necessary marketing functions. The State Bank has no current plans to aid farmers in their marketing problems.

The ratio of farmer clients to agricultural technicians in INDAP's program is 65 to 1. This ratio is within the maximum limit set by one credit authority.²² But there exists some doubt as to the real effectiveness of the technical assistance part of INDAP's program. Practically all the farmers are receiving assistance for the first time, and most of these farmers are in need of extensive individual attention. INDAP does its best by conducting assistance classes at comité meetings, but farmers find it difficult to apply group teaching to their individual problems. Conversations with INDAP clients in the field indicated a lack of close control by technicians over the use of the technical knowledge once they have passed it on to the farmer (i.e., a farmer can sell the fertilizer since chances of an inspection are slight).

The State Bank of Chile utilized an 8 page application form for small sharecroppers of the central valley. Many of these sharecroppers could not read the 8 page form and few could understand it let alone be able to fill it out with adequate information. Next,

²¹ See Charles T. Nisbet, "Oferta de Fondos Financieros Fuera del Mercado Crediticio Institucional en el Sector Rural de Chile," *Revista Economía*, No. 92, 1967.

²² Paul V. Maris asserts the maximum client-technician ratio is 100 to 1. See, "Supervised Credit for the Near East," Proceedings of the Agricultural Credit Conference, Beirut, 1953.

the employees of the State Bank copied verbatim a supervised credit form that had been utilized successfully in Europe. Again, the result was that this form had little meaning in a very particular situation in central Chile. After six months of operation, the employees of the State Bank finally realized that it would be necessary for them to design their own application form of about 2 pages.

Another problem involves the high quality and high-priced inputs INDAP provides (i.e., certified seed, chemical fertilizer, pesticides, etc.). Whenever possible, small farmers have worked with their own labor, their own seed and animal fertilizer, and they fear the burden of new, unknown, and untried inputs which carry a high price relative to available substitutes. Some farmers prefer not to deal with INDAP since the village merchant's price for substitutes is much lower. Although inputs sold by the latter are often of inferior quality, it is difficult to convince the farmer who has used them all his life. This situation might improve should INDAP carry two lines of inputs, one of high quality and one which competes with the informal credit market.

Reacting to criticism by lenders of the institutional credit market, INDAP has made an effort to ensure that its credits are used for productive purposes. It gives no cash credit but only loans in kind and services. Unfortunately, this approach seems unrealistic since the primary immediate problem of low income sectors is providing for daily consumption. Some farmers sell production inputs obtained by loan from INDAP for cash to meet daily living expenses. Furthermore, they are not completely free from the moneylender and village merchant who continue to satisfy consumption needs for some farmers.

Lastly, the nominal interest rates charged varied during 1965 from a low of 4 percent (CORA) to a high of 15 percent (State Bank). Due to inflation all interest rates set by the supervised credit programs represented negative real rates. The rationale for providing the subsidy and the differing levels of subsidy is not clear. These organizations need to take a hard look at these administratively determined interest rates to spell out their advantages and disadvantages.

Role and Impact of Supervised Credit. Supervised credit programs have been in operation in Latin America since 1943 when

Paraguay undertook its first program. Since then other programs have started in Brazil, Venezuela, Peru, Colombia, Honduras, Mexico, Costa Rica, and Chile. In fact, the most complete application of supervised credit in underdeveloped countries is to be found in certain parts of Latin America.²³

It seems to the author that there are two reasons for undertaking so-called supervised credit programs. One is to aid in the creation of viable commercially oriented family farms. The other is to provide short-run welfare relief to members of the low income sector. Most supervised credit programs contain a little of both although the former is usually held to be the only purpose of such programs.²⁴

For matters of economic policy the important question seems to be: Is the supervised credit program providing the basis for a take-off out of traditional agriculture and its accompanying low income status?

To answer such a question one would need a great deal more empirical evidence than exists at present but at least two important considerations can be outlined:

- 1) Will supervised credit substantially change the output expectations of small farmers?
- 2) Will farmers ever be free from supervised credit?

If farm operators are to begin a movement out of subsistence type agriculture into cash crop oriented surplus producing agriculture, output expectations of these farmers must first be changed. This implies that before farmers can take the necessary steps to augment production they must first be able to see how they can produce and market profitably their crops. Output expectations in Chile, for example, are changing because of the prospect of agrarian reform. Farmers will need knowledge of and access to

²³ Horace Belshaw, *Agricultural Credit in Economically Underdeveloped Countries*, Rome: Food and Agriculture Organization of the United Nations, 1959, p. 199.

²⁴ Exceptions to this are found in the writings of Dario Brossard who claims supervised credit is essentially a rural welfare service. See, for example, "Features of Supervised Credit in Latin America," *Proceedings of the International Conference on Agricultural and Cooperative Credit*, Volume 1, University of California, Berkeley, 1952, pp. 299-300.

production inputs and consuming markets. The lack and unavailability of inputs and markets has contributed to the sterilization of output expectations of many small farmers in Latin America.

Additionally, producers should face a price structure that contains some certainty of stability and price levels that permit a satisfactory return on invested capital. Transportation and storage facilities should be available. In short, all of the conditions should be present that are now generally absent in many Latin American countries, if a supervised credit program is to substantially change output expectations. If supervised credit programs only make available farm inputs even if at less than their going market prices, little progress will be made at altering the output expectations of farmers.

In Chile, the three supervised programs previously discussed have made little or no headway in providing storage facilities, improving transportation routes, or in connecting small farmers to consuming markets. Supervised credit in Chile since 1959 has principally meant a providing of low cost farm inputs to small farmers. Therefore, I would argue that the supervised credit programs in Chile have made little headway in altering the output expectation of small farmers.

But even if output expectations are changed, it must next be determined whether actual physical output changes, in other words, are the new output expectations being realized? If so, what clients of the supervised credit program are experiencing an increase in output and what clients are not and why? Is there any relationship between size of farm and ability to alter output patterns when preconditions for such a change are available? Empirical studies should seek to find out if present technology determines the size of the low cost producer. Data should be gathered on farmer-clients as to changes in their net worth, rates of return of capital invested, changes in gross income, evidence on the adoption of new techniques, and output diversification, to mention a few. Such empirical information would provide some idea of the impact of supervised credit.

A second consideration is, will farmers ever be free from supervised credit? If supervised credit is to be successful, farmers eventually must make the transition from the supervised credit agencies to conventional financial institutions.

Field studies should be made of farmers who have received supervised credit to determine whether these farmers are now in a position to seek credit from the institutional credit market. Farmers should be asked if they have had any success in applying for institutional credit or to see why these farmers continue to be outside of the institutional credit market. In essence, this points up the need for a survey of past clients of supervised credit programs to determine their present condition.

An analysis should be made of current supervised credit programs to determine what efforts are being made by the supervised credit agencies to insure that clients of the supervised credit agencies will eventually be qualified to seek credit from the institutional credit market.

In summary then, little can be done by the supervised credit program alone to alter the conditions of farmers in the low income sector. If supervised credit programs are not coupled with a general program of economic development, i.e., public works, education, and technical assistance, supervised credit programs will not provide the base for a take-off out of traditional agriculture. The result will be that farmers will remain dependent upon a continuous supervised credit program and the supervised credit program will take on a welfare-type agency existence.

We see, then, that there is a basic conflict between the stated purposes, goals, and action programs of supervised credit on one hand, and field reports of how supervised credit operates. In practice, Chile's supervised credit has been almost totally limited to granting of short-term and medium-term credits to small farmers. Because of this, supervised credit is able to have only a limited impact on increasing agricultural output and is principally a way to provide short-run assistance to small farmers. Output expectations are not markedly changed, little change in physical output results, and farmers continue to depend upon supervised credit.