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THE EMERGING ISSUES IN FINANCING AROUND THE WORLD AND THEIR PROBABLE SOLUTIONS

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In accepting the invitation to talk to so well-informed an audience about "THE EMERGING ISSUES IN FINANCING AROUND THE WORLD AND THEIR PROBABLE SOLUTIONS", we must admit that we had not suspected the magnitude of the challenge that was facing us. Dealing with so vast and complex a subject inside of thirty minutes did not make the task any easier for us.

The importance of financing in the development of agriculture and the fact that it goes hand in hand with farm management prompted us to accept the challenge.

We notice that the title of the topic proposed has changed in various ways but we decided that it would be best to keep to the original proposed.

To begin with, we shall try to analyze the world agricultural financing situation by looking at a cross-section of farm financing systems in general, first in the developing countries and then in the industrialized countries. In each of these two cases, we shall consider farm financing in the concomic context within which the agriculture is evolving and, after that, take a brief glance at the overall organization and operation of farm financing systems.

Our review is necessarily going to be static in the sense that we shall hardly dwell at all on the development of these systems; nor will it be expedient for us to insist upon their behaviour at the farm level.

In the second part of this paper we will suggest some material for solutions which should help developing and industrialized countries to come closer to the objective proposed by Fairchild:

"The principal aim of a farm financing system is to mobilize the necessary funds so that they can finally be invested in the volume, in the form, at the time and on the conditions needed to raise agricultural production to the level required by the national economy."

The fact that we are far from solving the problem of ensuring an adequate level of nutrition for mankind renders this aim all the more urgent and compelling.

FAIRCHILD, Henry W. "Nécessité d'améliorer les institutions de crédit rural pour faciliter le développement rapide de l'agriculture." Bulletin Mesnuel, Economie et Statistique Agricoles, Vol.19, No.4.

#### PART 1 - PRESENT STATE OF FARM FINANCING IN THE WORLD

# (A) In the developing countries

# (1) The economic Framework within which Agriculture is Evolving

In Developing countries, agriculture is generally the most important economic activity and hence is a potential source of the domestic funds and foreign currency which are essential to their progress.

TABLE 1 - AGRICULTURAL EXPORTS AS PERCENTAGE OF THE TOTAL EXPORTS OF SOME DEVELOPING COUNTRIES (figures for 1968).

Country	Percentage
sed and Jericultural Sank	ocept the challenger week week
Sudan	99.1
Ethiopia	
Chad	97.1
Ecuador Street Street	96.9
Argentina	86.2
Senegal	
OVIIA	77.9
Brazil	77.0
Thailand	75 7
Columbia	74.9
Cameroons	
Egypt	68.8
Ivory Coast	63.0 bnoose
	56.4
Morocco	56.1
Jordan Land Hay Vand	
	of add at ampley add at Savage

Sources: Cérès, Vol.5, No.2, page 11.

Rapid population growth in these countries makes it imperative that ever-increasing amounts of food be produced on the spot to meet the increasing need of the peoples. We are thus witnessing the classic "take-off" phase as described by Malassis.2 For most of these countries, development is based on agricultural growth; for this standpoint, agriculture must therefore undergo far-reaching changes calling for heavy investment.

Moreover, the funding of such investment comes up against many curbs which must be circumvented if agricultural growth targets are to be met.

In view of the present situation, the increased agricultural production and the development of the farming sector which that implies demand the mobilization of considerable capital. Projects by the FAO in the Indicative World Plan as shown next page give an idea of the size of investment required.

2

MALASSIS, L. "Agriculture et Processus de développement." Education et développement Rurale-1. Unesco, Paris, 1973

TABLE 2 - ANNUAL OPERATING CREDIT FOR AGRICULTURE

Estudadorio de la composición del la composición del composición de la composición de la composición del composición del composición de la composición del composi	1962 (estimated)	1975 (projected)	1985 (projected)	1962-1975 base year 1962	1975-1985 base year 1975
vana dagirga	Millions of dollars (U.S.)		(U.S.)	Indexes	
Production credit			STABLITE SE	hach must be met.	eredina ereze
Africa Asia	152 1181	353 4416	549 8812	232 374	156 200
Latin-American continent	808	2210	3604	273	163
Near East and Northwest Africa	190	634	1076	334	170
TOTAL	2331	7613	14041	326	184
Maintenance credit					
Africa Asia	126 861	327 3867	497 7438	260 449	152 192
Latin-American continent Near East and	527	1613	2760	306	171
Northwest Africa	134	483	1601	360	331
TOTAL	1648	6290	12296	382	195
Storage credit					
Africa Asia	287 2873	579 5727	627 8146	202 199	108 142
Latin-American continent Near East and	900	1692	1306	188	. 136
Northwest Africa	313	1212	1713	387	141
TOTAL	4373	9210	12792	210	139
Total operating credit					
Africa Asia	515 4915	1259 14000	1673 24396	244 285	133 174
Latin-American continent Near East and	2235	5515	8670	247	157
Northwest Africa	637	2329	4390	366	188
TOTAL TOTAL	8352	23133	39129	277	169

Source: FAO, Indicative World Plan, Chap. IX, p. 402.

These estimates only refer to investments financed from within the agricultural sector and they also include marketing, forestry and fisheries. The self-financing capacity of the sector thus remains unknown. A salient feature of these projections is the indication that production credit should increase fivefold from 1962 to 1985 to meet the objectives.

The following table lists the main inputs which should be financed through production credit.

TABLE 3 - ESTIMATED CREDIT NEEDS BY INPUT CATEGORIES

(Millions - U.S. Dollars)

PRODUCTION CREDIT	1962 (estimated)	90	1975 (projected)	96	1985 (projected)	96
Seed and livestock feed	932	40	1,705	22	2,418	17
Fertilizer and pesticides	482	21	4,037	54	9,019	64
Irrigation and mechanization	730	31	1,596	22	2,209	16
Fisheries	139	6	202	4	291	2
Forestry	48	2	73	1	104	1
TOTAL	2,331	100	7,613	103	14,041	100

Source: FAO, Indicative World Plan, Ch. IX, p. 403.

The I.W.P. also foresees a doubling of farm development credit (long and medium term) from 1962 to 1985.

TABLE 4 - PROJECTED DEVELOPMENT CREDIT NEEDS

(millions U.S. dollars)

ild be financed	(1) 1962- 1975	% of Total	(2) 1975- 1985	% of Total	increase between (1) & (2)	1962- 1985
Farm development	16,144	40	14,401	31	- 11	30,545
Machinery and equipment	10,560	26	15,075	33	43	55,635
Livestock	3,079	8	3,820	8	24	6,899
Fishing equipment	1,645	4	1,993	4	21	3,638
Forestry equipment	467	1	575	1	23	1,042
Processing and marketing	7,969	20	10,221	22	28	18,190
TOTAL	39,864	2,5	46,085	027	16	85,949

Source: FAO, Indicative World Plan, Ch. IX, p.403.

It should be noted that these projections do not take into account needs for mortgage credit and agrarian reform although these are considerable.

# (2) The Present Global Farm Financing Picture

Faced with such savings and credit needs, how can the developing countries mobilize the necessary funds and distribute these credits? In small scale type agricultural economics such as prevailed in most Third World countries and still continue to exist, farm financing needs were looked after by the farmers themselves with the participation of landowners and money lenders.

However, in today's semi-commercial agricultural economy, farm financing is different and much more complex. According to the experts, the rural community is incapable, on its own, of mobilizing and investing all the necessary capital; in reality it is integrated with the nation's much broader economic system. For example, one might mention the taxes which governments derive

from farmers and the postal savings account which drain rural savings away from the localities where they originate. Local communities are thus deprived of a considerable part of their savings and agricultural financing has to be funded from elsewhere. In practice, the capital mobilized for agricultural financing comes mainly from internal revenues, government loans, bilateral and multilateral loans and grants to governments, the savings of private lenders and other non-institutional lenders, the savings of individual farmers for immediate investment in the private farming sector, and individual and collective saving within the institutionalized banking and credit system.

For more than a decade, international gatherings and local conferences have studied agricultural financing in the developing countries. They have analyzed the weaknesses of the system and have proposed solutions. Some progress has clearly been made, but it has been very slight compared with the real and indispensable needs.

The main shortcomings of the present situation may be summed up as follows: prevalence of non-institutional and often usurious credit, scarcity and largely urban location of financial and credit institutions, government efforts channeled almost exclusively into vast infrastructural projects with, as a result, disproportionately small means of financing the productions and marketing of small scale farms in particular.

Amont the causes which might explain the persistence of these weaknesses, we shall mention those that appear to us to be the most common. A recent study by the "Cassa di Rsiparmio della Provincie Lombarde" on agricultural financing in Africa stresses that the dualism of the farming structure left as a legacy from the colonial phase in those countries is partly responsible for the weakness of their agricultural financing system.<sup>3</sup>

This affirmation taken up is by Nourredine Abdi who applies it to most of the Third World countries in general, as follows: "that is where we must look for the source of this dualism (a dominant modern sector and a dominated traditional sector), resulting partly from a particular farm credit set-up... and based on three essential factors: acquirement of property by the colonizers, the development of agricultural production for export and farm mechanization."4 This situation has favoured an intensification of efforts to capitalize and finance large estates offering plenty of security and small risk, to the detriment of the small farms and of the overall agricultural development.

Dell'amore Prof. Giordano. "Le financement de l'agriculture dans les pays en voie de développement." Ve Congrès mondial du crédit agricole. 17-20 sept. 70. Milan.

Abdi, N. Crédit Agricole: "Davantage de responsabilité, moins de spéculation. Cérès, Juillet-Août, 1973.

Furthermore, the prevalence of a hard-to-control pattern of money lenders and dealer-lenders (even though it had immediate advantages as regards loan formalities) has made it difficult to set up savings and credit institutions. In addition, this pattern has helped to drain off surplus agricultural savings through very high interest rates (often as high as 50-100%) a surplus which could be invested in other sectors. Besides this, governments have helped to drain off part of the rural savings, amongst other things by postal collection of voluntary or compulsory savings in order to be able to finance public expenditures benefiting urban infrastructures more than farms.

In spite of these unfavourable conditions, several attempts to set up an institutionalized system of farm financing have been made in a number of countries. Most of them have met with financial or psychological set-backs. According to MoTse Mensah, "One of the fundamental mistakes was to think that existing technological, socio-economic and cultural conditions permitted the introduction of viable institutionalized agricultural credit plans."5 Thus, some of the lending establishments that were set up found it difficult if not impossible to collect repayments on loans or realize securities. Because the loans were offered in a paternalistic manner or without any attempt at educating the borrowers about their true nature, farmers often considered them as gifts, especially when the funds came from the government. Moreover, the securities as understood in the orthodox sense proved to be practically unrealizable to any adequate extent or were fraught with serious social or political problems.

Another obstacle to institutionalized credit to farmers by public or semi-public organizations is encountered when the source of funds does not allow large sums to be tied up for intermediate or long-term credit. In the case of national development banks which were created first in Latin America and then in Africa, such funds came from outside aid in the form of short-term loans. Furthermore, there multi-purpose credit organizations are subject to pressures from outside the agricultural sector due to the availability of higher short-term rates of yield than those the traditional farming sector can provide.

There are, however, encouraging "success stories", such as those reported from Brazil, India and ZaTre, about supervised farm credit, and others from Togo or Madagascar attributable to shared responsibility within a community framework. In addition, multilateral aid bodies like the World Bank and its affiliates have indicated their willingness to increase their efforts to help indigenous agriculture "get off the ground." Unfortunately, runaway inflation and the heavy indebtedness of many countries threatens to wipe out such efforts.

Mensah, M.C., Structures and Institutions necessary for organizing agricultural credit schemes in Africa. Special Bulletin 2, CICA, XXII year, no.49, January 1973.

There is also a lack of studies on the financial position of farming enterprises but, judging from the small size and low productivity of "traditional" farms and the increase in domestic consumption, it may be concluded that self-financing will not suffice to ensure the initial start we mentioned earlier. The productivity targets and readiness to diversify being there, ways will have to be found to provide the agricultural sector of developing countries with the capital essential to its growth.

#### (B) In the Devloped Countries

# (1) The Economic Framework Within Which Agriculture is Evolving

In the developed countries agriculture is no longer the only sector on which economic and social development depends. On the contrary, as this development proceeds, agriculture itself becomes increasingly dependent upon the other sectors for its growth; in other words, it becomes a motivated sector instead of a motivating one.

TABLE 5 - CONTRIBUTION OF AGRICULTURE TO THE GROSS INTERNAL PRODUCT AND TO TOTAL EMPLOYMENT IN SOME INDUSTRALIZED COUNTRIES

		Agriculture's contribution to the gross internal product (%)	Agricultural manpower as % of total active population
Germany	1950	10.4	24.6
	1967	1.528.4.2 4.200.8	10.4
Belgium	1951-2	8.1	10.8
	1966-7	5.5	6.0
Canada	1951	ofa a mile. 1 and one and	18.4 A0886 101
	1968	4.1	6.9
U.S.	1950	7.4	11.9
	1966	3.3	5.2
France	1950	15.0	27.0 (1955)
	1966	7.4	17.6
Netherlands	1950	14.0	14.0
	1968	7.0	8.0

Source: OECD Le capital dans l'agriculture et son financement. Rapport sur les politiques agricoles, Paris, 1970. Vol. 2. The challenge to agriculture in these countries is rather to reach an equilibrium, promote its economic profitability, and obtain for farmers a living standard comparable to that which they could attain by some other occupation. To achieve this, high labour productivity and a high yield from invested capital are of primary importance. Substitution of capital for labour in farming is proceeding at an increasing rate and the farmer is faced with a wide choice of alternatives as regards the investment of both fixed and floating capital. We are thus going through a capital-intensification phase in agriculture coupled with change in the structure of this capital.

TABLE 6 - CAPITAL STOCK IN CANADIAN AGRICULTURE, 1961, 1968 AND PROJECTED 1980\*

orthearing ones med har sair		Year		a secono sec
TOTAL CAPITAL IN FARMING SECTOR	1961	1968	1980A*	1980B*
The programme formation to A	(n	millions of	dollars)	
Livestock and poultry	1,990.2	2,499.1	3,903	3,973
Implements and machinery	2,565.6	4,027.2	7,176	8,718
Land and buildings	8,603.4	15,852.1	23,937	42,166
TOTAL CAPITAL	13,159.2	22,378.4	35,016	54,857

<sup>\*</sup> For 1980A the projections are based on a slower increase rate in resource values than the one observed from 1961 to 1968 while for 1980B the same increase rate has been used.

Source: Brake, John R., Pub. No. AE 70/3, p.12, Dept. of Agric., Econ., University of Guelph.

The development of this capitalistic agriculture gives rise to many problems whose effects are felt mainly in the field of farm management and particularly of financial management. The increased need for capital will have more importance at the farm level than at the overall level.

TABLE 7 - CAPITAL STOCK IN CANADIAN AGRICULTURE, 1961, 1968 AND PROJECTED 1980\*

CAPITAL PER FARM	1961	Year 1968	1980A	1980B
sethy fluctuations.commagn this phenomenon.		(do1	lars)	is meyerth
Livestock & poultry	4,138	6,077	12,380	12,600
Implements and machinery	5,335	9,794	22,770	27,648
Land & buildings	17,890	38,551	75,950	133,977
TOTAL CAPITAL	27,363	54,422	111,100	173,977

<sup>\*</sup> For 1980A the projections are based on a slower increase rate in resource values than the one observed from 1961 to 1968 while for 1980B the same increase rate has been used.

Source: Brake, John R., Pub. no. AE 70/3, p.12 Dept. of Ag. Economics, University of Guelph.

Faced with this trend, the farming enterprise has to surmount obstacles and new difficulties to finance itself adequately. It is appropriate now to ask how the financing system is reacting to these agricultural transformations.

## (2) Development of the Financial Situation of Farming Enterprises

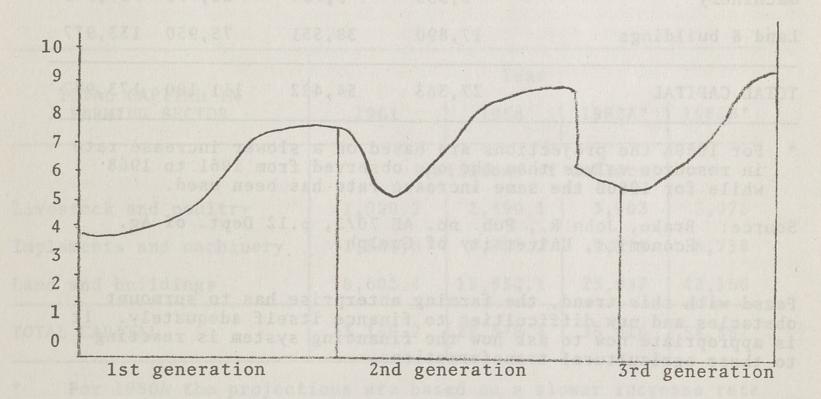
As regards financial management, there are three main points to be considered: the life cycle of the preponderantly family or individually-operated farm, the nature of farming capital and its evolution, and the extent and burdensomeness of the indebtedness.

Farm financial management has often been categorized as being in the grip of the "forced savings trap." These forced savings are used in the first place to make the initial down-payment to acquire the farm, and, since average capital investment per farm is constantly rising, net worth at the time of purchase is also increasing. Next, in order to meet the terms and conditions of external financing, the farmer has to save out of his net income to repay his creditors as quickly as possible. Then, by the time he has earned a little breathing space from these debts, it is time for him to hurry up and modernize the farm using a big part of his savings and once again resorting to onerous outside financing. Finally, he must strive to increase his equity so as

to get enough out of the enterprise for a decent retirement when the time comes to hand over the farm to his successor. In most cases, this transfer is made as a whole and the successor begins the cycle all over again, when succession laws do not further complicate the situation.

This typical life cycle of the farm owner is reflected in that of the enterprise. Although it will show irregular variations depending on the particular circumstances of each generation, it is nevertheless a cause of fruitless and costly fluctuations. The following curb is an attempt to depict this phenomenon.

FIGURE 1 - LONG TERM CARRYING OUT OF THE AIMS OF THE FARMING ENTERPRISE SHOWING THE DEGREE OF EFFICIENCY



The phenomena we have just described are attributable to several causes, including low return on labour and capital in agriculture and the slow capital turnover. The main cause, however, is related to the family farm or individualized structure of agriculture.

The structure of farming enterprises has certainly undergone a transformation but not as rapidly as expected. Tables 8 and 9 illustrate this tendancy.

TABLE 8 - CENSUS-FARM DATA CLASSIFIED BY TYPE OF ORGANIZATION
- CANADA 1971

	Type of ganization	% all farms	% of farms selling \$10,000 and over	% value of agricultural products sold
1.	Private individual	91.8	86.7	79.8
2.	Partnership	5.7	9.8	10.5
3.	Incorporated business			
	Family	1.9	2.6	6.0
	Others	0.2	0.4	2.3
4.	Institution or community pasture	2.1	ivan standard of the court of t	0.4

Source: Census of Canada 1971 - BFS Cat. 969701.

TABLE 9 - CENSUS-FARM DATA CLASSIFIED BY TYPE OF ORGANIZATION - U.S.A 1969

Type of Organization	% of farms selling \$2,500 and over
	584 2012 85.4 20 Tebra sens and days
	and to 12.8 erresorger won egasbli
	1.2 st read to not street
Under 11 shareholders 11 shareholders and over	95.4

<sup>\*</sup> A survey in 1967 showed that 68% of the corporations were of a family nature.6

Raup, P.M. "What policies should we have toward corporations in Farming?" Paper prepared for National Agriculture Policy Conference, Williamsburg, Virginia, Sept. 11, 1969.

Source: U.S. Department of Commerce (Bureau of the Census, U.S. Census of Agriculture, Vol. II).

In their report on Canadian Agriculture in the Seventies, the Federal Task Force defined the family farm as one where:

"(1) The farm operator makes all or most of the managerial decisions;

(2) The farmer and members of his family supply most of the labour needed;

(3) The available farm resources are sufficient to provide the family with at least a minimum standard of living." 7

Although this definition of "family farm" is tending to broaden, as already mentioned there are serious restrictions to be financing of these enterprises. Their size is also thereby limited to a certain degree. Possibilities of self-financing are marginal after the minimum living standard of the farming family has been satisfied. External sources of credit are limited practically to conventional credit. Nevertheless, in spite of all the latter's shortcomings, the big commercial enterprise has not succeeded in driving it out.

This slow development in the organization nature of the farming enterprise is not without its parallel in the characteristics of agricultural capital, and the nature of land-and-building capital and farm-operating capital is a source of financial problems. Furthermore, the growing use of floating capital (non-farm inputs) is increasing the need for financing, especially short-term financing.

For several years past there have consistently been very considerable increases in the value of farmland. In some countries, even though the area under cultivation had diminished, its value has more than doubled. At the farm level, capital invested in land and buildings now represents most of the farm assets.

The inflation of farm land prices has been a constant phenomena for the last several years. Tweeten reports that capital gains on farm-lands amounted to 5.3 percent per year of the residual return on land, from 1950 to 1967.8 This inflation, which especially affects capital investment in land and buildings exaggerates the cycle of the enterprise when the obtaining of this capital has to be financed. This funding is requiring an increasingly large part of the available farm income.

Report of the Federal Task Force on Agriculture: "Canadian Agriculture in the Seventies," Cap. XIII, p.341

Tweeten, L. "Foundation of Farm Policy." University of Nebraska Press, Lincoln, 2nd Ed. p. 264.

The inflation is particularly onerous at the establishment stage, because, as we shall see, the new farmer is definitely at a disadvantage compared with one who has been established for years. Tweeten reports a survey he carried out with Nelson according to which residual earnings from family labour were estimated at \$1,300 per worker at 1950 prices. If the price of land had remained at the 1940 level this labour income would have been \$1,512 and, by 1962, it would have been twice what it has been. Thus, inflation of land values, although it has nothing to do with productivity, has a negative effect on available income when it has to be financed.

A second characteristic of agricultural capital affecting farm financial management is due to the nature of operating capital, more specifically for machinery and equipment. Owing to crop specialization and technological progress, farm implements are becoming increasingly specialized and hence less and less usable for any other use. This results in under-utilization of the productive potential of that part of the capital investment and hence in a loss which has to be financed in one way or another. Similarly, rapid technological changes in farm machinery hasten the replacement rate and thus increase the depreciation costs that have to be financed.

These characteristics of land-and-buildings capital and operating capital explain (probably to a considerable extent) the capitalistic intensity and the slow turnover of agricultural capital: two decisive factors in the financial situation of an enterprise and on its financing facilities.

TABLE 10 - AGRICULTURAL CAPITALIZATION INCREASE - CHANGES IN THE AVERAGE-CAPITAL COEFFICIENT

	0 1 1							
FRANCE	1902	1912	1922	192	9 19	938	1955	1963
Total cap./VA*	7.3	7.3	3.9	4.8	4	. 4	4.3	6.0
Operating cap./VA	0.89	1.10	1.26	1.3	6 1	. 38	1.16	1.36
U.S. Boarbling	1910	1920	1930	1940	1950	1955	1960	1965
Total cap./VA	6.8	5.4	5.4	5.6	4.7	6.2	7.0	7.7
Operating cap./VA	1.03	0.84	0.91	1.09	1.18	1.45	1.58	1.54

<sup>\*</sup>VA - agricultural value added.

Source: "Les relations entre capital et production dans l'agriculture" P.109.

Finally, the increasing use of non-farm inputs to raise production is another feature of the present structure of agricultural capital. This trend adds to the need for working capital and exerts new pressures on short-term financing besides making agriculture more dependent on other sectors. The recent oil crisis, whose effects will probably not be merely contingental, is likely to increase this need and this pressure. In fact, a large part of non-farm inputs is sooner or later linked with energy and, more particularly, with oil.

The development of farm financing and the burden that it lays on the income is the last factor we would like to consider at the level of the farm enterprise.

TABLE 11 - RECENT TRENDS IN THE INCREASE OF FARM DEBT AND THE RATE OF INDEBTEDNESS

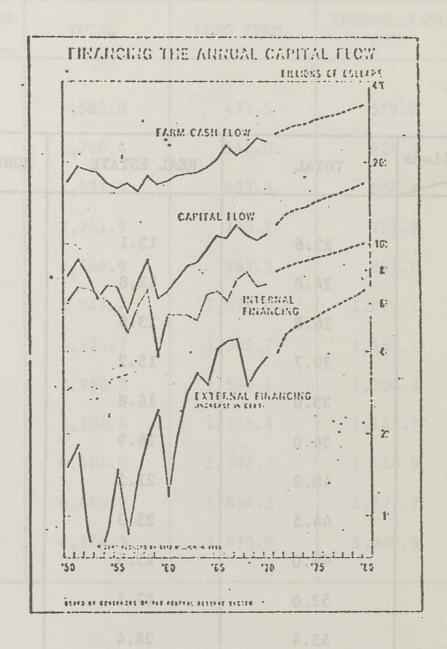
vidoubero s mi v virsi	Percentage annual	Percentage annual in debt			Indebtedness ratio at end of period			
COUNTRY	increase in value of farm assets		Percent- age	Total	As % of land and buildings cap. (A)	As % of operating cap. (B)		
i enlemen	S ens (sasske s		03 8 700					
Canada	7.2	1960-67	14.0	18	10.3	37.4		
U.S.	5.0	1955-68	8.4	18	13.2	36.7		
Denmark	7.3	1957-67	9.2	33	42.5	30.8		
Belgium	7.9	1962–67	15.5	(C) 7 17				
Italy	1.3	1956-66	12.5	11		SUNFORMULE.		
France	(10.0)	1955-66	25.0	(C) 13 20	AV Ta	Jenes Las		

- (A) Long-term debts rate percent of land-and-buildings capital;
- (B) Short and intermediate-term debts rate percent of working capital;
- (C) For Belgium and France, the 7% and 13% represent debt in relation to total land-and-buildings capital and operating capital, whereas the 17% and 20% represent debt in relation to freehold land-and-buildings capital and operating capital assuming absence of debt on leased land-and-buildings capital.

Source: OECD "le capital dans l'agriculture et son financement." Vol. 1, P.82.

These figures show us that, in general, agriculture is getting into debt and that, according to the present trend and given the same conditions, the process should become more pronounced. In fact, under present conditions, there are few financing alternatives to conventional credit.

#### FIGURE 2



Source: Fin. Rev. Vol. 33, July 1972. USDA, p.5

This graph (figure 2) clearly illustrates that the proportion of capital flow financed through indebtedness is increasing while the self-financed proportion is decreasing. Furthermore, it will be noted that indebtedness seems likely to keep pace with the increase in capital flow or even exceed it slightly. This trend is also confirmed for a number of countries as shown in table 11, where it will be seen that annual indebtedness has been outstripping increase in value of farm assets in all the countries listed. In addition to the overall increase in indebtedness, other aspects of the farm credit situation should be noted. Tables 12 and 13 show how this situation affects farm credit in the U.S. and Canada.

TABLE 12 - FARM CREDIT OUTSTANDING, 1960-72 - UNITED STATES

Billions	TOTAL	REAL ESTATE	NONREAL ESTATE
	and the second second	341082	
1960	23.6	12.1	11.5
1961	24.8	12.8	12.0
1962	26.8	13.9	12.9
1963	29.7	15.2	14.5
1964	33.0	16.8	16.2
1965	36.0	18.9	17.1
1966	40.2	21.2	19.0
1967	44.5	23.3	21.2
1968	49.0	25.5	23.5
1969	52.0	27.1	24.9
1970	55.4	28.4	27.0
1971	59.2	29.5	29.7
1972	64.6	31.3	33.3
T SITTY Enterents	ideotedness is i	r sauotaž beons	Not The

Source: USDA, Agricultural Finance Statistics, May 1973, p.1.

TABLE 13 - ESTIMATED FARM CREDIT OUTSTANDING, 1960 TO 1971 - CANADA

Millions Year	TOTAL	LONG TERM	INTERMEDIATE TERM	SHORT TERM
- Agens of	Speaka	Tardantill	CI E 797	
1960	1,583.0	473.5	579.7	529.8
1961	1,768.4	542.0	624.5	601.9
1962	1,991.9	632.3	684.8	674.8
1963	2,261.9	743.2	772.9	745.8
1964	2,568.9	883.2	882.9	802.8
1965	2,947.7	1,071.0	1,028.1	848.6
1966	3,375.7	1,309.7	1,168.1	897.9
1967	3,950.7	1,560.1	1,300.8	1,089.8
1968	4,104.8	1,713.4	1,147.7	1,243.7
1969	4,424.8	1,762.2	1,210.9	1,417.7
1970	4,480.7	1,854.3	1,177.7	1,446.7
1971	4,714.3	1,875.9	1,249.5	1,588.9

Source: Rust, R.S. "L'économie agricole au Canada, Vol.7, No. 5, p. 4 and Vol. 5, No. 2, p. 26."

The overall increased recourse to farm financing from outside sources is even more pronounced at the individual farm level because the number of farms is diminishing in industrialized countries. The following figures (table 14), though incomplete, give an idea of this trend.

TABLE 14 - ESTIMATED NUMBER OF FARMS, AVERAGE NET INCOME AND FARM DEBT, CANADA, 1960 TO 1971.

Water I			700
YEAR	Number of farms a	Average net income	Average farm debt b
1960	497,822	2,402	3,168
1961		1,924	3,712
1962		3,253	4,286
1963		3,314	4,988
1964		2,878	5,798
1965		3,571	6,818
1966	428,794	4,545	8,000
1967		3,545	9,460
1968	403,304	4,240	10,142
1969	390,559	4,004	11,292
1970	377,814	3,372	11,823
1971	365,068	4,366	12,875
Period change		pourcentage	
1960 to	1,713.4	3-401-A	
1971	-26.6	+81.8	+306.4
1965 to			
1971	-16.8	+22.3	+ 88.8

a Excludes Newfoundland, Yukon and Northwest Territories.

b Average based on estimated total number of farms in Canada.

Source: Rust, R.S., Canadian Farm Economics, Vol. 7, No. 5, 1972, p. 6.

TABLE 15 - FARMERS' DEBTS AS % VALUE OF LAND AND BUILDINGS

Age of farm operat	tor	Operator experience
Under 35 years	51	Under 2 years 50
35 to 44 years	47	2 to 4 years 58
45 to 54 years	35	5 to 9 years 45
55 to 64 years	26	10 to 14 years 39
65 years and over	21	15 to 19 years 37
		20 to 29 years 31
		30 years and over 23

Source: U.S. Department of Commerce, Bureau of the Census, 1964 Census of Agriculture. Vol. III, Part 4, p. 137.

Table 15 allows us to find that new farmers have larger indebtness than those already established and that the rate of indebtedness increases each year for young farmers establishments.

Besides considering farm credit needs to finance farm organizations, we should also pay some attention to the burden of debt and of the cost of financing credit. Ideally, the best measure of this load would be the proportion of net income used to finance capital. Unfortunately statistics on this subject are very scarce. We have therefore chosen a rough yardstick (see table 16) which nevertheless illustrates the evolution of the debt load.

TABLE 16 - CURRENT INDEBTEDNESS AS PERCENTAGE OF GROSS FARM INCOME

experience	PERCENTAGE		
Country	Middle 1950's	About 1967	
Canada	98	144	
U.S.	85	215	
Denmark	132	252	
Belgium	51	93	
France	19	97	
Italy	19	39	

Source: OECD Le Capital dans l'agriculture et son financement, Vol. 1, p.89.

These data give us only a relative idea of what it is costing farmers to service debts and they do not tell us whether the more indebted farms are necessarily in a worse financial position than others. The Task Force Report on Canadian Agriculture in the Seventies shows that there is actually a positive correlation between level of indebtedness and net income. However, there is nothing to indicate whether this correlation extends to available income.

## (3) Organization and Operation of Farm Credit System

As we have seen in reviewing developments in the financial situation of the farm organizations, self-financing is on the decline and farmers are increasingly resorting to outside financing which is almost entirely limited to banks credit. This situation is not without effect on the problems of farm financial management. In view of these new problems of the agricultural enterprises, we thought it would be appropriate to consider how the farm credit system is organized and how it functions to meet this increased demand for farm credit.

The organization of the farm credit system is greatly influenced by banking institutions, specialized bodies or non-institutionalized sources such as private individuals, farm suppliers and dealers. In keeping with its nature, the banking sector ought to be the principal supplier of farm credit. This is not, however, the case. With a few exceptions, the commercial banks play a secondary role in farm credit and, in most cases, this role is limited to short-term credit in accordance with the British banking system's tendency to prefer more quickly repaid investments.

Moreover, the commercial banks are the first to be affected by the general monetary policies of the Central Banks concerning their reserves, interest rates and also their supply of funds. On top of this, the uncertainties of the agricultural economy, the fact that farmers are generally unfamiliar with financial methods, and likewise that most people know little about agriculture, have not encouraged dynamic activities of multi-service banks in the agricultural sector.

This state of affairs has led to the setting-up of a host of specialized institutions in the farming community. The most widespread and important of these are unquestionably the cooperatives. Along with the farm credit cooperatives, we find government bodies and a few mortgage-loan establishments. In general, farm credit cooperatives provide every kind of credit needed by farmers. It is important to remember that the cooperative system has in many cases been set up with government assistance in the form of capital funds and help with their management. Many cooperatives are still under mixed management or supervised by public bodies.

Depending on the prevailing mentality or special conditions in their countries, some governments have preferred to set up their own farm credit organization, mainly to make up for the lack or scarcity of sources of long-term credit on conditions satisfactory for agriculture. In some cases, to avoid duplication, Treasuries have supplied special funds for long-term loans through existing institutions duly authorized to grant loans to farmers.

Non-institutionalized farm credit sources also play a role which one suspects to be relatively important without being able to estimate it precisely. For example, farmers are often owed money after they have handed over their farms to their successors. In the past, private rural lenders have also provided farmers with funds but this practice is apt to decline as alternative opportunities for investment increase. In addition, suppliers and dealers are active in the field of operating credit, which they make tempting to farmers through absence of formalities although their terms are more onerous.

The second feature of the farm credit system which calls for comment is the conditions attached to farm loans. One notices that, in all countries, the more a farm credit organization comes to resemble a commercial banking service, the more the conditions required of farmers are like those imposed on other sectors.

It is therefore surely fitting that we should ask ourselves whether the economic situation of agriculture will allow these conditions to be met. In view of the almost universal prevalence of government measures designed to make farm-loan terms easier, this would not seem to be the case. However, we should qualify this general conclusion by pointing out that the scope and aims of such measures vary considerably from one country to another. The following outline of farm loan conditions and government measures will help us to group the details of the farm credit system in industrialized countries.

The aforesaid conditions include amounts granted, security required, interest rates, and terms of repayment. These conditions partly affect the yield on farm capital, family income, capacity to borrow and repay and, of course, the possibilities of meeting needs for capital and financing.

In principle, the amounts lent should be in keeping with proven needs, capacity to repay and ability to surmount risks. In practice, many constraints often bring it about that the sums granted do not satisfy these criteria, for example: limited funds for granting farm loans, improvements in the terms of these loans, and overestimation of or inadequate protection against risks affecting the farming enterprise. These constraints are reflected in legislation or internal policy which, in many cases, result in loan maxima being set that are not in accordance with the three criteria just mentioned; this is particularly true for long-term loans. This situation would not be disastrous if farmers could count on several complementary sources of credit, but that is not often the case. In effect, sources of credit are in general mutually exclusive so that alternatives are non-existent.

The security required is in itself a bar to obtaining another loan of the same type. In fact, current practice is to judge a farmer's capacity to shoulder risks solely on the basis of the material security he can offer. If this requirement is too stringent, he is left without any security to offer to a supplementary lender. The systematic limiting of a farmer's borrowing capacity to the value of his material securities has many disadvantages. These disadvantages are aggravated if appraisals are made on a basis which tends to depart from true market value.

Farm credit interest rates are also the subject of lively controversy. This problem is doubtless due to the fact that agriculture has the reputation of not being able to yield a return on capital at a rate competitive with that obtainable from other sectors using the current market for capital. The problem is amplified when people start discussing the calculation of imputable costs, such as labour, which are difficult to measure precisely and evaluate in terms of opportunity cost. The confusion becomes total when profitability is likened to family income. However, this may be the estimates as a whole tend to point out a rather general weakness in the average profitability of farm organizations. This situation is not without increasing the dissatisfaction with and interferences on the interest rates applicable to farm loans.

Having discussed interest rates, we should like to consider another item of the loan conditions, namely repayment terms. A few years ago, it was easy to talk about long, intermediate and short-term loans and relate each type of specific purposes and securities. In fact, the terminology surrounding these different items was stereotyped. This terminology is now becoming increasingly confusing, which is a further indication of increased use of credit and more severe pressure on ability to repay. One often finds long-term and intermediate-term loans or intermediate-term and short-term loans grouped together, according to the usage adopted in different countries. It sometimes happens that the repayment terms for one class of loans come to resemble very closely those of another class. Beneath the stock terminology, the duration of long, intermediate and short-term loans varies greatly from one country to another and from one institution to another. Some long-term loans are repayable in seven years while others are in fact perpetual. Their commonest duration is around thirty years. Loans of such long duration certainly present disadvantages for credit institutions if the interest rate must remain unchanged. Thus, since interest rates have been keeping step with frequent economic fluctuations, many lenders are inserting a clause permitting periodic revision of the interest rate. Other lenders have chosen to shorten the duration of their loans.

This diversity of loan duration is also found at the intermediate - term level. It has been our experience in Québec with these loans that although their duration may be up to 10 years, we have found that most of them have in fact a much shorter duration. A single intermediate-term loan may not have much influence on the financial situation of a farming enterprise, but such borrowing has serious effects on ability to repay taking into account the number of such loans and the cumulative volume of the successive loans.

These conditions, generally prevailing in industrialized countries, are often modified by various measures by governments which directly intervene in the allocation of funds for farm loans. However, the fiscal effort of the public authorities does not stop there. In order to reduce fear of risks and encourage lending institutions to make loans, the favourite device of governments seems to be to assure the reimbursement to these lenders for the losses they may sustain, either through direct subsidies or by setting up a guarantee fund with them or unilaterally.

In a number of countries, governments have also sought to lighten interest charges on loans to certain farmers or for some specific purposes.

Finally, some governments intervene in farm financing by subsidizing part or all of the capital investment needed to buy items for farm production or to carry out certain land and building improvement projects that prove to be too expensive for the farmer.

Although not directly related to farm credit, this type of intervention does have considerable bearing on farm finance. Nevertheless, it is the least used method if we except the big infrastructure works which are usually financed out of public funds. In this last but not to be neglected class of investments, we find, in some countries, participation in the financing which is decentralized and may reach down to the individual farmer.

The picture we have just drawn may seem pessimistic to some people and indeed it would surprise us if it were otherwise since we have been particularly concerned to bring out the difficulties met with and the main problems created by farm financing in different countries in the face of the immense needs to be met. Unfortunately, the scope of our talk does not leave room for us to do justice to the numerous achievements of the many farm credit systems, they are none the less valid and impressive.

#### PART II - SOLUTIONS TO BE CONSIDERED

The foregoing analysis of farm financing is only meant to be a very general one (to say the least); indeed an exhaustive study of problems in this field appeared to us practically impossible for most countries. In submitting the following factors of solution to your attention, we shall keep very closely to this approach; that is to say our proposals will not necessarily apply to any one country in particular although of course they might apply to particular situations.

## (A) In Developing Countries

As their primary target, most developing countries have chosen the rapid and balanced growth of their economy and an equitable sharing of the increased per capita income derived therefrom. Agricultural development is planned to result from modernization of the traditional farming sector. How is the modernization of the traditional sector to be achieved? Here is what experts at the FAO think:

"The integrated institutional approach to agricultural and rural development arouses an interest which has been constantly increasing for the past twenty years. It consists in the view that, for a traditional subsistence agriculture to modernize itself, a certain number of external support factors, material means conditions and incentives must be in existence and accessible. Only then will the mass of small farmers consider it possible and profitable to adopt modern methods or change their traditional customs and attitudes:10

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FAO, Institutions agricoles en vue du développement rural intégré. Economie et Statistique agricoles, Vol. 20, No.9 Sept. 1971.

It is thus within such a framework that one can most effectively launch and ensure the formation of agricultural capital and assure its financing.

Such farm financing is an indispensable tool for achieving the modernization of a traditional agriculture. It will normally proceed by certain steps (agrarian reform being often considered a prerequisite, although some do not see it as an absolute necessity) and will precede certain others (advanced mechanization for instance). How is farm financing under the conditions of developing countries to be organized? Another FAO article recognizes this financing as a specific objective, namely:

"... the carrying into effect of the maximum capitalization rate for agriculture to allow financing other economic sectors while deriving enough capital to finance agricultural development an an adequate increase in rural living standards."11

We visualize this strategy on three facets. The first concerns the nature of the investments, the second, the mobilization of savings and the third, the organization of farm credit. As regards the nature of the investments, existing development programs do not all seem to be in agreement as to the priorities. After the manner of numerous observers and developers and with due regard for circumstances, we would be inclined to favour investments which make use of labour while saving on capital. For Nourredine Abdi, priority should be given to mobility of plentiful labour rather than to a mechanization which takes the place of labour.12 For this reason, as the Indicative World Plan mentions, great attention should be given to inputs conducive to high productivity and which can increase the returns from labour. As a general rule, farmers in developing countries can only buy such inputs with the help of credit.

Effectively operating farm credit systems will be assured, in the second place, by the amassing of savings on a solid basis. In fact the habit of saving predisposes people to a rational use of credit. As to the existence of this habit in developing countries, observers are not in agreement. Adams and Daubrey believe that

Szczepanik, E.F. Objectifs et financement du développement agricole. Economie et Statistique Agricoles. Vol.18, No.1, janvier 1969.

Abdi, N. Op. Cit.

there is a kind of rural saving but it is not always possible to mobilize it because it is used to pile up security and ostentation.13

How is saving to be encouraged while avoiding further such hoarding? A possible solution might be to harness existing forms of group saving (such a tontines and village mutual savings associations) to agricultural aims. Failing this, the actual presence, at least periodically, of persons responsible for collecting savings would be essential. A personal relationship between the saver and the collector would be considered indispensable to the confidence that must prevail when savings unions are being established.

Daubrey considers that, to begin with, the safety and liquidity of the deposits take precedence in the eyes of the saver, who will also be more influenced by interest rates once he has grasped the idea of the productivity of his savings.14

After that, the last facet of the strategy would be the organization of a system of farm credit. By means of a selective and temporary method of supply of inputs for agricultural production, a reserve of saving could be quickly amassed and become available for farm credit operations.

Here is what Professor Dell'Amore writes about farm credit systems: "There is no one system which is preferable in an absolute sense; moreover, even in the same country, the nature of a farm credit system will have to change in step with and in relation to social progress and the options open to economic and financial policy."15 However, for instance, parallel to a non-institutionalized system of credit, it will be necessary to organize sound agricultural finance institutions to stimulate competition in this field. Farm credit institutions must be tied in one way or another to rural savings collecting institutions in order to stop as far as possible the draining away of this money to other urban activities.

There are thus no absolutely predestined institutions whose mission is to take charge for farm credit operations. However, a number of experts agree that a channeling of farm loans through cooperatives already providing other services, through the extension services of agricultural departments and even through private lenders would make it possible to avoid costly duplication and provide loans which, to begin with, would be small and spread far and wide. With an intensification and a concentration, it is certain that specialized farm credit institutions will emerge.

Adams, D.W. Agricultural Credit in Latin-America: A critical review of external funding policy, Amer. J. Agr., Econ., Vol. 53, No.2, May 1971. Daubrey, La Mobilisation de l'épargne pour le financement du développement rural en Afrique. Ve Congrès mondial du crédit agricole.17-20 Sept. 1973 Milan.

Daubrey, A. Op. Cit.
Dell'Amore, Prof. Giordano., Op. Cit. p.86.

The birth of these institutions should be attended by the help of the government; indeed some authorities consider this the special responsibility of a Central Bank or equivalent body. A primary aim of the Central Bank should be the setting-up of financial institutions, including some in the agricultural sector, by means of technical and even financial assistance. According to Maka, the control of money and credit should be deferred till later.16

The introduction of a farm credit system into a developing country involves not merely meeting credit needs better, but also educating the farmer in judicious use of credit and training qualified personnel capable of directing farm credit operations. How is this double aim to be achieved? The process is already under way in many countries where it should be stepped up while, in others, it will be advisable to start it. The experiments in this field which have so far been fairly successful have taken the form of controlled or supervised farm credit. This type of credit is a branch of integrated development involving not only institutions but also the participation of the farmers themselves. Personal contact between farmers and credit officials effectively contribute to the education and training of both partners. Requiring much time and human resources, this method should be introduced on a limited scale at first, but will constitute a nucleus of proficiency calculated to ensure more widespread use later.

As regards the terms of farm loans, the great differences in economic situation and state of progress among farmers are so great that it would be difficult to propose blanket solutions. It will, however, be necessary to develop long and intermediate credit operations backed by a stock market and term deposits guaranteed and encouraged by government bodies like the Central Bank. At that stage, however, it would be unrealistic to recommend subsidization of interest on a large scale because government funds are subject to other priorities and the yield on loans is an indispensable safeguard for the survival of credit organizations. The opportunity cost of financial resources in developing countries, although very high at present, should decrease if adequate steps are taken to mobilize rural savings. Finally, in view of the securities required of farmers, credit bodies should stress increased production and returns by means of agricultural extension and management services and well-organized marketing.

## (B) In Industrialized Countries

The problem of farm financing is different in the industrialized countries. The relative share of agriculture in the overall economy of these countries is none the less vital even if the balance with the other sectors of activity is not always easy to obtain. The question is therefore to find the solutions which will cause the improvement of the farm sector and preserve a balance between the economic and social advantages resulting for agricultural activity.

Maka, D., Les Banques Centrales et le développement économique Agricain. L'actualité économique, No.2, juillet-septembre, 1969.

Those who are afraid that the set of values inherent in the family farm may disappear can take comfort in a recent report by P.M. Raup. According to this report, the family-size farm has its foundations not just at the sociological level but also at the economic level.17 Without minimizing the role left at the primary level of the agricultural sector to large corporations, we place, without hesitation, the family farm at the very heart of our concern in the search for answers to the farm financing problems.

If we are to succeed in setting up a farm financing system which will be adequate for improving the situation of farming enterprises, we must first bear in mind that these enterprises are very diversified and so are their needs. It is therefore not one solution but many that must be put forward to ensure the financing of farm transfers and the growth of farm organizations, to lighten the financial load of land and buildings and improve access to institutionalized credit sources.

In the rapid development that agriculture has undergone since the war, research and innovation have been mainly centered on production techniques; in recent years, however, much effort has gone into the management of the farm as an enterprise, although very little of this effort has been applied to the ownership and grouping farm. Many experiments are under way but the process of assessing and improving them has scarcely begun. Of these experiments and realizations, we should like to mention family-type farming partnerships and corporations. These certainly facilitate the handing-down and transfer of farm properties; but has the legislation governing enterprises of this type been adjusted to suit them to farming?

Furthermore, does not the large capital investment needed for land and building and which requires much of the farmer's funds and credit potential call for changes in the traditional notion of such ownership? Tenant farming is on the wane in most countries owing the legal restrictions on ownership rights which are incompatible with the long-term security required by the tenant farmer. Rental of part of a farm has been substituted for total tenant farming but is doubtless a transitory phenomenon. In the United States, Land Contracts are becoming increasingly common and this form of deferred purchase is without doubt feasible if the vendor's security is assured at the time of his retirement. But do not these ways of acquiring land-and-buildings capital merely postpone the problem of farm financing? Would we dare apply formulas which would allow the discount of land rent into a yearly income instead of the present system which capitalizes in a value realizable at the moment of the sale not only this land rent but also a part of the cultivation profits?

17

Raup, P.M., Corporate Farming in the United States. Staff Paper, p. 72-32. Dept. of Agricultural and Applied Economics, University of Minnesota.

A land-bank should also offer a feasible alternative to the problems involved in land tenure. In this regard, the fairly recent experience of the Province of Saskatchewan seems to us most encouraging. In this case, the farm belongs to a government body. "The Saskatchewan Land Bank Commission", which leases them, generally for a long period, at a rate set between 5% and  $6\frac{1}{2}\%$  of their market value at the time the lease is signed and as established at three-year intervals subsequently.

The zoning of arable land should also help to curb constantly rising prices of farms in certain areas especially on the outskirts of large urban centres. Legislation aimed at controlling use of farmlands appears to us an excellent step in this direction. British Columbia's experiment in this field, although brief as yet, is proving very interesting.

At any rate, there is no doubt that in order to meet needs for farm capital more adequately in this field, credit institutions must revise their underlying philosophy and keep closer to the main criteria we have already mentioned and which should normally govern the granting of loans in agriculture, namely; justification of the need, ability to repay, and capacity to overcome risks.

These institutions must seek the most effective ways of collecting savings in order that loans to farmers can be made on acceptable conditions. An Alberta report on farm finance reform said recently: "Judicious use of the money markets to raise funds will serve to obtain capital at minimum cost comparable to large corporations and at an unrestricted flow."18 So far, issuing of shares on the financial market by the United States farm credit system has met with much success. It remains to be seen whether all financial markets would prove capable of meeting agriculture's need for capital as efficiently. Another method rather like the one just mentioned would be to let the vendor buy shares in the credit institution. The property belonging to the new buyer would serve the institution as security for the shares. Whatever the solution, we very much doubt whether the public funds and rural savings which now finance many specialized credit bodies will any longer be sufficient to meet all needs in agriculture; we are rather inclined to think that it will be necessary to resort increasingly to a wider and multiple-purpose financial market.

But a farming enterprise needs large amounts of credit for many kinds of capital outlay at different stages of its existence. These consolidated elements require that sources of loans be as little scattered as possible in order to make the planning of all this borrowing easier. The farmer should be able to satisfy all his credit needs through the same lender so that his non-divisible material securities can, if necessary, serve for several loans and so that his repayments can be planned in accordance with his ability to repay and with the type of enterprise he is operating.

Jeffrey, H.B., and Roth, C.L., Financial Reforms for Agriculture, p.9 Policy and Liaison secretariat, Alberta, June 1973.

A harmonious Government-Private Lending Institution team could probably offer the ideal formula for this purpose by ensuring mutually complementary services by the two groups.

Our experience in Québec during the past ten years has been very conclusive especially in the field of intermediate-term credit. Slightly over 132,000 loans totalling nearly \$309 million were granted between January 1st, 1962 and March 31st, 1974 by chartered banks and savings and credit unions under the Farm Improvement Act. Under this Act, the Québec government reimburses lenders for losses and is authorized to reimburse 3% interest on the loans.

This formula seems to us particularly appropriate because it makes use of and, at the same time, aids the normal operations of existing structures while relieving private lending institutions of the burden of organizing and maintaining a parallel network of agricultural advisers such as is needed to operate in a field as complex as well as specialized as agriculture.

The changes undergone by agriculture during recent decades call for increasing demands on the skill of the head of a farming enterprise. Farm financing systems must adapt to these new requirements by attaching proper importance to the competence of farmers and their production and investment programs. Are not the commoner biological, climatic and even human hazards to which farming is exposed now covered by various kinds of insurance? Where such insurance does not exist, it should be introduced because it is an indispensable trump card in adequate farm financing. Credit institutions should be able to minimize other risks through a sound knowledge of agriculture and a thorough study of their files. Undoubtedly, dependence on material securities only may appear easiest and safest; but this attitude is unfavourable to agricultural development and even goes against the sense of dynamism and innovation which farming needs to meet today's imperative needs.

As for the burning question of interest rates, the solution does not appear to lie in the imposition of ceilings on lending institutions by governments. More often than not, this control mechanism does a dis-service to agriculture by limiting the volume and number of loans granted. There are other ways to control and encourage lending to farmers at rates they can afford. Another way, for example, would be recourse in certain cases to the financial market through the issuing of bonds guaranteed by the government. One thing is certain however, a farmer who goes to his bank to borrow is usually not in a position to contract a loan at the current interest rate like an ordinary consumer. Nor can he agree to uncertain or too widely fluctuating interest terms as might an enterprise with a faster capital turnover.

Finally, what role can governments play to help solve the problems of agricultural financing? We believe that those with limited financial, recourses will have to set their own priorities, but that most of the public funds available for agriculture should be used primarily for basic investments with a longer-term pay-off. Next, funds should be used for reorganizing marginal agriculture, i.e., what is called social financing, because no other economic agency will concern itself with this section of the rural community. Governments should provide this class of farmers with the financial means to reach a viable level where they will be able to fend for themselves, or with other social means to get out of agriculture. Lastly, the remaining part of the resources earmarked for agricultural financing should be used as wisely as possible to ensure maximum benefit from the agricultural financing system.

A model for government action in this field would be the settingup of special financing mechanisms (such as already exist in some countries) which would enable farming enterprises to cope with crisis resulting from sudden and uncontrollable drops in the sale prices of farm products or from any natural disaster.

Other types of direct intervention should be used after mature consideration and be designed to fit into the overall farm financing scheme. For example, a government guarantee against losses will likely help to lower interest rates and make lending institutions less demanding as regards material securities.

As for the subsidization of interest and capital, its effect in the farm financing system as a whole is hard to assess. We believe that such measures should primarily constitute incentives to encourage farmers to weather particular situations, i.e., steps likely to remedy transitory imbalances or adverse economic conditions.

#### CONCLUSION

We are acutely aware of not having exhausted our subject; in fact, it was not our intention to do so. We would be satisfied if we have helped to bring out some queries about the financing of farm organizations and succeeded in suggesting some material for a solution or even simply encouraged reflection on this vast and complex matter.

There is certainly no single solution to the problems set by the financing of agricultural enterprises all over the world. One must think rather in terms of a whole bundle of solutions even though, when all is said and done, all of them will largely depend on the extent to which current financial resources and investments can be transferred between the agricultural sector and the rest of the national economy.

In the case of any one country, it is necessary to take into account the economic situation, the actual and the desirable degrees of development in different sectors, and the volume, terms and conditions of external aid, etc. We must also bear in mind that, besides this general economic context, there is another one just as complex, at the level of the individual farms, which is a reflection of their technological and economic development and the competence of the head of the farming concern, we have in mind, the vast field of farm management.

With the help of concerted research by all concerned in the financing of farming enterprises, backed by a common determination in the face of the imperatives we are faced with and with the assurance born of a common will in the pursuit of our aims, we should be able to bring about the reforms that command our attention.

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