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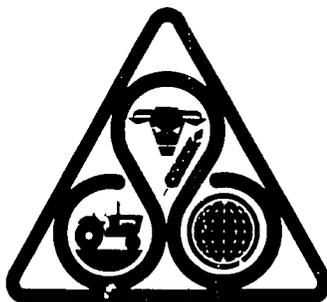
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Mobilizing Household Savings
Through Rural Financial Markets*

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Mobilizing Household Savings through Rural Financial Markets*

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Introduction

There is general agreement that in early stages of development most low-income countries must rely heavily on agriculture for capitalizing their economies. Much less agreement is found on questions about the magnitudes of agricultural savings capacity and on how surpluses can be mobilized most efficiently. Only a handful of countries have stressed mobilization of voluntary household savings through rural financial markets. In part, policymakers have ignored these savings because of widely held assumptions about rural household saving behavior. It has been assumed that these households are too poor to save and that those which do acquire additional income spend the windfalls on consumption or ceremonial sprees.

It will be argued that these assumptions are incorrect, that substantial voluntary rural household savings capacities exist, and that household savings are strongly influenced by rural financial markets. The discussion opens with remarks about the importance of household savings, a brief outline of the household decision-making process which determines savings behavior, and a few comments on how rural financial markets relate to household behavior. This is followed by a review of evidence on the extent of rural household savings capacities. The discussion concludes with an examination of the benefits which result from mobilization of voluntary rural financial savings and a few suggestions on savings mobilization strategies.

Household Savings Decision

Relatively little is known about rural household savings in low-income countries. Exacting data requirements, the large number of heterogeneous decision-making units involved, the complexity of the household decision-making process, and inadequate theoretical models of household saving

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behavior have hindered analysis. In most studies, household savings are ignored, and emphasis is placed on government, corporate, and aggregate savings performances.¹ It is easy to overlook the fact that household savings make up the largest part of aggregate savings in market-oriented economies. An ECAFE study of seven countries in Asia, for example, showed that household savings made up one-half to two-thirds of total savings.² Recently, several economists have argued that household savings, as well as aggregate savings, may be closely related to financial market policies.³ They argue that financial markets influence the forms in which savings are expressed, as well as the total amount of potential consumption which is diverted to savings. This influence can be better understood after the various dimensions of the rural household decision-making processes are clarified.

A large number of studies have been done on farmers' production activities and on rural household consumption and household investment-savings activities. In most cases, however, the farm-firm and the household are studied independently. Only a few researchers have attempted to develop an integrated model of the farm-firm and the household.⁴ An integrated model must include at least three interrelated sets of activities: production, consumption, and savings investment. The production activities (P_i) may be carried out within the farm-firm, in some nonfarm enterprise owned by the household, or within the household itself. Some of the inputs which go into these production activities may be supplied directly by the household, others may be purchased with the household's own financial resources, while still others might be purchased with borrowed money or received through barter. The selection of a particular production activity and associated inputs will largely depend on the resource endowment of the firm-household and profit potentials.

A complex set of consumption activities (C_i) takes place along with the P_i . Some of the goods consumed may be drawn directly from the

¹ Allen C. Kelley and Jeffrey C. Williamson, "Household Saving Behavior in the Developing Economies: The Indonesian Case," *Economic Development and Cultural Change* 16 (April 1968): 385-403.

² United Nations, ECAFE, *Economic Bulletin for Asia and the Far East* 13, no. 3 (December 1962): 1-12.

³ For example, see Ronald I. McKinnon, *Money and Capital in Economic Development* (Washington, D.C.: Brookings Institution, 1973); Edward S. Shaw, *Financial Deepening in Economic Development* (New York: Oxford University Press, 1973); U. Tan Wai, *Financial Intermediation and National Savings in Developing Countries* (New York: Praeger Publications, 1972); and Hugh T. Patrick, "Financial Development and Economic Growth in Underdeveloped Countries," *Economic Development and Cultural Change* 14 (January 1966): 174-89.

⁴ For example, see Toshiyuki Mizoguchi, "An Econometric Comparison of Farm Households: Economic Behavior in Japan, Korea and Taiwan," *Developing Economies* 11 (September 1973): 231-43; and Chihiro Nakajima, "Subsistence and Commercial Family Farmers: Some Theoretical Models of Subjective Equilibrium," in *Subsistence Agriculture and Economic Development*, ed. Clifton R. Wharton, Jr. (Chicago: Aldine Publishing Co., 1969), pp. 165-85.

P_i . Additional goods may be purchased with owned or borrowed money, while still other consumption goods may be received in exchange for products or services. Some of the benefits from C_i , such as education, health expenditures, and acquisition of consumer durables will be realized by the household over several time periods; the C_i may include a savings-investment component. Overall, the C_i are limited by the amount of income generated by the P_i , earnings from assets not involved in P_i , the wealth position of the household, and the ability of the firm-household to borrow.

The firm-household's savings-investment activities (S_i) may be fewer in number, but more complex than either the P_i or the C_i . The complexity is due to the uncertainties associated with the stream of future income expected from the savings investments. A number of these S_i are involved in the P_i : investments in durable inputs such as land, land improvements, irrigation facilities, tractors, livestock, and buildings; savings directed toward expanding operating expenses of the firm; and investments made in nonfarm production activities. Savings can also be expressed in various types of financial forms or nonproductive assets. The exact makeup of the S_i portfolio held by the household will depend on household preferences, the security, liquidity, and availability of the particular S_i , and the expected net rates of return from the S_i .

The dimensions of the firm-household's decision-making process are easy to specify, but the interactions between the various dimensions over time are difficult to quantify when a number of P_i , C_i , and S_i change together. For example, the effects on household decisions of a real increase in interest rates paid on financial savings are hard to sort out when household incomes move up and down, rates of return on P_i and other S_i may be jumping around, and attractive new C_i may become available to the household. In addition, the makeup of the household may be changing substantially. This is further complicated by the fact that causal relationships between some elements in the various dimensions may run two ways: for example, increases in household income cause some C_i to increase, while the availability of new attractive consumer durables such as refrigerators, motorbikes, radios, and television sets may induce a household to work longer hours to generate the income to purchase same. Despite these messy methodological problems, one would expect to find a close inverse relationship, other things being equal, between the average rates of return the household expects to receive from its S_i and the proportion of income allocated to the C_i .

Role of Rural Financial Markets

Rural financial markets (RFMs) may influence household behavior in several ways. On the one hand, RFMs may augment the household's liquidity pool through credit.⁵ This additional liquidity allows the firm-

⁵ John A. Hopkin, Peter J. Barry, and C. B. Baker, *Financial Management in Agriculture* (Danville, Ill.: Interstate Printers, 1973), p. 138.

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household to use more inputs in the P_i and may increase the net income of the household from these activities. This increased income expands the household's savings capacity. The additional liquidity also allows households to maintain consumption which would otherwise be disturbed by uneven income flows. Credit further allows households to make lumpy purchases of consumer durables and large productive capital goods. When negative real rates of interest are charged on loans, the household may also receive an income transfer through the borrowing process.

On the other hand, RFMs may provide the households with additional S_i by offering various types of financial savings instruments. If these instruments provide positive real returns to the household, they may induce the household to convert some of its excess liquidity into financial savings. This may increase the average rate of return realized by the household on its savings portfolio and induce the household to divert more of its income to S_i .

Evidence on Rural Savings Capacities

At this point, two major questions might be raised. The first is, How strong is the relationship between the rates of return expected on various S_i , especially on financial S_i , and consumption decision in the household? Unfortunately, there is little quantitative evidence available on these relationships. The second question is, Do rural households in low-income countries have a significant savings capacity? Although sketchy and scattered, some data are available to answer this question. Information on average propensities to save of rural households in five countries follows. Additional information on rural savings behavior from a few other countries is also summarized.

Taiwan Evidence

Recently completed studies in Taiwan provide a review of rural savings capacities during the past decade and a half. Three factors make these data useful. First, high quality, detailed information is available on rural firm-household C_i , S_i , and P_i . Second, analysis is facilitated by significant changes in income and consumption among rural households over the past several decades. Third, Taiwan has promoted a voluntary savings mobilization program which included major interest-rate adjustments. Over the period 1953-1970, the real rates of interest paid on time deposits were negative in only 2 years, 1953 and 1960. That is, the nominal interest rate paid on deposits generally exceeded the rate of inflation. Savers could expect to receive a positive real rate of return on their time deposits of 5-6% over the 1953-1970 period.⁶ These attractive interest rates drew

⁶ See the following for more details on Taiwan's interest rate policies: Chyau Tuan, "Determinants of Financial Savings in Taiwanese Farmers' Associations, 1960 to 1970" (Ph.D. diss., Ohio State University, 1973); and R. J. Irvine and R. F. Emery, "Interest Rates as an Anti-Inflationary Instrument in Taiwan" *National Bank Review* 4 (September 1966): 29-39.

substantial savings deposits into farmers' associations and postal savings facilities. From 1954 to 1970, the value of financial deposits in farmers' associations increased from the equivalent of less than US\$6 million to over US\$124 million. The deposits in the associations at times exceeded the value of loans made, and funds were transferred to other parts of the economy through financial channels.⁷

The average propensities to save (APS) shown in table 1 are drawn from very reliable data collected by a farm record-keeping project in Taiwan. The households included in the project have incomes and farm sizes somewhat larger than the average Taiwanese farmer.⁸ The resulting upward bias in APS was partially offset by defining purchases of all consumer durables and expenditures on health and education as current consumption. It can be noted in table 1 that the APS for all households ranged from 0.19 to 0.31 over the 1960-74 period. (The APS is defined as the ratio formed by subtracting the total annual value of household consumption from total net household income and dividing by total net household income.) The APSs among even the smallest farm size groups were large.

Additional analysis of these farm records also showed that household

TABLE 1
APS OF FARM RECORD-KEEPING HOUSEHOLDS IN TAIWAN
BY FARM SIZE GROUPS, 1960-74*

Farm Size Groups	1960	1962	1964	1966	1968	1970	1971	1972	1973	1974
.5 hectares or less†	.03	.09	.09	.19	.19	.15	.08	.19	.21	.17
.5-1.0 hectares	.15	.17	.22	.16	.23	.14	.16	.16	.23	.26
1.0-1.5 hectares	.14	.20	.27	.25	.25	.20	.23	.16	.27	.31
2.0 hectares or more	.27	.25	.29	.38	.36	.26	.24	.32	.28	.39
Average all households	.19	.21	.23	.28	.28	.20	.19	.23	.27	.31
Total no. of households	95	233	535	430	416	404	347	452	460	461

SOURCE.— Department of Agriculture and Forestry, Provincial Government of Taiwan, *Report of Farm Record-Keeping Families in Taiwan*, various years 1960-74 (Nantou: Department of Agriculture and Forestry, Provincial Government of Taiwan).

* The APS is equal to one minus the ratio of total household consumption to total net household income.

† One hectare equals 2.47 acres.

⁷ For more details, refer to Dale W Adams, H. Y. Chen, and C. Y. Hsu, "Rural Capital Markets and Small Farmers in Taiwan, 1952-1972," in *Small Farmer Credit in East Asia*, A.I.D. Spring Review of Small Farmer Credit, vol. 11 (Washington, D.C.: Agency for International Development, 1973).

⁸ Refer to the following for more income and consumption details on these households: Marcia Min-ron Lee Ong, "Changes in Farm Level Savings and Consumption in Taiwan, 1960-1970" (Ph.D. diss., Ohio State University, 1972); and Dale W Adams, Truong Q. Canh, and Lien-In A. Chin, "Changes in Rural Purchasing Power in Taiwan, 1952-1972," *Food Research Institute Studies* 14 (1975): 127-45.

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savings were related to rates of return on farm assets.⁹ Households saved more when they had profitable investment possibilities.

Japanese Evidence

Although currently not a low-income country, Japanese rural household data do provide additional insights into savings behavior of small farm households. As Kato has shown, since the early 1920s, agricultural cooperatives in Japan have mobilized financial savings well in excess of the amount of agricultural loans extended by the cooperatives.¹⁰ A large part of these excess funds moved out of the rural sector through financial markets.

The APS shown in table 2 were calculated from data collected annually by the Japanese Farm Household Economy Survey. (The ratios shown are total disposable household income minus gross household expenditures divided by total disposable household income.) Because of the surveying techniques used, household income is probably underreported. The ratios are, therefore, conservative estimates of actual household savings capacities. Despite this, the APSs for the average household from 1950 to 1973 ranged from 0.10 to 0.22. After 1960, the savings of households with very small farms increases, in part because of the rapid increase in household income from off-farm sources.

Other household studies of rural consumption-savings in Japan confirm the APSs given in table 2.¹¹ Without exception, these studies show that rural households in Japan have had high average, as well as marginal, propensities to save. These studies also indicate that incentives played an important role in stimulating these savings.

Korean Evidence

In September 1965, the Korean Monetary Board approximately doubled the rates of interest applied to loans and time deposits. Nominal interest rates on time deposits were raised to 30%. As a result, real rates of interest in excess of 8% were paid on financial savings from 1965 to 1971.¹² This financial reform resulted in large increases in financial

⁹ See Truong Quang Canh, "Income Instability and Consumption Behavior: A Study of Taiwanese Farm Households, 1964-1970" (Ph.D. diss., Ohio State University, 1974).

¹⁰ Yuzuru Kato, "Mechanisms for the Outflow of Funds from Agriculture into Industry in Japan," *Rural Economic Problems* 3 (December 1966): 1-20.

¹¹ For example, see Tuvia Blumenthal, *Savings in Postwar Japan* (Cambridge, Mass.: Harvard University Press, 1970); Toshiyuki Mizoguchi, "Consumption Functions and Savings Functions for the Japanese Farmer's Families in the Post-War Japan," *Rural Economic Problems* 4 (December 1967): 20-35; Tsutomu Noda, "Savings of Farm Households," in *Agriculture and Economic Growth: Japan's Experience*, ed. Kazushi Okawa, Bruce F. Johnson, and Hiromitsu Kaneda (Tokyo: University of Tokyo Press, 1970), pp. 352-73; and Miyohei Shinohara, "The Structure of Savings and the Consumption Function in Postwar Japan," *Journal of Political Economy* 67 (December 1959): 589-603.

¹² Additional details on this policy change are provided by Gilbert T. Brown, *Korean Pricing Policies and Economic Development in the 1960's* (Baltimore: Johns Hopkins Press, 1973).

savings. Total time and savings deposits in all banks jumped from only 39 billion in 1964 to 366 billion won in 1968.¹³ Financial deposits in agricultural cooperatives increased at about the same rate.¹⁴ The number of savings accounts also increased sharply during this period.

Rural household savings behavior in Korea has not been analyzed in detail, but some interesting information is available. The data in table 3 were drawn from annual farm household surveys carried out by the Ministry of Agriculture and Fisheries. Again, the figures shown in the table are APSs calculated by dividing total farm household net surplus by total net household disposable income. As can be noted in the table,

TABLE 2
APS OF FAMILIES IN THE JAPANESE FARM HOUSEHOLD ECONOMY
SURVEYS BY FARM SIZE GROUPS, 1950-73*

Farm Size Groups	1950	1955	1960	1965	1970	1971	1972	1973
.5 cho or less† . . . . .	.04	.07	.10	.14	.16	.17	.19	.23
.5-1.0 cho . . . . .	.07	.08	.08	.14	.14	.15	.18	.19
1.0-1.5 cho . . . . .	.10	.12	.11	.16	.14	.12	.19	.21
1.5-2.0 cho . . . . .	.13	.14	.13	.20	.14	.12	.16	.21
2.0 cho or more . . . . .	.16	.15	.17	.24	.19	.13	.24	.23
Average all households . . . . .	.10	.10	.11	.16	.15	.15	.19	.22
Total no. of households	5,306	5,666	5,781	17,002	10,460	10,307	10,380	10,439

SOURCE.—Ministry of Agriculture and Forestry, *Farm Household Economy Survey*, vol. 1, 1974; and *Annual Report for Farm Household Economy Survey* (1973), Ministry of Agriculture and Forestry, Tokyo, 1975 (in Japanese).

* The APS equals total disposable income minus gross household expenditures, including depreciation on households capital goods divided by total disposable income.

† One cho is equal to approximately one hectare or 2.47 acres.

TABLE 3
APS OF FAMILIES IN KOREAN FARM HOUSEHOLD ECONOMY
SURVEY BY FARM SIZE GROUPS, 1962-74*

Farm Size Groups	1962	1965	1966	1968	1970	1971	1972	1973	1974
.5 cheongbo or less† . . . . .	.05	-.05	.01	.06	.03	.17	.02	.15	.22
.5-1.0 cheongbo . . . . .	.12	.01	.09	.11	.13	.24	.21	.19	.29
1.0-1.5 cheongbo . . . . .	.16	.06	.10	.20	.16	.34	.34	.27	.35
1.5-2.0 cheongbo . . . . .	.15	.12	.13	.23	.26	.35	.30	.34	.43
2.0 cheongbo or more . . . . .	.22	.13	.23	.24	.19	.47	.30	.40	.40
Average all households . . . . .	.15	.04	.11	.16	.15	.29	.24	.26	.33
Total no. of households	1,163	1,172	1,180	1,181	1,180	1,180	1,182	1,170	2,515

SOURCE.—Ministry of Agriculture and Fisheries, Republic of Korea, *Report of the Results of Farm Household Economy Survey*, various years 1962-75, published yearly by the Ministry of Agriculture and Fisheries, Seoul.

* The APS equals total farm household net surplus/total net disposable income.

† One cheongbo equals 0.992 hectares or 2.45 acres.

¹³ Economic Planning Board, Republic of Korea, *Korea Statistical Yearbook 1969* (Seoul: Economic Planning Board, 1969), p. 342.

¹⁴ Robert B. Morrow and Paul E. White, "Farm Credit in Korea," in *Small Farmer Credit in East Asia* (1969, p. 7).

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the average APS for all households ranged from 0.04 in 1965 to 0.33 in 1974. As in the Taiwanese and Japanese data, APSs among households with small farms were surprisingly large. It is particularly noteworthy that APSs increased substantially from 1965 to 1974. Part of this increase was undoubtedly due to expanded incomes and farm policies which increased the returns to on-farm investments. It is also likely that part of the increased saving was due to the more attractive incentives provided by financial markets.

Malaysian Evidence

A cross-sectional study of household savings activities carried out in the mid-1960s in West Malaysia provides some additional evidence on rural savings capacities. Approximately 60% of the 5,147 households surveyed were in rural areas. Although the survey techniques used probably resulted in underreporting of incomes, the APSs shown in table 4 suggest that significant savings capacity exists among the surveyed rural households. It further shows that APSs increase rapidly among farm operators and fishermen as their incomes increase.

Indian Evidence

A large number of the studies on rural savings have been done in India.¹⁵ In general, they show smaller savings capacities than noted for Taiwan, Japan, and Korea. This is due, in part, to lower per capita incomes in

TABLE 4
RURAL HOUSEHOLD SAVINGS (APS)* IN WEST MALAYSIA BY
OCCUPATION AND INCOME LEVEL GROUPS

ANNUAL INCOME GROUPS	OCCUPATIONAL GROUPS			
	Farm Operators and Fishermen	Rural Employees	Mixed Operators and Employees	Rural Businessmen
Less than \$3,000† . . . .	.01	.07	.08	.06
\$3001-\$10,000 . . . . .	.12	.06	.43	.16
More than \$10,000 . . . .	.46	...	...	...
All income groups . . . .	.06	.07	.12	.13
Total no. of house- holds	1433	1433	87	84

SOURCE.—Lee Hock Lock, *Household Saving in West Malaysia and the Problem of Financing Economic Development*, Monograph Series on Malaysian Economic Affairs (Kuala Lumpur: Faculty of Economics and Administration, University of Malaya, 1971), pp. 54-57.

* Total household savings divided by total household net income.

† Expressed in Malaysian dollars. In 1970, M\$3.09 = U.S.\$1.00.

¹⁵ For example, refer to P. G. K. Panikar, *Rural Savings in India* (Bombay: Somaiya Publications, 1970); Balbir S. Sahni, *Savings and Economic Development* (Calcutta: Scientific Book Agency, 1967); *Indian Economic Journal* 17 (1970) and *Indian Journal of Agricultural Economics* 30 ([July-September 1975]: 1-82), which have a number of articles on household savings.

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studies of 239 households in Zambia.¹⁷ Households were visited on a regular basis over a 2-year period, and detailed accounts were kept on important economic activities. On the average, these accounts showed that the rural households included in the study were saving more than 30% of their income.

Several years ago, coffee cooperatives in Kenya began to deposit members' receipts from sales of coffee in unblocked savings accounts.¹⁸ The leaders of the cooperatives have been very surprised by the large amounts which have been left on deposit for long periods. Recently, deposits in these cooperatives substantially exceeded the volume of funds lent by the cooperatives. Success in developing rural savings clubs in Zambia, Lesotho, Rhodesia, and Malawi and mobilization of savings through postal savings, savings banks, and credit-savings unions in many parts of Africa provide further evidence on rural savings capacities.¹⁹ A recent study of household consumption-savings in a rural area of Ethiopia showed APSs ranging from 0.11 to 0.14.²⁰ The author of this study stresses that these are conservative estimates of savings since household incomes in the study were likely underreported.

Advantages from Voluntary Mobilization of Rural Savings

At this point, a skeptic might argue that, even if some voluntary savings capacities do exist in rural areas, they are too costly to mobilize via financial markets and other resource mobilization techniques are more efficient. There are at least three strong reasons for stressing voluntary rural financial savings. The first reason is that they may be important to overall strengthening of financial markets. Until recently, most economists assumed that financial markets played a neutral role in development. This view recently has been challenged, and some economists have concluded that proper financial policies can provide some fundamental developmental pulses.²¹

A second reason is that mobilization of financial savings might play an important part in strengthening local service organizations. For a number of years many less developed countries (LDCs) have tried to bridge the institution gap in rural areas between national service organiza-

¹⁷ For further details, see R. A. J. Roberts, "The Role of Money in the Development of Farming in the Mumbawa and Katete Areas of Zambia" (Ph.D. diss., University of Nottingham, 1972).

¹⁸ Reported by J. D. von Pischke, "Farm Credit in Kenya: The Poor Farmer Paradox," unpublished study (Nairobi: Institute for Development Studies, University of Nairobi, September 10, 1973).

¹⁹ See C. J. Howse, "Agricultural Development without Credit," *Agricultural Administration I* (1974): 259-62; and Giordano Dell' Amore, *The Mobilization of Savings in African Countries* (Milan: Cassa di Risparmio delle Provincie Lombarde, 1971).

²⁰ Johan Holmberg, "Survey of Consumption Patterns in Etheya Extension Areas," CADU Publication no. 90 (Addis Ababa: Chilalo Agricultural Development Unit, October 1973), p. 96.

²¹ See Brown, McKinnon, Patrick, Shaw, and Wai.

rural areas of India. One might also argue that rural people in India have less incentives to save: on-farm investments in many areas yield low returns, and badly fragmented financial markets do not offer savers positive real rates of return.

Despite these less favorable savings conditions, information from studies in the Punjab of India show that savings capacities rapidly expanded there during the late 1960s. Table 5 gives APSs for a group of 180 farm households in two districts of the Punjab for four crop years, 1966-70. These are prosperous areas which benefited substantially from changes in agricultural technology during the 1960s. As can be noted, the average household saved or invested 12%-37% of its income. In some years, savings capacities among even the smallest farm size groups were quite high.

On the basis of household level studies in another state of India, Desai and Desai found very substantial savings in households experiencing income increases.¹⁶ They report marginal propensities to save of .29 and .63 for two groups of rural households.

Other Evidence

Bits and pieces of information from a handful of other countries support the conclusion that significant amounts of voluntary savings capacity exist in rural areas of low-income countries. During the latter part of the 1960s, for example, the University of Nottingham did intensive case

TABLE 5
APS OF 180 FARM HOUSEHOLDS IN TWO DISTRICTS OF PUNJAB
BY FARM SIZE GROUPS, 1966-67 THROUGH 1969-70*

FARM SIZE†	LUDHIANA DISTRICT				HISSAR DISTRICT			
	1966-67	1967-68	1968-69	1969-70	1966-67	1967-68	1968-69	1969-70
Small.....	.02	.06	.06	.17	.01	.09	.34	.34
Medium.....	.17	.23	.30	.26	.21	.21	.38	.36
Large.....	.18	.22	.28	.25	.09	.17	.37	.31
Average.....	.14	.20	.25	.24	.12	.18	.37	.34
Total no. of households.....	72	72	72	72	108	108	108	108

SOURCE.—A. S. Kahlon and Harbhajan Singh Bal, "Factors Associated with Farm and Farm Family Investment Pattern in Ludhiana (Punjab) and Hissar (Haryana) Districts, 1966-67 through 1969-70," unpublished report (Ludhiana: Department of Economics and Sociology, Punjab Agricultural University, n.d. [ca. 1971]), p. 116.

* APS is the ratio of net farm family savings and net farm family income.

† In Ludhiana, small units had less than 3.5 hectares, medium-sized units 3.5 to 6.0 hectares, and large units more than 6 hectares. In Hissar, small units had less than 4 hectares, medium-sized units 4 to 8 hectares, and large units more than 8 hectares. One hectare equals 2.47 acres.

¹⁶ B. M. Desai and D. K. Desai, "Potentialities for Mobilizing Investible Funds in Developing Agriculture," unpublished study (Ahmedabad: Centre for Management in Agriculture, Indian Institute of Management, 1971).

tions and the individual by building cooperatives and farmers associations. It is fortunate that these local organizations have been "biodegradable"; otherwise, the landscape in most LDCs would be littered with defunct cooperatives and farmers' associations. Despite some modest success in a few countries, the experience with building these intermediate service organizations has been very disappointing. These organizations often have been asked to provide financial services, mainly credit, to their members. Typically, these loans are granted at concessional rates of interest. These rates are almost always below the opportunity costs of capital in the economy, below the going commercial rate of interest in the money market, and often below the rates charged on regular agricultural loans made by banks. Further, in a number of cases, the rates of interest which these organizations are allowed to charge are well below the rate of inflation. These concessional interest rates weaken the intermediate organization in several ways. The availability of concessionally priced credit, for example, makes the intermediate organization vulnerable to intrigue.²² Low interest rates force intermediate organizations to ration "bargain credit." These nonmarket rationing decisions are highly vulnerable to various types of personal influence, political persuasion, and outright corruption. In addition, concessional interest rates on credit almost always force an intermediate organization to concentrate its loans in the hands of relatively few borrowers. Part of this is due to intrigue, but part is also due to internal financial pressures. With excess demand for loanable funds at concessional interest rates, agencies minimize lending costs by concentrating loans in the hands of relatively few borrowers. The lament that the large farmer captures most of the concessionally priced cooperative credit can be heard around the world.

The intrigue and the loan concentration process have obvious deleterious effects on the willingness of those who do not receive the bargain credit to participate in the intermediate organization. Further, concessional interest rates on credit make it next to impossible for intermediate organizations to maintain, let alone expand, the real value of loanable funds. This is due to capital erosion caused by inflation and the inability to offer sufficient interest-rate incentives to induce members to deposit funds voluntarily in the organization. These two factors seriously undercut the ability of an intermediate organization to expand and integrate itself into national financial systems. Cooperatives and farmers associations are forced to live the uncertain life of a medicant whose sustenance must come from beneficent central banks or foreign aid agencies. Mobilization of voluntary savings might allow these intermediate organizations to develop a much larger degree of independence and self-sufficiency.

²² For further discussion, refer to Claudio Gonzalez-Vega, "Interest Rate Policies and Small Farmer Credit Programs in LDC's," *Small Farmer Credit Analytic Papers*, A.I.D. Spring Review of Small Farmer Credit, vol. 19 (Washington, D.C.: Agency for International Development, 1973).

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A third major reason for mobilizing financial savings is the favorable impact it has on discouraging household consumption. The incentives to save provided by financial markets are strong inducements for households to defer consumption. It is little wonder that financial institutions in rural areas of Colombia, Bangladesh, the Philippines, Kenya, and Ethiopia, for example, attract very few savings deposits when they offer negative real rates of interest on deposits. These rates encourage, rather than discourage, consumption.

A Savings Mobilization Strategy

If financial markets are to play a positive role in the resolution of rural poverty, fundamental changes in policies in most low-income countries will be necessary. Current policies are resulting in badly fragmented financial markets, in concentration of concessionally priced credit in the hands of relatively few people, in unprofitable financial operations in many rural cooperatives, and in little or no incentive for rural households to defer consumption. Overall, these financial policies are very regressive: the relatively well-off benefit from the concessionally priced credit, and the poor are denied access to production credit as well as remunerative savings instruments. Furthermore, perpetuation of fragmented financial markets results in too little honest competition between formal and informal financial markets. Under these conditions, some informal credit sources are able to continue to extract monopoly profits from small borrowers who are denied access to formal markets. A rationalization of financial market policies combined with aggressive savings mobilization programs would eliminate part of these undesirable features.

A savings mobilization effort should be carried out at two levels. Some changes must be made at a national level before substantial voluntary savings can be mobilized. In general, these changes include a more flexible interest-rate structure. Where rates of inflation are above 15%–20% per year, savings instruments might be value linked so that the savings principal is tied to price adjustments. Additional inducements might also include tax exemptions on interest payments made on certain kinds of savings deposits.

It is often necessary to institute legal changes so that cooperatives and other local organizations legally can handle credit and savings activities. In some cases it might also be necessary to adjust some laws and administrative procedures so that local organizations can be integrated into regular financial markets. Bonding services for employees who handle financial activities would also be helpful. In addition, nationwide deposit insurance programs such as currently found in the United States, the Philippines, and Uganda are needed to assure savers of secure deposits.

At this point, a reader might comment that raising interest rates are great in theory but politically impossible to carry out. Some politicians

view concessionally priced credit as a way of buying political support. They forget, however, that cheap credit policies lead to cheap savings policies and, further, that only those who receive concessionally priced credit benefit. More votes will be positively influenced by high rates of return on savings deposits, combined with wider availability of credit, than will be bought by concessionally priced credit which is given to only a few.

Where at least part of the above-mentioned conditions are present, savings mobilization programs can be initiated. Fortunately, many of the less developed countries have at least a partial set of institutions already in place which can handle financial savings. In many countries, including the Dominican Republic, Costa Rica, the Philippines, India, and Bangladesh, a number of banks already provide financial services in many rural areas. Postal savings offices, cooperatives which handle credit, and credit-savings unions dot much of the landscape in many other parts of the less developed world. A local savings mobilization effort, therefore, need not concern itself primarily with constructing new financial institutions. Initially, major emphasis should be placed on getting a balanced and economically sound set of financial activities in the institutions which already exist.

The exact makeup of savings mobilization programs will vary from area to area. These programs might include various combinations of the following components; in some cases, various types of forced savings programs may already be underway or appropriate to initiate. Required share purchases in an organization, compensatory balances, regular contractual savings, and even depositing cash receipts in an unblocked savings account may be stressed in the start-up phase of a savings mobilization program. The mobilization efforts, however, should begin early to stress voluntary savings incentives. If the Taiwan, Korean, and Japanese experiences are representative of what might occur under proper conditions, these voluntary savings should make up the bulk of the savings mobilized.

The key element in a savings mobilization program is the attractiveness of the reward paid on savings. Convenience, liquidity, and security of the savings, however, strongly complement the return paid. Wherever legal, lottery schemes can be attached to savings deposits to promote additional interest in voluntary savings. A large number of countries, including Egypt, Sweden, Tunisia, Colombia, Russia, El Salvador, Iran, France, and India, have some type of drawing associated with savings accounts. Cash as well as merchandise bonuses can also be provided to depositors. In a few cases, a life insurance option tied to savings deposits will also strengthen the incentive to save. This has been a popular feature in some credit-savings cooperatives in Latin America.

Any savings mobilization effort will work better where rapid agricultural growth and increasing rural incomes are occurring. A national savings program should, therefore, initially stress savings promotion in

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areas where agriculture is on the move. Above all, regardless of where the program is started, it should be strongly supported and promoted. This includes rewards and recognition for successful organizations and managers.

A Concluding Comment

Development from below appears to be the only way to reach rural poor effectively. The savings program briefly outlined above might be a first step in a bootstrap approach to rural development in low-income countries. It would stimulate rural poor to increase their own capital base, it would provide a more healthy environment for local organizations to grow, and it would allow local financial institutions to integrate with national financial markets. Current financial market policies in most LDCs are an unmitigated disaster for most rural poor. It is past time for making policy adjustments so that rural poor are more fairly treated by this most important development instrument.

Ocean Yearbook 1977



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