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SUMMARIES

STUDY OF GROWTH AND DISPARITY IN FLOW OF CO-OPERATIVE CREDIT IN INDIA

R. K. Pandey and Ashok Kumar*

Co-operatives are one of the important institutional agencies involved in the disbursement of agricultural credit. At present, co-operatives with the network of 94 thousand primary agricultural societies constitute a prominent organisation in terms of volume of credit advanced and territorial coverage. The paper aims at examining the structure and growth of co-operative credit in different States. The disparity in disbursement of credit in different categories of holding has also been studied. The factors responsible for flow of co-operative credit have also been investigated. The study is based on secondary data. The analysis indicated that the number of primary agricultural societies has come down in all the States during the period 1970-81. The compound growth rate of short-term credit was maximum in West Bengal. In the case of medium-term credit, growth rates were positive and statistically significant in all the States except in Punjab. The study further indicates that per hectare credit availability on small and marginal farms was higher than on farms above 2 hectares in almost all States. However, on per borrower basis the position was reverse. The study further revealed that the disparity in distribution of credit on per hectare basis has increased during the period 1977-78 to 1983-84. The important factors affecting the flow of credit in the States are fertiliser consumption, irrigated area, application of high-yielding varieties and area under cash crops.

EFFECT OF ALTERNATIVE PRODUCTION CREDIT ALLOCATION POLICIES ON GROWTH AND EQUITY IN A COMMUNITY DEVELOPMENT BLOCK

M. L. Sharma and S. K. Tewari†

The paper presents the growth and equity implications of production credit allocation among different size-groups of farms in a block based on alternative allocation criteria. Single period linear programming model incorporating all the three size-groups of farms (marginal, small and large) was run under five alternative credit allocation criteria. The different parameters of the model were estimated using the cross-sectional data collected from 150 farmers selected through appropriate sampling design to represent

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farmers of all the three size-groups in Bahjoi block of Moradabad district in Uttar Pradesh. The data related to the year 1986-87. Growth in income, farm size-groupwise as well as overall were estimated on the basis of percentage change in agricultural income under a given allocation over the income under existing allocation. Equity was measured through Lorenz ratios under alternative allocations taking the data on cumulative percentage of farmers across size-groups and corresponding cumulative percentage of income shared by them. The results indicated that the lowest overall growth in income (30.4 per cent) and the highest inequality in income distribution were found to be under the productivity based allocation of credit. The highest overall growth rate (42.7 per cent) was obtained when 50 per cent of credit was allocated to the large farmers and the rest 50 per cent was shared between the marginal and small farmers. This allocation brought a slight reduction in inequality compared to that under the existing allocation. The other three allocation criteria, *i.e.*, credit allocation in proportion to the area in each size-group, in proportion to the number of farmers in each size-group and in equal proportion to each size-group yielded a uniform growth rate of about 38 per cent. The latter two allocation criteria reduced inequalities in income distribution to the same degree and were only next to the area-based allocation in terms of potency to reduce inequality. The results showed that when the large farmer gets more credit under the area-based allocation, it generates more wage employment opportunities for the marginal farmers to whom wage income forms a substantial part of income. Hence, this allocation criterion showed the largest reduction in the inequality of income distribution.

RURAL CREDIT POLICY: NEED FOR TRANSCENDING 'CREDIT NEEDS' BY CREATING DEBT CAPACITY

K. Munidoraswamy Naidu and K. B. Surendrababu*

One of the policies of the Government of India is to ensure that the benefits of economic development trickle down to the weaker sections. Accordingly, the banking sector in the country aims at evenly spreading credit over unbanked and under-banked areas, ensuring that small borrowers get adequate credit. With this objective the banking industry expanded rapidly after nationalisation. However this resulted in huge losses to the bank branches, particularly to those operating in rural centres. One explanation given for this trend is that the credit institutions in the developing countries follow the traditional credit need approach while lending. This approach appears to be defective and misleading. Due to this the loans advanced to the target groups are misused. This highlights the need for transcending credit need. Recently, writers from World Bank have suggested that debt capacity, which is defined as "the amount of credit that an individual, enterprise, organisation, activity, industry or sector can obtain" can replace credit need as a criterion

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for advancing credit. Debt capacity can be created by adopting technical innovations improving infrastructure, institutional innovation and improvements and reducing the transaction costs. In India, although over the last four decades of planning infrastructure has been created, the weaker sections failed to utilise them to improve their repayment capacity. Unless the debt capacity of this segment of the rural population is improved the benefits of economic growth cannot reach them.

IMPACT OF INSTITUTIONAL CREDIT ON TRIBAL AND NON-TRIBAL FARMS IN MANDLA DISTRICT OF MADHYA PRADESH

Hemchand Jain*

In this study an attempt has been made to investigate the impact of farm credit on the income of tribal farmers through increases in production and employment in selected survey areas of Madhya Pradesh. The findings are based on the five adopted villages of a block by the farm credit agencies. The impact on operational and structural aspects of farm business is compared between the borrower and non-borrower tribal farmers at a point of time. The findings of this study reveal that the percentage increase in crop production in the case of tribal borrower farmers was about 43 as compared to about 18 for other non-borrower tribal farmers. The small farmer-borrowers got the maximum benefit in terms of crop production as compared to other categories. As a result of borrowed funds, the increase in the net income of borrower tribal farmers was 28 per cent as compared to 20 per cent for the non-borrower tribal farmers.

The comparison of human labour requirements in pre-loan/post-loan periods between the borrower and non-borrower tribal farmers in crop production and allied activities also shows significant increase in labour days of family/hired labourers in the case of tribal borrower farmers as compared to non-borrower tribals. Hence the farm credit support to the tribal cultivator beneficiaries should be followed for a longer period perspective to ensure its fruitful use and sustained income generating capacity of the tribals.

AN ECONOMIC EVALUATION OF FINANCING UNDER INTEGRATED RURAL DEVELOPMENT PROGRAMME IN TONK DISTRICT OF RAJASTHAN

R. C. Verma, U. Singh and S. D. Singh Burark†

A study was conducted in the Malpura block of Tonk district of Rajasthan in 1981-82 mainly with a view to examine and study the impact of financing made under the Integrated Rural Development Programme (IRDP) on the income, assets and employment of the beneficiaries. The results of the study

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revealed that livestock activities for which assistance was given were most popular but they generated minimum additional incomes. This was particularly true for sheep and goat units. On the other hand, these activities created significant additional employment. But the additional employment generated was more or less non-remunerative. Assistance given under TRYSEM schemes was found to be most beneficial and it not only generated sufficient additional income but also created significant additional employment. Thus there is a need to strengthen the TRYSEM programme. Assistance to rural artisans was given only once like all other schemes. Because of pressing demand these beneficiaries used not only the additional income but the principal amount too for consumption. Thus these beneficiaries were left with little amount to buy the raw material again. Hence, the policy of financing for such schemes only once should be reconsidered. The results of the study revealed further that IRDP, more or less, failed to help the people in crossing over the poverty line in the study area.

LONG-TERM RURAL CREDIT IN ANNA DISTRICT, TAMIL NADU: A CASE STUDY

S. Srinivasan*

This paper studies the role of the financing institutions in providing long-term rural credit in the selected villages of Anna district, Tamil Nadu for grape cultivation during 1985-86. The pattern in issuing long-term finance, its adequacy and the problems faced by the farmers in obtaining the credit are also examined in the paper. The study is based on the data collected from a random sample of 125 farmers in the area. During the survey, it has been estimated that a total of 134 loan accounts have been operated involving 101.10 acres and Rs. 12,24,730 as loan, covering 109 farmers. The commercial banks supplied credit to 44 respondents to the tune of Rs. 4,74,530 covering 46.15 acres, accounting for 38.75 per cent of the total credit. The land development banks covered 33 respondents, lent Rs. 3,33,600, covering 34.05 acres, accounting for 27.24 per cent of the total credit. These two form the major long-term financing agencies in the rural areas. It is also observed that 74 per cent of the credit needs of the farmers were met by institutional credit agencies.

The per acre credit needs of the farmers during the establishment period were estimated at Rs. 15,711.07, the credit provided was Rs. 10,427.67 and the resulting credit gap was Rs. 5,283.40. The enquiry indicated that the farmers felt that procedural difficulties, the rigidity or delayed disbursement of credit, the prohibitive cost of acquiring it and its inadequacy were the major impediments in getting long-term finance from the institutional agencies.

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A STUDY INTO THE OVERDUES OF CO-OPERATIVE LOANS IN MAHARASHTRA

S. R. Bhosale and S. B. Dangat†

The main objectives of this paper were (*a*) to study the repayment position of the loans borrowed from co-operative societies and (*b*) to ascertain the factors responsible for overdues based on data collected from a sample of 120 farmers selected from eight villages in Chandgad taluk of Kolhapur district, Maharashtra State. The data pertaining to borrowing and repayment were collected for three years, *viz.*, 1981-82, 1982-83 and 1983-84. At the overall level, short-term and medium-term loan constituted 54 per cent and 46 per cent respectively. The per farm borrowings of short-term as well as medium-term loans increased with the increase in the size of holding during all the three years of the study. The proportion of repayment of principal amount was 40 per cent of short-term and 31 per cent of the medium-term loans. The repayment percentage showed an increasing trend from the year 1981-82 to 1983-84 in both the types of loans. Important reasons for non-repayment reported by the farmers were their low income, non-remunerative prices for agricultural produce and crop failure due to natural calamities. The results of the multiple linear regression analysis revealed that the amount of overdues was related with the net income from crop production, amount borrowed, amount used for productive purposes and expenditure on family consumption in all the three size-groups of holdings. This calls for appropriate policy with regard to supervision of credit used at the farm level.

IMPACT OF AGRICULTURAL CREDIT ON MILK PRODUCTION, MARKETED SURPLUS AND INCOME OF WEAKER SECTION HOUSEHOLDS IN SUGARCANE TRACT OF WESTERN UTTAR PRADESH

A. K. Sharma and Kuber Ram*

The study is based on randomly selected 195 sample households of weaker section from eight villages of Saharanpur district in West U.P. It attempts to study the extent and availability of credit along with its impact on milk production, marketed surplus and income of weaker section households. It revealed that borrowing households constituted only 18 per cent of total sample households. The percentage of borrowers was highest (24.39) for marginal farmers, followed by small farmers (20.69) and landless cattle owners (11.90). The low percentage of borrowers underlines the scope and need for extension of lending operations by financing agencies. Out of the borrowing households, 89 per cent borrowed from banks, indicating a signi-

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ficant increase in the availability of institutional credit to this deprived section. The average availability of credit per households was Rs. 4,778, out of which 94.48 per cent was borrowed from banks, 4.07 per cent from co-operatives and 1.45 per cent from moneylenders. Purposewise, about 47 per cent of the loan was availed for the purchase of farm animals (especially buffaloes), 27 per cent for minor irrigation, 17 per cent for small farm equipments, 6 per cent for self-employment schemes and 3 per cent for gobar gas plants. Landless cattle owners and marginal farmers availed of loans mainly for farm animals (especially buffaloes), whereas small farmers availed mainly for minor irrigation and farm equipments.

Further, it was observed that milk yield, production, marketed surplus, income per annum and investment were significantly higher for borrowers than for non-borrowers. This is indicative of significant positive impact of credit on these parameters for weaker section households. Therefore, if more credit along with suitable schemes of dairy extension, and assured marketing facility is made available to the weaker section households (especially landless cattle owners and marginal farmers), they will be encouraged to improve their economy through dairying and allied activities.

ECONOMIC VIABILITY OF REGIONAL RURAL BANKS: A CASE STUDY OF HARYANA

Suresh Bedi†

This paper makes an attempt to analyse the financial performance and identify the factors of non-viability of regional rural banks (RRBs) in Haryana which have been incurring recurrent losses since their inception. The experience of the banks demonstrates that it is mythical to believe that an RRB can attain viability after attaining a particular age or level of business. The study empirically establishes that the gross margin rate in the banks has been so low that it has, for most of the years, been more than offset by the establishment cost thereby bringing them to losses. The margin rate, moreover, has been found to decline with the expansion of business. From the analysis of financial data of the banks, the major factors of non-viable performance have been identified as the unremunerative structure of lending rates of interest, rise in the proportion of time deposits, lack of functional diversification, less remunerative loan-mix and incidence of bad or doubtful debts. Among these, the impact of exogenous factors on viability has been observed to be more serious than those related to the banks' internal functioning. Apart from improving organisational and functional efficiency, there is an urgent need to restructure the prevailing interest rates and facilities for RRBs so as to provide them with a reasonable margin to function viably.

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INFIRMITIES IN RURAL CREDIT POLICY: A CASE STUDY OF FARM LOANS IN KOZHIKODE DISTRICT

T. P. Gangadharan*

Rural credit programmes have become integral components of Indian development strategy. However, an empirical understanding of the determinants of credit absorption and utilisation at the farm level is wanting. This study examines essentially the cost dimensions of borrowing, the relationship between physical endowments and credit off-take and factors that distinguish users from non-users of rural credit. The data for the investigation were collected from borrowers of two service co-operative banks in Balusseri block of Kozhikode district in Kerala. Different facets of crop loan servicing costs, production pattern, infrastructure availability, etc., were gathered for the reference year 1986-87. The study observed high cost of borrowing especially for small borrowers due to enhanced premium on risk and administrative cost. The borrowing cost ranged from 22 to 41 per cent of the loan availed. While 76 per cent of the large farmers availed credit, only 67 per cent of the small farmers sought credit assistance; the latter misutilised loans in 23 per cent of the cases and engaged in labour intensive farming techniques. The large farmers, on the contrary, evaded labour intensity on their farms and utilised loans for labour displacing farm activities. The study further observed that the small farmers are not responsive to lower interest rate and such policy of providing subsidised interest rate may vitiate the dynamism in the capital market. The relevance of remunerative market, irrigation facilities and farm education as stimuli for credit use has been also substantiated. The rural credit policy should rather focus on these areas than resorting to cheap credit for promoting larger credit use in the rural areas.

AN ANALYSIS OF TANGIBLE MEANS TO REDUCE INCIDENCE OF DEFAULT IN COMMERCIAL BANK LENDINGS

P. Raghu Ram and I. Bhavani Devi†

A study was conducted in Bapatla mandal of Guntur district of Andhra Pradesh to probe into the reasons of default among the commercial bank borrowers of crop loan and milch cattle finance and to suggest tangible measures to overcome the incidence of default in the small farmers' category. The percentage of overdues accounts to total accounts from 1982-83 to 1986-87 in village I (crop loan overdues village) and village II (milch cattle loan overdues village) for the period from 1984 to 1987 touched 75 and 78 per cent respectively. The cropping pattern followed by the farmers in the two villages was paddy in *kharif*, followed by groundnut in *rabi*. In village I, 81 per cent of the borrowers reported that irregular and insufficient supply of irrigation more often than not, as it is situated at the tail-end of the canal, had

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forced them to fall in the defaulting category. This problem was observed to be perennial in nature. It was altogether a different story in village II as 76 per cent of the borrowers even after making a net income more than the total annual payment of loan, backed up by sizable net income earned in farming did not pay even a single loan instalment which was a sheer case of wilful default. In this context, it may be noted that in another village which received finance for milch cattle from the same bank and the beneficiaries being small farmers, the repayment performance was cent per cent. The reasons for this were repayment consciousness among the borrowers, prompt repayment tradition for several years in the village and a strong village leadership. Since in village II, it was a case of sheer wilful default by the borrowers, initiation of legal action is the only alternative for the recovery of the loans by the bank. In the case of the ill-fated farmers of village I, provision of productive assets which are capable of generating additional income should be thought of in the form of advances for sheep and goat rearing, as these avocations have been already followed by the farmers of the same community of the defaulters in the adjacent villages quite profitably. Since these enterprises are quite productive, they not only enhance the repayment capacity but also contribute to the economic development of these hard-pressed non-wilful defaulters of commercial bank.

A STUDY OF OVERDUES OF LOANS IN AGRICULTURE IN AGRA DISTRICT OF UTTAR PRADESH

S. P. Singh,* Balishter† and A. K. Jain*

The present study was conducted in Bichpuri Development Block of Agra district of Uttar Pradesh during the year 1984-85. Its specific objectives were (i) to assess the extent of 'current' and 'old' overdues among defaulters in different farm size-groups; (ii) to estimate the extent of wilful default in different farm size-groups and (iii) to ascertain the factors responsible for overdues. The study covered 60 defaulting farmers of State Bank of India. The data were collected by personal interviews with the help of schedules and questionnaires. The analysis of data showed that the large farmers accounted for only about 27 per cent of the total defaulters but for about 42 per cent of the total overdues. The medium farmers accounted for about 42 per cent of the total defaulters but only for about 27 per cent of the total overdues. The proportion of small farmers was almost equal in total defaulters and in total overdues. Thus the large farmers were responsible for a large proportion of overdues. Of the total overdues, about 56 per cent were 'old' overdues extending over three years and 44 per cent were 'current' overdues for less than three years. Categorywise analysis showed that the proportion of 'old' overdues was higher in the case of large farms (62 per cent) as compared to the small (53 per cent) and medium farms (48 per cent). Thus the problem of 'old' overdues needs to be solved effectively. Otherwise it would continue to pose problems in the issu-

* Cost of Cultivation Scheme and † Department of Agricultural Economics, R. B. S. College, Bichpuri, Agra.

ance of future loans. The small and medium farmers had a repayment capacity of only Rs. 2,500 and Rs. 4,368 each respectively as against the total repayable loan instalment of Rs. 5,069 and Rs. 4,569 each while the large farmers had a repayment capacity of Rs. 12,673 each against the total repayable loan instalment of Rs. 10,510 each. It is rather a matter of serious concern that the farmers particularly the large farmers do not repay the bank loans in spite of having repayment capacity in excess of the loan repayable. The defaulting farmers, however, discharged the other loans from private agencies for different reasons such as its high rate of interest, the pressure from the agency and to ensure future supply of credit.

Of the total defaulters, about 53 per cent were cases of wilful default and 47 per cent were non-wilful defaulters. Categorywise analysis showed that about 94 per cent of the defaulters in the large size category did not repay the loan deliberately (wilful), whereas it was 21 and 52 per cent in the case of small and medium categories respectively. Thus wilful default is mainly confined to large and medium farmers and to some extent to small farmers. Thus stern legal action against wilful defaulters should be taken. If immediate action against selected influential wilful defaulters are taken, it will influence other wilful defaulters to pay the loan overdues. Such defaulters may be debarred from loan advances in future. For non-wilful defaulters, a set of liberal measures should be adopted such as extending the repayment period over a reasonable time, conversion of accumulated crop loan overdues into medium-term loans, and making loan available in time. Besides, measures for improvement in crop yields, remunerative price for the crop produce, reasonable subsidies on input prices and crop insurance are also necessary to enhance the repayment capacity of the farmers.

CREDIT REQUIREMENT AND ITS GAP ON THE FARMS IN BHIMA COMMAND AREA OF WESTERN MAHARASHTRA

S. D. Suryawanshi[†]

The paper examines the requirement, availability and credit gap in irrigated agriculture in Bhima command area of Western Maharashtra. The data were collected from a sample of 96 farmers selected from six villages for bench-mark survey prior to introduction of irrigation (1982-83) and for subsequent three monitoring years after introduction of irrigation (1984-85 to 1986-87) to study the changes. It was observed from the cropping pattern that before the introduction of irrigation, about 96 per cent of the area was under cereals with a cropping intensity of 87 per cent. However, due to introduction of irrigation the area under cereals was reduced to 65 to 68 per cent and the rest of the area was covered by oilseeds, sugarcane, vegetables, fruit crops and such other commercial crops. Thus the area under cash and commercial crops increased significantly due to irrigation. Before irrigation about 93 per cent of the loan was taken from co-operative institutions; however, after

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irrigation the proportion of lending by nationalised banks increased. Thus irrigation accelerated the use of high cost inputs, resulting in increased demand for credit. In the command area, the requirement of cash expenditure for crop production during the bench-mark period worked out to Rs. 1,895 per farm; however, it increased by more than three to five times during the three monitoring years after the introduction of irrigation. The high cost was associated with the high intensity of cropping and more cash crops. It was observed that before irrigation the loan received from different agencies was more than the requirement. However, after the introduction of irrigation the credit gap widened from Rs. 3,995 to Rs. 7,173 per farm in the monitoring years. The credit gap needs to be reduced. The study indicated that even in an assured irrigated area, there exists a substantial gap in meeting the credit requirement. The financing institutions should provide more credit to the agricultural sector. The working expenditure on cost of cultivation of crops must be taken into consideration in deciding the loan policy.

INSTITUTIONAL CREDIT FOR DAIRYING IN HARYANA STATE

T. C. Duhan and C. B. Singh*

The study conducted in the east and west zone of Haryana State revealed that there was a sharp increase in the distribution of dairy credit in the agriculturally less progressive area of west zone compared to east zone from 1977-78 onwards, aimed at reducing regional disparities. The total amount of credit advances during 1974-75 to 1979-80 had an inverse relationship with farm size in the west zone. Besides, the share of weaker sections in total advances varied between 80 per cent in the east zone and 86 per cent in the west zone. This indicated that efforts were made to reduce imbalances in the distribution of co-operative credit among different categories of households. Interestingly, the repayment of dairy loans was higher in the west zone than in the east zone in almost every year. The overall repayment of loans was 72 and 65 per cent in the west and east zone respectively, resulting in the reduction of overdues to 28 and 35 per cent while it was 43 per cent in Haryana State. The magnitude of overdues in the State as a whole indicated an increasing trend over the years which needs to be reversed through suitable measures. The defaulters formed a major portion of the total borrowers ranging from 60 per cent in the west zone to 65 per cent in the east zone. Among different categories of defaulters, the small farmers registered a higher percentage of default as compared to the marginal farmers and landless labourers. Of the total defaulters, 100 per cent of the small farmers in the east zone and 71 per cent in the west zone were found to be wilful defaulters. The majority of the defaulters revealed that various factors such as low milk yield, increasing family expenditure, social obligations, low price of milk, failure of crops, low farm/family income, absence of other sources of income, high rate of interest, unsuitable repayment schedule, etc., were responsible for adversely affecting

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the timely repayment of loan which should be looked into by policy makers, planners and lending institutions.

RURAL CREDIT IN KARIMNAGAR DISTRICT

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The structure of rural credit market began to change rapidly since the nationalisation of the 14 major banks. The effects were more pronounced in the advanced regions like deltas in the 1970s, but the backward regions too were awakened in the 1980s. Karimnagar is one such backward district of the Telengana area of Andhra Pradesh. A part of the district is irrigated by the Sriramsagar project and it grows a variety of wet and dry crops ranging from paddy to small millets or the Italian millet. The credit needs of the cultivators in this district increased not only due to the poverty of a large proportion of the peasants, but also because of the diversity of crops, increased physical volume of inputs and their increasing marketisation, besides their inflationary costs both in the open and black markets. It is found that the per acre credit increased along with the size of the holding due to a host of factors, but the increasing role of the organised credit came in handy and saved many farmers from falling into the clutches of the moneylenders. Not only the role of the unorganised market became insignificant in this district except in a few remote pockets, the expansion of the organised credit market largely helped the farmers to increase their marketed surplus and thus to achieve a degree of commercial farming which is at present (1988) all set for a take-off into a fast growing agriculture if only the same increasing trend in the credit market continues for a decade or so.

A STUDY OF THE RECOVERY AND OVERDUES OF AGRICULTURAL LOAN ISSUED BY BISHNOO DATT CENTRAL CO-OPERATIVE BANK, BRANCH UMARIKAN, JABALPUR DISTRICT (MADHYA PRADESH)

B. B. Beohar and R. K. Khare*

The paper examines the repayment of loan by borrowers of the District Central Co-operative Bank, branch Umarikan in Jabalpur district of Madhya Pradesh, their overdues and repayment capacity, based on data collected from 45 farmer respondents from nine villages served by three societies relating to the period 1982-87. The bank branch issued loan for the purchase of pumpset, digging of wells, for purchase of fertilisers, improved seed, for land improvement and purchase of bullocks. The farmers who obtained credit for the purchase of pumpsets repaid the loan in the beginning but those who received loan for the purchase of fertiliser and digging of wells did not repay the loan in proper time. A large proportion of loans advanced for the purchase of

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bullocks and for land improvement remained overdue as compared to other purposes. The farmers who adopted a large number of package of production practices, irrespective of the purpose of credit, had higher repaying capacity per farm as compared to others. The farmers who obtained loan for pumpset had the maximum repaying capacity as compared to other purposes.

RURAL CREDIT MANAGEMENT THROUGH INTEGRATED CROP AND MILK PRODUCTION

Amrik Singh Saini, Raj Vir Singh and R. K. Patel†

The present study mainly aimed at examining as to how the rural credit could be managed on the farms with the help of integrated crop and milk production. Mixed Integer Programming Model was employed to integrate the crop farming with dairy enterprise and estimate the income, employment and credit needs of 40 marginal and 49 small farmers in six villages of Patiala district of Punjab. The study revealed that the integration of crop farming with high-yielding milch animals markedly increased the income and employment of marginal and small farmers. Dairying, being self-income generating enterprise, reduced the short-term credit requirements completely by supplying regular income to the farmer but increased the medium-term credit requirements manifold for the purchase of the high-yielding milch animals of improved breeds and other requisites. The financial institutions should, therefore, come forward unhesitatingly to provide medium-term loans on easy terms to these farmers for the integration of their arable farming with dairy enterprise to increase the income and solve the much debated problem of indebtedness and unemployment/under-employment of the rural poor in India.

TEMPORAL VARIATION IN ECONOMIC AND FINANCING ASPECTS OF COTTON FARMS—A CASE STUDY

C. V. Hanumanthaiah, V. T. Raju and M. R. Naidu*

An attempt has been made in the paper to study the economic and financial aspects of cotton farms in Prakasam district of Andhra Pradesh. Using stratified random sampling technique, a sample of 60 farmers was selected from one mandal of Prakasam district in Andhra Pradesh for collection of primary data, and secondary data were obtained from bank records and unpublished thesis of the senior author. The primary and secondary data pertain to the crop year 1986-87 and 1976-77 respectively. The findings of the study indicated that the financing agency functioning in the area since 1979 onwards provided 99 per cent of the advances to the priority sector alone. It is noted that the expenditure on pesticides accounted for a major proportion (61 per cent) of the total expenses of the farms even after a decade. The data

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also indicated that the farmers were denied remunerative price for their produce. Further, it is also inferred that the farmers could not realise the benefits in proportion to their investments. The cost-benefit ratio also indicated that the farmers' realisation on per rupee basis declined alarmingly.

ANALYSIS OF DEFAULT IN ORGANISED SECTOR CREDIT—A STUDY OF MINOR IRRIGATION SCHEME IN WEST BENGAL

T. N. Datta†

The present paper analyses the extent of default on minor irrigation scheme based on a primary survey of 120 bank financed tubewell beneficiaries spread over Nadia and Malda districts of West Bengal which are representative of South Bengal and North Bengal respectively. Besides, it also examines the rationality of repayment schedule worked out by the organised sector lending agencies in the light of actual net benefit accrued to the farmers. The reference year of the survey is July 1985 to June 1986 and the reference date of default analysis is June 30, 1986. If the number of defaulted beneficiaries to the total beneficiaries is considered, it is observed that 80 per cent of the borrowers are defaulters with a proportionately high default rate for the small and marginal farmers compared to medium and large farmers. In general, the actual incremental income available with the beneficiaries after meeting enhanced consumption needs falls short of annual debt servicing liability. This holds good irrespective of default status, *i.e.*, defaulters and non-defaulters which implies that default status cannot be explained only by economic benefits.

Interestingly, the tubewell investment seems to be generating unequal incremental income across different regions of the State. This inter-regional disparity in incremental income is not taken into consideration by the financial institutions for working out the repayment schedule. It is obvious that in such a case the default rate would also be uneven, especially because of unequal incremental income. This is an important aspect which the financial institutions should probably take into account particularly for the regions where the resource base is relatively under-developed. At least, the extent of high overdues can partially be reduced if this element of cushion is provided in devising the feasible repayment schedule. The other measures of improving the performance of financial institutions in schematic lending like minor irrigation loan should take into account strengthening the field staff, effective monitoring and supervision of loan and finally the flexibility in repayment schedule.

INSTITUTIONAL CREDIT FOR AQUACULTURE

Pradeep K. Katiha and Anand Swaroop*

The paper attempts to (*a*) estimate the rate of growth of institutional credit, (*b*) examine the distribution of institutional credit among various com-

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munities in small and large fish farms and (c) calculate the share of various financial institutions in total credit for aquaculture, based on analysis of data collected from a sample of 470 fish farmers in Allahabad district of Uttar Pradesh for the period 1978-79 to 1987-88. For credit growth, the credit widening has a positive trend, while credit deepening has overall negative value. It is mainly due to a higher percentage increase in water area developed than credit availability on large farms. The maximum credit growth is for the scheduled caste community in accordance with government policies for their upliftment. The fishermen considered fish farming as a subsidiary enterprise, so the credit growth rates were lower for them. Commercial banks have a major share in credit for aquaculture. Over the period their share has declined as other financial agencies like Regional Rural Banks (RRBs) and Land Development Banks have started financing aquaculture. The share of RRBs in total credit advanced to aquaculture has shown a remarkable increase. Unlike in the case of agriculture, fisheries co-operatives accounted for a negligible share in credit for aquaculture due to many technical problems.

SUPPLY AND UTILISATION OF SHORT-TERM CO-OPERATIVE AGRICULTURAL CREDIT IN PALGHAT DISTRICT

V. Radhakrishnan and K. Mukundan[†]

The present study on the supply and utilisation of short-term co-operative agricultural finance in Palghat district of Kerala was done based on data collected from a sample of 15 borrower farmers and an equal number of non-borrowers. The reference year of the study was 1984-85. It was found that around 50 per cent of the holdings of borrowers as well as non-borrowers belonged to the size-group of one hectare or less. An examination of crop-wise distribution of loan amounts received by the sample borrowers revealed that as much as 80.57 per cent of the amount was for paddy cultivation, followed by tapioca (13.67 per cent), banana (5.25 per cent) and groundnut (0.51 per cent). Fifty-two per cent of the loan amount was advanced in kind (mainly fertilisers) and the balance in cash. An inverse relationship was found between the amount of loan per hectare, on the one hand, and the size of holdings, on the other. Smaller holdings obtained relatively more amount of credit than larger holdings. An examination of the economics of paddy cultivation revealed that the benefit-cost ratio was slightly more for the borrowers than for the non-borrowers in spite of the fact that the former incurred relatively higher costs than the latter, both for the first crop and the second crop.

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A STUDY INTO THE APPROPRIATENESS IN THE SCALE OF FINANCE BY THE CO-OPERATIVES IN MAHARASHTRA STATE

A. N. Ratnaparkhe and B. V. Pagire*

A study was undertaken to examine the relation between the cost of cultivation (cost A) and the scale of finance for selected crops, *viz.*, bajra, groundnut and sugarcane. It is said that the requirement of credit is more than the present credit limit fixed by the different institutions. An attempt was therefore made to study the changes in the cost of cultivation of crops and the scale of finance for these crops over a period of six years (1980-81 to 1985-86). The study revealed that there was a gradual increase in the cost of cultivation (cost A) of bajra during the period and the increase ranged between 8 and 20 per cent over the base year (1978-79). In the case of groundnut, cost A showed an increasing trend and the increase varied from 38 per cent (1980-81) to 83 per cent (1985-86) over the base year. However, no trend was noticed in the cost of cultivation of sugarcane during the study period. In the case of sugarcane, the increase in cost A over that of the base year worked out to 16 per cent to 151 per cent in different years. The study thus showed that the credit gap was smaller for bajra and groundnut. A little enhancement in the scale of finance for these two crops will bridge the gap. However, in the case of sugarcane, a wide gap existed between the cost of cultivation and the scale of finance. There is a need to enhance the scale of finance for sugarcane. Moreover, no consistency was observed in the scale of finance when the cost of cultivation is considered.

IMPACT OF INSTITUTIONAL PRODUCTION CREDIT ON FARM PRODUCTIVITY IN KASIMKOTA PANCHAYAT SAMITHI OF VISAKHAPATNAM DISTRICT (A. P.)

S. Adinarayana and M. Lakshminarayana†

At the village level co-operatives and the commercial banks are the only two institutional financing agencies advancing production loans. So the farmer has to choose the best alternative keeping in view their terms and conditions of lending and his requirements. Accordingly, it is felt necessary to conduct a field level study focusing attention on the relative advantages of raising a loan either from the co-operative or commercial bank. Since the production loan advances are maximum in Kasimkota Panchayat Samithi of Visakhapatnam district during 1983-84, the study is located in this area. Two-stage stratified random sampling technique was adopted for the selection of

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two villages and 48 farmers under co-operatives and another two villages and 48 farmers covered by the State Bank of India, Kasimkota branch. The selected farmers were grouped under small and large size categories. To assess the productivity of crop loans, tabular and Cobb-Douglas production function analyses were employed. The results of tablular analysis indicate higher productivity of crop loans both at per hectare as well as per farm level under commercial bank for all sizes of farms over that of the co-operatives. Easy and timely availability of credit under commercial bank alone accounted for this phenomenon. However, per rupee gross productivity of credit turned out to be higher under co-operatives owing to its adequacy and strict adherence to scales of finance. The functional analysis showed that the quantum of loan in the case of small farms under co-operatives was not adequate while in all other farm categories it was just sufficient. The marginal analysis also revealed that it was not adequate in the case of small farms while the same was in excess in the case of large farms under co-operatives. So the loan amount has to be revised upward in favour of small farms even by relaxing lending regulations in order to increase the farm credit productivity significantly. But the small farmers may be suitably advised to reduce the use of borrowed capital, particularly the privately borrowed funds under co-operatives.

ECONOMIC RATIONALE OF CREDIT USE ON SMALL FARMS— A CASE STUDY IN BIHAR

G. C. Srivastava and K. K. Lal*

In order to quantify the flow of institutional credit at the farm level in different groups of farm community and the economic feasibility of its proper utilisation, a study was undertaken to examine the supply and utilisation of credit and the economic rationale of credit use on the progressive and less progressive farms in Sitamarhi district of Bihar, which is a flood-prone district. For the purpose of study, a sample of 40 farmer-borrowers was selected on random sampling basis from the Vaishali Regional Rural Bank (RRB), Raipur branch during the agricultural year 1983-84. The selected borrowers were classified into the following four sub-groups on the basis of the loan amount sanctioned by the bank: group I consisting of borrowers who obtained loan upto Rs. 1,000, group II with loan amount between Rs. 1,000 and Rs. 3,000, group III between Rs. 3,000 and Rs. 5,000 and group IV with loan amount above Rs. 5,000. The study revealed that both on the progressive and less progressive farms, irrigation elasticity was positive at 0.7980 and 0.2094 respectively and highly significant at one per cent probability level. It amply demonstrated that farm credit sanctioned for irrigation structures made significant contribution in strengthening capital resource base on both the categories of farms. At the same time, it was also observed that crop loans and

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borrowings for livestock have not made any significant impact on progressive farms, since the 'b' values for these variables were found to be negative though statistically non-significant. On less progressive farms the livestock elasticity was positive and significant at ten per cent level of probability, indicating that farm credit for livestock significantly contributed on this category of farm. The negative crop loan elasticity indicated that this variable did not respond favourably since diversion of loan for such purposes was noticed.

REGIONAL INEQUALITIES IN LONG-TERM INSTITUTIONAL CREDIT—A STUDY OF LAND DEVELOPMENT BANKS

M. M. Bhalerao, Malati, Ravindra Singh†

The paper attempts to assess the extent and trend in the regional (inter-State) inequality in the supply of long-term credit by the land development banks in India. The study is based on secondary data compiled from the Statistical Statements Relating to the Co-operative Movement in India, published by the Reserve Bank of India/National Bank for Agriculture and Rural Development. The trends in the inter-State inequality are analysed for the two periods, *viz.*, 1968-69 and 1980-81 for the seventeen major States of India for which comparable data were available. The inequality is analysed by using the tools of coefficient of variation (C.V.), Gini coefficient of concentration and Lorenz curves. The analysis indicated that the inequality in the distribution of long-term loans in the 17 States has increased during the 12-year period. Thus to avoid further accentuation of the problem of regional imbalances in the process of co-operative development, it would be necessary to give greater emphasis on accelerated development of the co-operatively under-developed States with more resources, trained manpower, efficient long-term credit management and more stringent measures to minimise the mounting overdue problem which inhibits the recycling of the funds for increased credit facilities from the land development banks.

INSTITUTIONAL FARM FINANCING WITH SPECIAL REFERENCE TO PROBLEMS OF LOAN RECOVERIES IN JABALPUR DISTRICT (M.P.)

J. K. Gupta*

The paper examines the lending pattern of State Bank of India (ADB) Shahpura block of Jabalpur district (Madhya Pradesh) and the repayment performance of the borrower-farmers, by using the data (1978-79 to 1982-83) collected from 80 defaulter farmers (50 term loan and 30 crop loan). A simple correlation between the recovery percentage with individual factors was also worked out to explain their relationship. The study revealed that the sample farmers obtained the loan mainly for creation of irrigation facility and

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about 92 per cent of the total loan received was as term loan for sinking of new well, purchase of pumpset while only 8 per cent was crop loan. Further, 42 per cent of the total loan advanced by the bank to the sample farmers was in cash while the remaining 58 per cent was disbursed in kind. The ratio of cash to kind was 1:1.38. This is certainly a good feature of loan disbursement which assumes proper use of loan and it helps in checking diversion and misutilisation of loan. It is noted that only 41.69 per cent of the loan was repaid by the sample farmers and the overdues accounted for 58.31 per cent of the total loan advanced. The recovery performance of term loan was found comparatively better than that of crop loan. The recovery of overdues was found associated with the size of holding, percentage of irrigated area, cropping intensity and per capita income.

DISBURSEMENT, OVERDUES AND FACTORS AFFECTING REPAYMENT CAPACITY OF BORROWERS

R. P. Singh†

The present investigation was undertaken to study the trend of loan disbursement, overdues and factors influencing repayment capacity of dairy borrowers of Bhojpur-Rohtas Gramin Bank (BRGB), Bihar relating to the period 1977-83. A sample of 93 borrowers, consisting of 25 landless labourers and 68 marginal farmers, was selected randomly from nine villages of three branches of BRGB. The study revealed that the bank had exclusively financed the neglected and weaker sections of society and showed the image of a 'small man's bank'. Purposewise loan analysis showed that dairy, sheep, and goat, poultry and piggery schemes constituted the major activities of the landless labourers and scheduled castes and scheduled tribes while crop loan scheme was for small and marginal farmers. Linear growth trend equation was fitted for economic analysis of loans. It showed a more positive trend in sheep and goat scheme, followed by piggery, poultry, dairy and crop loans schemes. The recovery of loan in allied activities was around 52 per cent which was higher than the crop loan scheme. The regression analysis of factors affecting repayment capacity of borrowers revealed that the ratio of total expenditure to total income, the number of adult equivalent consumer units, family living expenses and the amount of old debt to be paid during the year were the major factors influencing the repayment capacity of dairy borrowers/households.

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TRENDS IN RECOVERY, OVERDUES AND OUTSTANDING POSITION OF AGRICULTURAL LOANS, RANCHI DISTRICT (BIHAR)

R. K. Pandey and P. L. Guglani*

An attempt is made in the paper to analyse the trends in overdues, recovery, and outstanding position of agricultural credit with respect to tribal and non-tribal farmers in Ratu block of Ranchi district of Bihar. For this purpose, time-series data were collected from the various financial institutions engaged in financing agriculture in Ratu block during the period from 1971-72 to 1981-82. Linear growth trend equation was fitted for economic analysis. The results revealed that in the advancement of agricultural loans by the various financial institutions, a positive trend was noted for both the tribal and non-tribal farmers during the period under study. Linear growth rate of agricultural loans was found to be 23.56 and 22.92 per cent in the case of tribal and non-tribal farmers respectively. The results showed that the outstandings of agricultural loans advanced by the financial institutions were mounting high year after year in the case of non-tribal farms. An increasing trend was observed in institutional lending to the tribal farmers since the inception of 'multi-agency approach' in rural credit.

PRODUCTION CREDIT MANAGEMENT IN RICE FARMING SYSTEM OF CHHATTISGARH REGION

Dinesh K. Marothia†

An attempt has been made in this paper to examine whether the existing supply of credit is adequate and whether there is scope for improving the existing management network for the supply of agricultural credit with particular reference to the Primary Agricultural Co-operative Societies (PACS) in Raipur district of Chhattisgarh region of Madhya Pradesh. To study the problems related with the 'scale of finance' criteria of credit supply and conversion of short and medium-term loans and financial performance of PACS, the required data were collected from the official and non-official records of the co-operative societies for the year 1985. To examine the credit gap, management aspects of farm production credit and attitudes of farmers, the survey method was used to collect the data from 40 randomly selected members of the PACS from each of the three blocks, namely, Arang, Dhamtari and Dharsiwa for the year 1984-85. This makes the total of 120 sample members or farmers. To study the attitudes and opinions of managers of PACS, regarding use of farm credit and working of societies, six managers

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from each block were interviewed. The findings of the study revealed that PACS have given more emphasis to the supply of short-term loan as compared to medium-term loan. The recovery of loan in the case of scheduled castes/ scheduled tribes (SC/ST) was very poor and as a result the conversion of short-term loan has become a serious problem. This has increased the volume of indebtedness in this group. About 94 per cent of the crop loan was supplied in cash to SC/ST farmers, whereas input loan in kind has not at all been supplied to these farmers. It may be suggested that loan for agricultural inputs may be supplied in kind on a large scale to ST/SC farmers so that the risk of diversion of cash loan may be minimised. About 33 and 31 per cent of medium-term loan was supplied for livestock (poultry, milch cattle, goat, piggery) in the case of all the selected (total) and SC/ST beneficiaries respectively. The second importance in the allocation of credit has been given to develop irrigation facilities (13.28 per cent in the case of total and 12.8 per cent in the case of SC/ST beneficiaries). Conversion of loan was as high as about 42 per cent in SC/ST which involves them in the vicious circle of poverty. It is interesting to note that in spite of high priority and subsidy assigned to gobar gas plant, the loan supplied for this purpose has been insignificant. The scale of finance was significantly lower than input cost both at farmers' and recommended situations. As a result, a noticeable credit gap has emerged. The scale of finance fixed by the co-operatives was significantly higher at farmers' input level use. However, this gap was reduced at recommended input level under both irrigated and unirrigated situations. The reason for fixing higher scale of finance by the co-operatives is high yield variability in paddy production. In farmers' opinion high input prices, timely and adequate availability of agricultural inputs and credit, desired type of input were the most important problems in the input supply system of PACS. PACS managers have stressed on the following management problems: unmanageable working zone, inadequate staff, inadequate input storage facilities, improper utilisation of loan, conversion of productive loan, mass exemption of loan, influence of socially and economically powerful farmers and poor co-ordination with other departments.

EVALUATION OF CO-OPERATIVE CREDIT WITH SPECIAL REFERENCE TO LAMPS IN ORISSA

Dibakar Naik and S. C. Patnaik*

This paper attempts to study the trend of membership, advance of credit and to assess the performance relating to credit, marketing and distribution of consumer goods through 220 Large-sized Adivasi Multipurpose Societies (LAMPS) in Orissa. The total membership of these societies has gone up from 4.54 lakhs in 1977-78 to 7.09 lakhs in 1983-84, recording a rise of about 50 per cent. Per capita credit availability through LAMPS varied

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from Rs. 92.2 to Rs. 251.1 over the same period. However, it is still less than the critical minimum needed by the tribals. The magnitude of trade deficit of members in their transaction with LAMPS ranged between 11.4 per cent in 1978-79 and 48.2 per cent of the total loans taken from LAMPS in 1980-81. This shows that a substantial part of the loans (including productive, short and medium-term) taken from LAMPS by the tribals are perhaps used for meeting a part of their purchases mostly of consumer goods. This is a disquieting trend of diverting a substantial part of productive loans for consumption purposes. This contributes towards raising the consumption propensity of tribals without raising their productive capacity and widening their economic opportunities. Thus the functioning of LAMPS should be reorganised for improving the marketing of tribal products and fixing prices for agricultural produce and minor forest products. The quantum of consumption loan for tribals should be raised to make the tribals free from the clutches of middlemen for such loans.

**INSTITUTIONAL FINANCE FOR AGRICULTURE (A CASE STUDY
OF STATE BANK OF INDIA, BHAGALPUR DISTRICT
IN BIHAR)**

Anubha Roy†

This paper examines the role played by the State Bank of India in financing agriculture in Bhagalpur, a backward district of Bihar. As a matter of fact, the SBI has been the fore-runner in widening of the horizon of rural credit through its intensive area approach, agricultural banking division, agricultural development branches, etc., and has made a significant contribution to the rapid growth of direct agricultural advances. The quantum of direct finance as compared to indirect finance has registered much larger and steady growth from year to year and consequently its impact has been felt in improving agricultural productivity through improvement in irrigation facilities and use of agricultural inputs and increased mechanisation. The bank has done much in financing households under IRDP. It has not only given credit to the agriculturists but has also provided technical expertise to improve the old farming practices. However, during recent years between 1985 and 1988 (March), the agricultural advances as a percentage of total advances have significantly declined. The credit-deposit ratio has also declined from 47 per cent in 1985 to 37.74 per cent in 1988 (March). This trend is really disturbing. Further, the affluent farmers have been the main beneficiaries of the credit and the poor farmers are still largely dependent on rural moneylenders. Lending procedures of the bank are very cumbersome and red-tapism is rampant and in some cases corrupt practices are also prevalent.

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CREDIT-FINANCING OF PRIMARY AGRICULTURAL CO-OPERATIVE SOCIETIES AMONG FARM HOUSEHOLDS IN ORISSA

Rajkishore Panda*

The objective of the paper is to examine the pattern of credit distribution of Primary Agricultural Co-operative Societies (PACS) among different size classes of ownership holdings in Orissa. For the purpose of study, the amount of short-term and medium-term credit supplied by the PACS to different size classes of ownership holdings for the years 1979-80 and 1982-83 are taken into account. It is observed from the study that the credit distribution pattern of PACS is very much uneven between different size-groups of holdings. The large farmers received a greater percentage of credit than marginal and small farmers. With regard to the trend in credit-financing of PACS among different farm households during this period, it is observed that the growth in co-operative credit has not kept pace with the growth in the number of loanees. The additional percentage increase in loan amount is found to be less than the additional percentage increase in loanees, implying inadequate credit financing of PACS per loanee in the year 1982-83 as against 1979-80. The study concludes that the co-operative credit distribution is not only uneven between different size classes of holdings but also the growth in amount of credit per borrower-member in all categories of farm households during the period of study is very much inadequate so as to provide sufficient credit support to develop agriculture in the State.

INTER-REGIONAL DISTRIBUTION OF INSTITUTIONAL AGRICULTURAL CREDIT IN INDIA

Neena, Gurbachan Singh and Mann Singh Toor†

The objective of this paper is to look into the pattern of regional distribution of institutional agricultural credit vis-a-vis the regional growth of agriculture. The study has revealed that on the whole the distribution of agricultural credit is not based on the parameters of agricultural growth because it is found that States lying in the low growth rate zone of total advances are not in the same zone of total cropped area, gross and net irrigated area. In most of the cases there are States which are agriculturally more advanced and the farmers might be financing their farm needs from their savings. As the commercial banks are getting experience in dealing with the agricultural sector, the distribution of all kinds of agricultural credit advanced by the commercial banks has tended to be more egalitarian. It is a very healthy and favourable trend from the point of view of rural development.

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DEMAND FOR BANK CREDIT IN THE AGRICULTURAL SECTOR IN INDIA

Satish Verma and Vijay Chopra*

In India, the estimates of the demand for bank credit in the agricultural sector are worked out as a part of credit planning on the basis of the level of output and prices. In this study, an attempt has been made to demonstrate that the demand for bank credit in the agricultural sector depends upon a number of other factors also. Using the first difference data for the period 1968-69 to 1983-84 (April-March), the study shows that the demand for credit from the scheduled commercial banks in the agricultural sector in India is positively related with the number of bank branches and aggregate deposits. Hence, it is suggested that more bank branches should be opened in this sector of the economy so as to meet the unfulfilled demand for bank credit. The study also points out that as the demand for bank credit was inversely related to the national income originating in this sector, therefore, more funds can be made available to the small and marginal farmers. Furthermore, the rate of interest mechanism could be used to encourage the flow of credit to the small and marginal farmers. The study also revealed that the demand for bank credit was positively related with the adoption of new technology and the cost of production in this sector of the economy.

INSTITUTIONAL CREDIT AND DRYLAND FARMERS—A STUDY IN GADWAL BLOCK OF MAHABOONNAGAR DISTRICT (ANDHRA PRADESH)

K. P. C. Rao†

This study examines the various facets of institutional credit in a backward and drought-prone district of Andhra Pradesh, Mahaboobnagar. More specifically, it looked into the structure of demand for credit, the pattern of supply, the overdues problem, the impact of crop loan insurance and the relative performance of different institutional sources of credit. Data were collected from a sample of 110 farmers belonging to 15 villages in Gadwal block as well as from financial institutions in September 1987. Nearly 43 per cent of the sample farmers did not borrow from any institutional source of credit. The weighted average of short-term credit requirement in the sample was Rs. 10,418, consisting of Rs. 4,100 for production purposes and Rs. 6,318 for consumption purpose. The long-term credit requirement was even higher at Rs. 12,191. But the average amount of short-term credit availed by the sample farmers in the last three seasons was only Rs. 1,276, while Rs. 4,152 was availed as long-term credit over the past one decade. Even in the case of those who borrowed credit from institutional sources, 43.7 per cent of the

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amount was availed from non-institutional sources at high rates of interest. Owing to successive crop failures, the repayments were very less and most of the credit from both institutional and non-institutional sources was overdue for payment. The overdues, however, amounted to only 4 to 13 per cent of the assets in different categories of farms. Although dry crops occupied 83 per cent of the cropped area in Gadwal block, their share in crop loans ranged between 20 and 32 per cent only in the case of different financial institutions. The regional rural bank did better than other institutions in follow-up and recovery of loans. During 1985-86, the farmers in the study area received indemnities, which were about nine times the amounts paid as premiums under crop loan insurance scheme, resulting in a substantial reduction in the loan liabilities.

REGIONAL DISTRIBUTION OF AGRICULTURAL CREDIT BY PRIMARY AGRICULTURAL CREDIT SOCIETIES IN KERALA

P. V. Prabhakaran and N. Umadevi*

An attempt has been made in this paper to examine the nature and extent of regional imbalance in the flow of agricultural credit through primary agricultural credit societies in Kerala during 1976-77 to 1985-86. The study showed that there was a gradual decline in the regional concentration of refinance distribution in recent years. But the credit flow has definitely shown a positive bias towards developed districts like Kottayam and Ernakulam. The northern districts of Kerala have been badly affected by the present distribution of credit. Credit planning and its flow should be directed to the development of backward regions in the State. The levels of fertiliser consumption, acreage under perennial crops and the use of farm machinery are the major factors contributing to the regional imbalance. The operational efficiency of primary agricultural credit societies in a district can be predicted with the help of these variables. However, the credit distribution in a district is not related to the overdue position in the district.

COST OF CREDIT IN HILL AGRICULTURE: A SPATIAL ANALYSIS

C. S. Vaidya, B. K. Sikka and R. Swarup†

The paper examines the demand pattern and cost of credit in Himachal Pradesh, based on data collected from a random sample of 200 borrowers of commercial banks from the high hills, mid hills and low hills into which the State was divided. These borrower-farmers had obtained institutional credit for the pre-selected activities which were crop husbandry in low hills, horticulture in mid hills and animal husbandry in high hills, being area-specialised activities. The cost of credit was considered here in its wider sense and not merely the interest charges. Various costs incurred by the borrowers in the process of availing and repaying the loan were taken into account to work

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out the total cost of the credit. It was found that the borrowers had to incur 1.14 per cent of the average loan availed as cost during the process of availing the loan. Similarly, 3.12 per cent was the cost of repaying the loan. Thus in all, the borrowers had to incur 4.26 per cent as cost other than interest charges, which works out to be 23.54 per cent of the average amount of loan. The least cost of credit was observed to be in mid hills and the highest in low hills. The cost, in addition to interest charges, was found to be higher for small farmers than the medium ones, which is not a healthy trend. The need is suggested for the formulation of liberal policies for efficient distribution of credit to meet the requirements of area-specific activities and for speedy and efficient disposal of loan application to reduce the cost of credit.

PROFILE AND COST OF RURAL CREDIT: A CASE STUDY

A. C. Julka, R. N. Soni and S. Arora*

This paper tries to examine the profile of rural credit and the cost of its use through the analysis of its shadow prices. The shadow prices have been found through the method of linear programming. The study covers farmers of different categories in the district of Patiala in Punjab. It was observed that the additional cost incurred for adopting the new agricultural technology was fully paid for by the additional returns brought about by the new technology on marginal, small, medium and large farms. It was found that though the small and marginal farmers needed as well as deserved more financial assistance as compared to the large and medium farmers, they were the least favoured lot with regard to their share both in the total external finance as well as in the share of total institutional finance. The study revealed that the repayments of loans were more satisfactory in the region with transformed agriculture than those in the region with traditional agriculture. Prosperity in the region with transformed agriculture has encouraged quite a number of farmers to incur debt for the purchase of unproductive assets. The analysis of shadow prices showed that under the present set of constraints and yield of various crops, the use of existing level of 'cash' was unremunerative on most of the farms.

ANALYSIS OF RURAL CREDIT STRUCTURE IN LUDHIANA DISTRICT

Narinder Kumar, Bant Singh and H. S. Bal†

The paper examines the extent of loan outstanding with different categories of rural households, the share of different agencies in the total loan outstanding, purposewise distribution of loan and the extent of institutional loan diverted to other purposes in Ludhiana district of Punjab. Two villages of the district were randomly selected for this purpose and a complete census

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study of all the 330 households was made. The households of the selected villages were classified into seven categories: (i) cultivators, (ii) agricultural labourers, (iii) village artisans, (iv) skilled labourers (v) servicemen, (vi) businessmen and traders and (vii) transporters. The study revealed that over 60 per cent of the rural households were indebted as on March 31, 1988. The average amount of debt per household was Rs. 12,762. The amount of debt varied from Rs. 2,571 for agricultural labourers to Rs. 35,246 for large farmers. More than 67 per cent of the debt incurred was taken from institutional agencies, 19 per cent from commission agents and about 13 per cent from relatives and friends. Nearly 85 per cent of the loan was borrowed for productive purposes and the remaining 15 per cent for social and consumption purposes. About ten per cent of the loans taken from institutional agencies were diverted for non-productive uses. The diversion of loan was more among the weaker sections of the rural population and it accounted for 15 to 16 per cent of the total loans among the agricultural labourers and small and marginal farmer households respectively.

COMMERCIAL BANK LENDING TO AGRICULTURE—SOME LEADING ISSUES

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Some of the problems plaguing commercial bank lending to agriculture are viability of operation, erosion in the autonomous character of institutions, credit allocation based on security, rigidity in administered lending, credit gaps, misutilisation of credit and poor recovery. The paper makes an attempt to examine these issues using both district level and households level data. There has been stability in the commercial bank lending to agriculture in Coimbatore district of Tamil Nadu during 1980-86 and commercial banks accounted for more than 70 per cent of the total lending to agriculture. Again crop loans constituted more than 70 per cent of total credit to agriculture from commercial banks. In the allied sector, dairying benefited greatly with more than 40 per cent of the total credit during 1980-86. About 81 per cent of the small farmers and 68 percent of the agricultural labour households expressed concern over the untimeliness in the delivery of loans. The other problems are insufficient time for repayment, lack of technical guidance, inflexibility in the structure of instalments of repayment, and lack of technical guidance.

Misutilisation of loans was the highest (37.61 per cent) among agricultural labour households and among the small farmers (20 per cent). The analysis revealed that the large farmers have better access to commercial bank credit. The per hectare utilisation of credit by the small farmers for different crops is considerably less. This has very serious implication for income distribution. Another interesting finding is that the farmers use less quantum of credit for crops with high income risks. The size of crop income, income from other

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sources and size of farm assets have a positive influence on the repayment of loans. Farm size, consumption expenditure, family size and non-farm assets exert negative influence on repayment. This was found out by using 'Path Analysis'. An econometric model estimated to identify the credit demand revealed that fertiliser use, intensity of irrigation and the proportion of area under cash crops create more demand for credit. An analysis of credit gap revealed that for sugarcane the credit gap was Rs. 4,760 per hectare and for cotton, it was Rs. 1,434 per hectare. It amounted to Rs. 219 for coconut, Rs. 556 for turmeric and Rs. 483 for groundnut. The major policy suggestion is that a more scientific but bold approach should be adopted for providing agricultural credit to meet the differential needs across different categories of beneficiaries and regions. The decision process in the delivery and recovery of agricultural credit should be more decentralised.

IMPACT OF RURAL CREDIT THROUGH CO-OPERATIVES IN AGRICULTURAL DEVELOPMENT IN EASTERN UTTAR PRADESH

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An attempt has been made in this paper to study three important aspects, namely, (i) the class of cultivators reaping utmost benefit from co-operatives and the extent of co-operative credit utilised for productive purposes, (ii) the effect of co-operative credit on investment and income and (iii) the credit need. The study is based on a random sample of 100 cultivators (50 beneficiaries and 50 non-beneficiaries) selected from ten co-operative credit societies of two blocks of Deoria district of Eastern Uttar Pradesh. The enquiry was conducted by survey method during the agricultural year 1985-86. The results indicated that the farms of the smallest size-group (less than one hectare) benefited most by the co-operatives as compared to the farms in the size-groups of 1-2 hectares and 2 hectares and above. On an average, 71 per cent and 29 per cent of the total loans were utilised for productive and non-productive purposes respectively. The productive and non-productive loans utilised varied from 67.50 per cent and 32.50 per cent in the smallest size-group to 82 per cent and 18 per cent in 2 hectares and above size-groups respectively. The per farm business analysis revealed that the values of input, output, family labour income, farm business income and input-output ratio were significantly higher on the beneficiary farms in all the size-groups as compared to the non-beneficiary farms. Out of total credit need, the co-operatives, on an average, met only 15.13 per cent of the total credit needs of the sample farms. The co-operative credit helped the beneficiary farms to invest more on cash inputs which in turn resulted in higher production and incomes on these farms.

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BORROWING AND REPAYMENT PERFORMANCE OF FARMERS PERTAINING TO INSTITUTIONAL LOANS IN KURUKSHETRA DISTRICT, HARYANA

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An attempt is made in the paper to analyse the nature and extent of loans taken from institutional agencies and the repayment of loans by 203 borrower households in the agriculturally advanced Kurukshetra district of Punjab in 1981-82. The total amount of outstanding institutional loans borrowed by the small, medium and large farmers and the overall average was Rs. 9,677, Rs. 30,184, Rs. 55,936 and Rs. 26,935 respectively. In the total outstanding loans, the share of medium/long-term loans borrowed from the land development banks and commercial banks was about 48, 67, 73 and 67 per cent for the small, medium and large and overall average farms respectively and the remaining being the short-term crop loans borrowed from the co-operative societies. In the total outstanding medium/long-term loans, the tractors alone accounted for 60, 93, 95 and 96 per cent on small, medium, large and overall average farms and in total institutional loans, the share of tractors was 29, 62, 69 and 60 per cent respectively. The average amount of loans due for repayment on the small, medium, large and overall average farms was Rs. 9,644, Rs. 23,861, Rs. 42,104 and Rs. 21,691 and the repaying capacity was only Rs. 3,437, Rs. 17,595, Rs. 44,895 and Rs. 18,585 respectively. The majority of the farmer thus were found to be under heavy debt burden. The main causes of default in recovery of loans were (*i*) excessive political interference in the day-to-day functioning of credit institutions, (*ii*) problems relating to sub-standard supply of farm inputs, (*iii*) cases of wilful default, (*iv*) farmers being caught in credit trap as their repaying capacity fell short of loan amounts due, (*v*) fictitious loans were common in subsidised items like milch animals, poultry, piggery, etc., (*vi*) advancing loans without proper scrutiny of the technical feasibility, and financial viability of the schemes and inadequate marketing facilities and (*vii*) lack of adequate income to repay the tractor loans by most of the farmers.