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Summaries

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An Evaluation of Physical and Financial Indicators of Banaskantha-Mehsana Gramin Bank (Gujarat)

R.L. Shiyani and J.K. Patel*

The paper evaluates the physical and financial indicators in relation to the functioning of Banaskantha-Mehsana Gramin Bank in Gujarat State. The data on various attributes of the bank were collected and compiled for the period of nine years which were divided into two sub-periods, viz., period of establishment from 1981 to 1985 and period of development from 1986 to 1990. Linear growth rates of different attributes were computed for the overall period. The study revealed that the linear growth rates of all the attributes were highly significant. A tremendous increase in the accumulated losses was an alarming situation for the bank. The losses could be reduced by proper cash management, minimising the less remunerative fixed assets and increasing the proportion of savings deposits which carry relatively lower rate of interest. The physical and financial indicators per branch as well as per employee showed that the business volume of the bank increased at a relatively faster rate during the period of development as compared to the period of establishment. The need is emphasised for intensive efforts of the bank staff in deposit mobilisation, branch expansion and for the disbursement of loans to the rural masses. However, prompt action needs to be initiated for minimising the overdues.

An Analysis of Issues Related to the Agricultural and Rural Debt Relief Scheme, 1990

K.A. Khunt, G.D. Parmar and D.B. Desai†

With the advent of high-yielding varieties and new capital intensive farm technology, agricultural production and flow of institutional credit have increased substantially. Even then, the problems of overdues and indebtedness in the farming and rural sector became more and more acute. This tempted the government to incorporate relief measures in agricultural credit policy whenever it became necessary to save some target groups. Recently, this has become a controversial issue, whether such measures have really served the purpose. Therefore, an attempt is made in the paper to examine the issues like growth in agricultural credit allocation, recovery, repayment behaviour and impact of Agricultural and Rural Debt Relief Scheme, 1990. Four branches of Bank of Baroda were selected in Navsari taluka of Valsad district in Gujarat State. An opinion survey was carried out covering 30 respondents (progressive farmers, bank officers and presidents of village co-operatives, etc.) selected from the jurisdiction of the selected branches of Bank of Baroda. The study pertained to the year 1992-93.

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The study revealed that in the selected branches of Bank of Baroda, the allocation of agricultural credit increased significantly during the period 1985-86 to 1992-93 but the rate of recovery lagged behind the rate of credit allocation. The tendency of borrowers to delay the repayment of the loan increased with the passage of time. In addition to this, it is also confirmed that Agricultural and Rural Debt Relief Scheme, 1990 may intensify the problems of overdues, wilful defaults, bankruptcy, etc. Thus the scheme may prove a curse rather than a cure for the banking sector. Therefore, it is high time for the planning authorities to reform the existing credit policy and to renounce any relief measure in the future credit policy to save the banking industries from becoming paralysed.

A Study of Institutional Finance in Agriculture

Balishter and Pankaj Kumar*

The study attempts to examine the extent of credit available to different categories of farmers from the institutional and non-institutional sources, purposewise availability of credit, pattern of utilisation of credit availed from the institutional sources and repayment and overdues of loans which were availed by the farmers from the institutional sources. The study is based on the primary data collected from 75 farm families - marginal, small, medium and large - from Bichpuri village of development block Bichpuri (Agra) selected purposively on the basis of intensive financing of agriculture by the institutional agencies - commercial banks, co-operative society and the Land Development Bank during the agricultural year 1991-92. The results of the study indicate that in areas where commercial banks have extended their operations, they constitute the major source of financing agriculture in the case of marginal and small farmers while the share of the co-operative society is larger in the case of medium and large farmers. This indicates that the co-operative societies still continue to be conservative and security-oriented in their loaning operations. The commercial banks have to finance the marginal and small farmers as part of the Government policy. Thus the system of directed credit programmes has contributed to an expansion of credit in favour of the weaker sections of rural society and thus fulfilling the social objective.

About 35 per cent of the sample farmers, mostly marginal and small, also borrowed from the non-institutional agencies - mainly from moneylenders - but the total amount of borrowings amounted to about 10 per cent of the total, which means that the farmers borrowing from the institutional agencies do not have to depend much on non-institutional sources to meet their credit requirements. Of the total credit made available to the farmers, about 76 per cent was provided from commercial banks, about 8 per cent from the co-operative society and about 6 per cent from Land Development Bank. The availability of credit per hectare was higher in the case of marginal and small farmers as compared to the medium and large farmers. This implies that the marginal and small farmers are no worse than the medium and large farmers which is due to the deliberate policy of the government to redirect the flow of institutional credit in favour of marginal and small farmers. Of the total credit available to the farmers, about 10 per cent was for crop production, 69 per cent for purchase

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of milch animals, about 7 per cent for minor irrigation and about 5 per cent for farm equipments. It may be noted that over 81 per cent of the total loan availed from commercial banks was for the purchase of milch animals. Thus bank loans for milch animals dominate among the various purposes. This is due to the fact that the marginal and small farmers have been financed by the banks under the Integrated Rural Development Programme for purchasing milch animals to increase their income.

On an average, about 54 per cent of the available credit was used for productive purposes and about 46 per cent was diverted for unproductive purposes. Of the total overdues, about 50 per cent are 'old' overdues for over three years and about 50 per cent are 'current' overdues for less than three years. Categorywise analysis shows that of the total overdues, 'old' overdues accounted for about 54 per cent in the case of marginal farmers and 50 per cent in the case of small farmers. This indicates that the problem of overdues of bank finance is quite serious in the case of marginal and small farmers. Thus there is immediate need to take appropriate measures to reduce the incidence of overdues to make funds available for the needy farmers for agricultural development.

Agricultural Finance in the Context of Technology-Led Agricultural Development

G.N. Singh, R.K.S. Kushwaha and R.B. Singh†

With a view to examining the importance of directed lending for agriculture, a study was conducted in Azamgarh district of Uttar Pradesh during 1991-92. There are three main farm financing institutions, viz., co-operatives, commercial banks and Regional Rural Banks (RRBs) operating in this district. The total agricultural credit needs of the district was estimated at Rs. 33 crores in 1991-92. Farm financing institutions contributed as much as about 87 per cent of the total credit needs of the farmers. The total outstanding loan was of the order of Rs. 17.06 crores, of which over 21 per cent was recovered. Out of the total borrowers, 9.94 per cent were defaulters. It was the highest for RRBs and the lowest for the co-operatives. As large as 32 per cent of the defaulters failed to make payment of their dues due to poor crop yield because of untimely rainfall.

The main outcome of this study is that the overdues increased mainly because of the weak and unstable financial condition of the farmers. It is necessary to increase the income and earning capacity of the farmers. The farm credit institutions follow the traditional credit need approach with high interest rate which has resulted in poor recovery position. Urgent remedial measures are, therefore, required to make the financial institutions particularly the RRBs a viable proposition. As regards re-defining the priority sector, agriculture and the target groups consisting of the rural poor should be given top priority for the next ten to fifteen years.

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An Evaluation of Co-operative Loan Waiver Schemes in Patan Block of Jabalpur District, Madhya Pradesh

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A study was undertaken to evaluate the Madhya Pradesh Krishak Rin Rahat Yojna and Madhya Pradesh Agricultural Production Incentive Scheme, 1990 in Jabalpur district of the state. The Patan block and a co-operative society of the selected district were selected purposively and the data were collected from 74 beneficiaries, pertaining to the year 1991-92. The analysis of data revealed that the uncertainty in weather conditions, low productivity and low income of the borrowers were the main reasons for non-payment of co-operative loans by the borrowers. The proportion of principal amount and interest waived under the schemes was 64 per cent and 36 per cent respectively. The sample borrowers had availed of the relief mainly on crop loans. The majority of the borrower-beneficiaries belonged to the general group of farmers as compared to the scheduled castes and scheduled tribes. The medium farmers obtained the maximum benefits in loan amount which was written-off in the study area. The period of loans which were waived off pertained to 2 to 15 years.

As regards the entitlement for fresh loans, only the farmers representing the general category availed of fresh loans. The scheme assisted the farmers to use improved seeds and fertilisers only. The use of fresh loans did not lead to higher level of adoption for other components of crop production technologies. The repayments of fresh loans did not show any improvement due to the loan waiver which might also be due to too short a period to evaluate the same. The scheme should be restricted to the weaker sections of the society irrespective of the social groups, but the results of this study reveal that the medium category of farmers obtained the maximum benefits. The loan waiver scheme in the study area did not result in capital formation and adoption of new farm technology. Hence the scheme could not serve the purpose. The door for fresh loans was opened after the scheme but the recovery of farm loans was found to be a major problem that still needs to be solved. However, the scheme has succeeded in the redemption of old debt but the recovery of fresh loans was a major problem faced by the co-operative farm credit sector.

The loan waiver scheme did provide relief to the farmer-borrowers but did not create an atmosphere for the lending agencies to expand the credit facilities to the needy farmers. The redemption of the old debts should have been followed by input supplies rather than the cash component of the loan to boost up production, income and repayment capacity of the borrower-beneficiaries. Opinion of the banking agencies should have been taken before launching the loan waiver scheme to make it production oriented rather than simply to provide relief by way of redemption of old debts.

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Financial Sector Reforms: Some Implications for Rural Credit

Kandarpa Kumar Barman†

An attempt has been made in the paper to highlight the financial sector reforms based on the Narasimham Committee report and to examine their various implications for the rural credit system in India. Despite the remarkable achievements made by the financial system in India during the last two decades, several distortions have crept into the financial system. As a result, the productivity and efficiency of the system have suffered, the profitability has been eroded and its portfolio quality has deteriorated. Therefore, the Narasimham Committee, appointed in August 1991, has made several recommendations, among other things, relating to modification of the rural banking structure, interest rates on agricultural loans and directed programmes of rural credit which have a direct bearing on the future of agricultural credit system.

An analytical study of the recommendations of the Narasimham Committee reveals that in a country like India where more than 75 per cent of the people live in rural areas and where the agricultural sector still contributes more than 30 per cent to the gross domestic product, phasing out the concessional rate of interest to the priority sector or reducing the quantum of priority sector lending in the name of increasing competitive efficiency will be a difficult task. Moreover, the experience of Korea and Bangladesh (in the case of Grameen Bank) shows that priority sector lending itself is not a drawback of the financial system. What we need today is quality lending, appropriate system of selecting the borrowers and monitoring the loan through disbursement, use and repayment, Likewise the Committee's suggestion about the creation of 'rural subsidiaries' towards restructuring the rural banking system is yet to be accepted by the Government. The basic feature of low returns on agricultural lendings is a major constraint in the rural banking system, and that has to be corrected before making any structural changes in the rural banking system.

A high lending rate to the agricultural sector accompanied by a reduction in priority sector lending may jeopardise the very objectives of financial sector reforms. The financial reforms proposed by the Narasimham Committee marks a beginning of a new era towards financial liberalisation. But while implementing the policy reforms, we must see that the reforms do not produce any undesirable effects on the economy.

An Analysis of Performance of Co-operative Credit Institutions in Tamil Nadu

N. Ajjan*

The main objectives of this study were (i) to analyse the performance of the three-tier structure of co-operative credit institutions in terms of their deposits, borrowing, working capital, loans issued, loans outstanding and the profit/loss during the last decade, i.e., 1982-83

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to 1991-92, and (ii) to suggest appropriate strategies to improve their viability. The analysis reveals that the deposits, borrowings and working capital have increased more than 200 per cent in all the short-term and medium-term co-operative credit institutions, viz., State Apex Co-operative Banks, Central Co-operative Banks and Primary Agricultural Co-operative Banks (PACBs). The percentage of overdues has continuously declined from 46 to about 35 during the reference period, reflecting the poor recovery performance. In the case of PACBs, the overdues increased to 259 per cent during the reference period reflecting poor recovery performance making most of the PACBs non-viable. This non-viability aspect was well conceived by the Agricultural Credit Review Committee which suggested a Business Development Plan. This plan has been implemented in Tamil Nadu since 1991-92 and the results are encouraging. It is suggested that this plan should be continued till all the non-viable PACBs become viable.

In the long-term credit institutions, viz., State Land Development Bank, the share of loan issued to loan outstanding has increased to about 18 per cent during 1991-92 as against 8.79 per cent during 1982-83. The overdues of primary land development banks also increased to 18.75 per cent from 11 per cent during the corresponding periods. Profitability of these long-term credit institutions has fluctuated during the reference period, a majority of them working at a loss. It is suggested that recovery performance should be improved by drawing suitable plans. It is also suggested that an appropriate plan encompassing diversified activities similar to Business Development Plan should be drawn to improve the viability of primary land development banks.

Role and Future of Regional Rural Banks in Supplying Rural Credit

Sushila Srivastava, Brahm Prakash and S. Lal[†]

The paper seeks to examine the contribution of various agencies in agricultural finance, the role of Regional Rural Banks (RRBs) in supplying rural credit, to judge the economic viability of RRBs, to identify the constraints responsible for losses and to study the changing role of RRBs as influenced by the farm sector reforms. The study revealed that the share of non-institutional sources in supplying credit has been continuously declining. Among these non-institutional sources, the share of moneylenders has declined sharply. This could be possible due to the increasing role of institutional sources like co-operative societies and commercial banks through RRBs. It is evident from the study that as on March 31, 1994, there is a network of 14,543 branches of RRBs in 396 districts of 23 states of the country. Ninety-three per cent of these societies have been established in rural areas. The number of branches of RRBs is about 24 per cent of the total branches of scheduled commercial banks and 38 per cent of rural branches of commercial banks. Till the end of March 1994, loans amounting to Rs. 4,610.53 crores were distributed by RRBs among 12.943 million accounts of small and marginal farmers. Thus although the RRBs did succeed in achieving their social and constitutional objectives but from the point of view of economic viability, they have

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failed. Out of 196 RRBs, 150 have been continuously running at a loss. Till the end of March 1993, the cumulative figure of deficit was Rs. 930 crores. During 1992-93, only 24 RRBs could earn a marginal profit. The RRBs could recover only 32 per cent of their loans. Structural, organisational and political constraints are the major bottlenecks responsible for the failure of these RRBs. By implementing farm sector reforms (reducing the statutory liquidity and cash reserve ratios, setting up special tribunals for the recovery of loans, additional provision for disputed loans, permission to change the location of banks at a profitable place, abolition of selective credit control on cotton and wheat, increasing the credit limit for paddy and increasing the bank margins for oilseeds and vanaspati, etc.), the Government is determined to improve the working of RRBs and making them viable. It is hoped that these RRBs will play a better role in the economic development of the country.

Impact of New Farm Technology on Financial Structure and Credit System in India

R.K. Sharma, Brij Bala and A.K. Sharma*

The paper aims at examining the changing nature, purpose and sourcewise distribution of debt in different states of India. The data were collected from Rural Labour Enquiry Reports for the years 1964-65 and 1987-88 and analysis was done for the pre-green revolution and post-green revolution period. The data pertained to all the major states and Union Territories and for agricultural labour households. The results reveal that over time more emphasis has been given to kind loan than to cash loan. The share of hereditary loan per household was found to be the highest in Rajasthan. The percentage amount of debt to total debt for household consumption continued to be important in all the states particularly in Assam, Bihar, Meghalaya and Uttar Pradesh. With the adoption of new farm technology, the amount of debt for productive purpose has also increased significantly, barring Assam. During 1987-88, the amount of debt for more than one purpose was found to be nil. The analysis of sourcewise debt shows that although the percentage of non-institutional debt decreased over the 25-year period, yet it was more than 65 per cent of the total debt. The institutional sources were restricted mainly because of government regulations and high intrinsic cost of borrowings. With the recent recommendations made by the Narasimham Committee, these bottlenecks can be overcome. This will lead to additional investment in agriculture to get the benefits of untapped farm technology.

Flow of Credit to Different Categories of Farmers: A Study in Cuttack District, Orissa

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The present study was undertaken with a view to examining the flow of rural credit to

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different categories of farmers in Cuttack district of Orissa. The relevant data were collected from a random sample of 99 farmers from two blocks of the district and pertained to the year 1992-93. To find out the extent to which credit allocation was associated with certain farm characteristics, the Gini index of concentration was worked out. A comparative picture of credit distribution according to farm characteristics indicated that the marginal farms constituted 44.44 per cent of the total sample and owned 20.75 per cent of the land. The small and large size farms constituted nearly 34 and 21 per cent of the total sample farms and owned 38.67 and 40.58 per cent of the total land held by the sample farms respectively. Of the total credit advanced, the marginal, small and large farms accounted for 19.26, 38.51 and 42.23 per cent respectively. On the other hand, comparison of the allocation of credit in respect of other farm characteristics like farm assets, farm expenses, gross farm output, etc., revealed that credit allocation was almost in proportion to the resources held in each size-group of farms.

The Gini index of concentration of the number of farmers and land owned was 0.58, which indicated a high degree of land ownership among the large size-group of farms. When the number of farmers was used to measure the credit allocation, the Gini index worked out to 0.66, indicating once again that the allocation of credit was skewed and the large size farms were getting proportionately a larger share of the credit allocation. The position, however, changed when the proportion of land owned and the proportion of credit used by the each size-group were studied simultaneously. The Gini index worked out to only 0.16, which indicated that the distribution of credit was almost equitable in respect of economic characteristics of the farms. Thus it may be inferred that farm characteristics influence the flow of credit to different categories of farmers and it is discriminatory against small and marginal farmers. If the policy is to improve the economic condition of the small and marginal farmers through equitable distribution of credit, then the present basis of credit allocation needs to be changed.

Informal Group Finance: Its Relevance to the Rural Poor

T.P. Gangadharan*

The failure of formal credit system to reach the rural poor has urged the planners to search for feasible alternatives. One finds, of late, a novel yet experimental mechanism of credit delivery through Self-Help Groups (SHGs) epitomising the relevance of informal credit. This paper examines the positive characteristics of informal finance while highlighting its profound sway over the rural poor in the country. Later, the compelling reasons for linking SHGs with banks and issues involved thereon are discussed. The study provides supportive evidence that informal credit would flourish in areas of poor resource base and weak natural endowments. In such backward areas the moneylenders, professional as well as agricultural, gain upperhand as other sources of informal credit like relatives and friends, traders, etc., may become less relevant. The brighter side of informal credit such as loans

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for emergent consumption purpose, delinking of security, promptness in loan availability, low transaction cost, etc., need to be adapted in any system of credit delivery to the poor. The lender should be able to reduce the risk of default by using the knowledge gathered through frequent social/business dealings. The transactions are to be undertaken by mutual consent in truly informal manner. It thus follows that a modified approach is needed to overcome the limitations of formal and informal credit.

Group loan concept is gaining popularity among the rural poor who can pool their meagre resources and work for a common cause. The lending cost is reduced because lending to a group lowers the risk of dealing with small and unviable activities, circumvents the problems involved in identifying the borrowers and reduces the cost of processing the loans. Group members encourage each other to repay on time so that the other members can qualify for loans in the future. Though instances of linking SHG with banks have been reported here and there, the response from both the sides in this direction has been lukewarm.

The bank's approach to the poor should be more of a change agent than as a mere financing agency and therefore, the terms and conditions ought to be suitable to the group. Experiences worldwide show that given the fast financial services through simple procedures and supervision of end-use of credit with problem solving approach, the rural poor can emerge as respectable clientele of banks. Groups that are motivated by the availability of cheap credit or where members do not pull together in pursuit of a common, viable objective are likely to fail. Thus understanding of group dynamics would go a long way in meaningful group formation and linking with banks.

Agricultural Credit and Financial Sector Reform

Amalesh Ch. Banerjee†

The paper examines the emerging issues of farm finance on the demand and supply side, analyses the implications of the recommendations of the Narasimham Committee in the context of changing requirements of farm finance and draws some policy conclusions. Credit requirements for all the activities - technology adoption, production and trade - under the economic reform programme will be large and extensive which the existing credit institutions will find challenging to supply. Financial sector reform while deregulating government control must create conditions for sufficient availability of credit at remunerative cost for efficient and productive use of resources for income generation. The emerging scenario of agricultural activities in the context of economic reform is that more extensive adoption of technology in irrigation, electricity generation, agro-processing and manufacturing are required to be promoted under the public and private sector. This will rapidly increase output in this biggest sector of the economy and will also provide employment as a safety net in the context of exit policy in the organised sector. Credit available for all these diversified activities in agriculture under the existing financial structure is not even, enough and efficient.

The financial sector reform as proposed by the Narasimham Committee and the Malhotra

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Committee for banking and insurance seeks to deregulate the commercial banks, phase out concessional interest rate, reduce priority sector lending to 10 per cent, and promote competition among banks and insurance companies, both national and international. This reform programme is not, however, very specific with regard to farm credit. Instead of winding up the Regional Rural Banks (RRBs), they should function independently under the National Bank for Agriculture and Rural Development (NABARD) and the co-operatives have to be strengthened both for credit, marketing and production. Adoption of new technology in agriculture in different regions of the country requires a more flexible but viable rural financial structure encompassing RRBs and co-operative credit for consumption, trade and production will generate income and will relieve the rural peasants from indebtedness to the landlords. Poor peasants' indebtedness to the landlords for distress and consumption credit results in exploitation of various sorts. Commercial banks' assistance to these farmers through Integrated Rural Development Programme (IRDP) and such other anti-poverty schemes has been limited but effective, even though the programmes suffer from a number of limitations. Credit for the target group including women has to be considered in the reorganised financial structure. Neither the Malhotra Committee nor the Narasimham Committee could suggest any robust programme of credit for their social security and poverty alleviation and they are the 40 per cent of the entire population of the country.

In order to bridge the credit gap that exists in the rural community, the Narasimham Committee suggested to swap the rural branches of commercial banks and to form rural subsidiaries of the commercial banks. The RRBs of the commercial banks should be merged with the newly formed rural subsidiaries of the commercial banks. The Khusro Committee also recommended to merge the RRBs with the sponsor banks. Alternately, it suggested the formation of a National Co-operative Bank in order to strengthen the co-operative structure. Both the recommendations are relevant but need some modifications for building up a general framework of viable rural credit institutional structure. The RRBs should be strengthened with the merger of rural branches of commercial banks with them instead of winding up and a National Co-operative Bank should be set up in order to strengthen the co-operatives which will provide succour to the weaker section. Co-operatives and RRBs should be revitalised and should, under the NABARD, jointly form the rural credit structure to meet the formal and informal credit needs of rural households and the target group in particular. In this general framework of rural credit institution, a National Hill Development Bank and a Rural Infrastructure Development Bank should be organised for hill regions and for the development of rural infrastructure respectively.

Financial Viability of Central Co-operative and Regional Rural Banks in Bihar - A Case Study

Sheila Sinha, R.K.P. Singh, and J.N. Choudhary*

The paper presents a comparative analysis of the financial performance of a Central Co-operative Bank (CCB) and Regional Rural Bank (RRB) operating in Singhbhum district

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of Bihar. The study aims at analysing the pattern of income, expenditure, profit or loss and break-even levels for deposits as well as for loan business. The study is based on secondary data collected from the financial statements of these banks for the period 1987-92. The analysis of data revealed that the CCB earned comparatively higher gross income than the RRB during 1987-92. The interest earned was the major source of income in both the banks under study. Income from other sources was insignificant in both the identified banks and its contribution to gross income has been less than one per cent during the period under study, probably due to their inability to provide ancillary services to their customers.

The expenses incurred by the CCB was also more than those incurred by the RRB but the establishment expenses were comparatively higher in the RRB than in the CCB. It was mainly due to deputation of high salaried officials of sponsoring bank as branch managers of the RRB. Variable expenses constituted a major part of total expenses in the case of CCB (80 to 90 per cent) but these expenses varied from 36 to 70 per cent in the RRB. On the other hand, fixed expenses were comparatively higher in the case of RRB (33 to 63.7 per cent) than in the CCB (9.87 to 18.13 per cent) during the period under study.

The CCB earned profit throughout the period under study whereas the RRB incurred losses during the same period. Break-even analysis indicated that the CCB was operating above the break-even level for deposits and also for advances during the period under study but the profitability was declining, whereas the RRB was operating below the break-even level both for advances and deposits during the period. The declining financial viability of the CCB and increasing loss in the RRB could be checked by controlling the expenses in the former and increasing the volume of business in the latter.

Institutional Credit and Its Role in the Small Farm Economy: A Case Study

S.P. Gupta†

The paper examines the extent of utilisation of credit and the impact of credit on technology used, labour absorption and the income at the farm level of the producers. The study is based on data collected from a sample of 60 households (36 beneficiaries and 24 non-beneficiaries) selected from six villages of three Primary Agricultural Co-operative Societies (PACS) of Dharsiwa block in Raipur district of Madhya Pradesh, pertaining to the year 1993-94. Large farmers were not considered for the study and all the sampled farmers were grouped into marginal (below one hectare), small (1 to 2 ha) and medium (2 to 4 ha) categories. The study revealed that the utilisation of short-term loan as a proportion of the total loan advanced decreased as the size of holding increased and it varied from 73 per cent on the marginal farms and 64 per cent on the small farms to about 52 per cent on the medium farms with an overall average of 57 per cent. The per hectare use of short-term loan (cash and kind) was the highest on the marginal farms, followed by the medium and small farms. On the other hand, the utilisation of medium-term loan increased with an

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increase in the size of holdings and it accounted for about 43 per cent of the total loan. Its utilisation varied from 26 per cent on the marginal farms to 48 per cent of the total on the medium farms. More than 77 per cent of the medium-term loans were used for the purchase of draught animals and the rest for the milch animals. The proportion of outstanding medium-term loans was 22 per cent while the outstanding short-term loans was only 9 per cent.

As regards the extent of adoption of improved technology on the beneficiary and non-beneficiary farms, it was noted that about 19 per cent of the total area under paddy was under high-yielding variety (HYV) paddy on the beneficiary farms, on an average, as against only 12 per cent on the non-beneficiary farms. The beneficiaries adopted improved package of practices like transplanting which was conspicuously absent in non-beneficiary farms. The use of fertilisers and plant protection chemicals was also higher on the beneficiary farms than on the non-beneficiary farms.

The per hectare use of human labour in all the operations of paddy cultivation except interculture was found to be higher on the farms of beneficiaries. In interculture, the per hectare use of human labour was less on these farms because of adoption of transplanting method in paddy cultivation. On an average, the per hectare use of labour was about 139 days on the beneficiary farms as against 127 days on the non-beneficiary farms. The beneficiaries, on an average, earned about 60 per cent of their income from crop cultivation, about 20 per cent from service, 18 per cent from wage paid employment and 2 per cent from business. The corresponding figures for the non-beneficiaries were 43 per cent, 32 per cent, 18 per cent and 7 per cent, the total non-farm income being 57 per cent. The crop income and the non-farm income earned by the beneficiary farms were higher by 108 per cent and 52 per cent respectively than those earned by the non-beneficiaries. The study suggests that the farmers should be encouraged to avail of medium-term loans to create good infrastructure on their farms as well as to adopt improved technology with a view to increasing the productivity of the crops and farm income.

Capital Requirement of Maharashtra Agriculture at Varying Growth Rates

S.N. Tilekar, P.G. Desale, B.J. Hinge and N.M. Inamke*

Estimation of capital requirement for agriculture is a difficult task since technologies are changing quick and very fast. The effects of technologies, however, can be expressed in terms of changing growth rates. The paper attempts to estimate the per farm capital requirements of small, medium and large farms in Western Maharashtra, Marathwada, Vidarbha and Konkan regions of the Maharashtra State and estimate the capital requirements for the years 1994-95 and 1999-2000. The data collected under the ad hoc scheme of Indian Council of Agricultural Research (ICAR), viz., "Capital Requirement for Modernisation of Indian Agriculture" were used. It was observed that, on an average, the per farm capital

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requirement of small, medium and large farms was Rs. 3,894, Rs. 10,775 and Rs. 33,055 in Western Maharashtra, Rs. 5,997, Rs. 18,309 and Rs. 21,079 in Marathwada, Rs. 1,878, Rs. 4,644 and Rs. 10,847 in Vidarbha and Rs. 2,286, Rs. 14,204 and Rs. 29,482 in Konkan respectively. The estimated capital requirements at existing technologies for different regions of Maharashtra were Rs. 4,348, Rs. 2,697, Rs. 1,103 and Rs. 1,520 crores in Western Maharahstra, Marathwada, Vidarbha and Konkan regions respectively. These estimated capital requirements include short, medium and long-term capital investments on the sample farms. Similarly, the break-up of total capital requirement was also estimated as owned and borrowed capital.

Based on the existing use of capital in the state in different regions, the projections for 1994-95 and 1999-2000 were made. While making projections the expected future price rise was considered. The resultant effect in the increased use of capital due to change in technologies was assumed at the rates of 1, 2 and 3 per cent per annum. The projected values indicated that by 2000 A.D., capital requirement will be in the range of Rs. 7,374 - 7,595 crores, Rs. 4,574 - 4,711 crores, Rs. 1,870 - 1,927 crores and Rs. 2,577 - 2,655 crores for Western Maharahstra, Marathwada, Vidarbha and Konkan regions respectively.

Service Area Approach in Agricultural Financing: A Study of Credit Flow to Animal Rearing in Bansdih Block of Ballia District

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The paper examines the flow of credit towards animal rearing with particular reference to dairy development, poultry, sheep, goat and pig rearing and fisheries in Bansdih block of Ballia district in Uttar Pradesh through various financing agencies under the Service Area Approach initiated by the Reserve Bank of India from April 1, 1989. The data taken from various bank branches in the block for the pre- and post-service area approach periods (1987-89 and 1989-91 respectively) were used for this study. The study noted that the banking agencies in the area have shown least interest in financing the heads of dairy development, poultry, sheep, goat and pig rearing and fisheries despite their potency in employment generation and enhancement in income, living standard and economic status of rural population. The service area approach has been implemented in the area but failed to influence the financing tendency of the banking agencies. The failure of service area approach in influencing the financing tendency of the banking agencies, however, seems to be due to their stereotyped functioning and least interest shown by the banking personnel in the development of the area.

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Economic Rationale of Credit Use on Small Farms in the Context of Technology-Led Development of Agriculture in Bihar

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The paper examines, on the basis of empirical data, the economic rationale of credit use supplied through Large Sized Adivasi (Agricultural) Multi-Purpose Societies (LAMPS) and Regional Rural Banks (RRBs) in two distinct regions of Bihar in the context of technological development in agriculture. The basic data for the study were collected from a random sample of 72 borrowers - 36 from Raipur branch of Vaishali Khetriya Gramin Bank (VKGB) in Nanpur block of Sitamarhi district, North Bihar and an equal number from Baraplasi LAMPS in Jama block of Dumka district in Santhal Paraganas tribal region of South Bihar. The period of enquiry was from July 1989 to June 1990. In order to estimate the economic rationale of farm credit and its marginal value productivity, a regression model of the Cobb-Douglas type was fitted to the two sets of data.

The percentage of irrigated area and the intensity of cropping of VKGB borrower-farmers was 75.60 and 194.12 respectively as compared to the LAMPS borrower-farmers who had a poor resource base. The pattern of utilisation of loan indicated that LAMPS borrowers utilised 52.65 per cent of the total loan supplied for crop cultivation, 28.85 per cent for pumpset irrigation, 9.90 per cent for purchase of dairy animals and 8.60 per cent for purchase of draft cattle. This trend of investment was quite logical as per the requirement. The pattern of credit utilisation on VKGB borrower farms was, however, a little amazing in the sense that even though these farmers had over 75 per cent of irrigated area, they utilised about 41 per cent of the total loan supplied for irrigation purposes. The per hectare net farm income was more than double on VKGB borrower farms as compared to the LAMPS borrower farms. An examination of different components of farm income indicated that over 91 per cent of the income was obtained from crop production, on an average, on VKGB borrower farms, whereas it was 83 per cent on LAMPS borrower farms. The capital-output ratio was 1:1.89 on VKGB borrower farms which was relatively higher than that on the LAMPS borrower farms. The estimates of regression coefficient for investment in irrigation and production supplies were positive at 0.1978 and 0.9008, being highly significant at 1 per cent probability level. The relatively higher and significant 'b' value for production supplies, however, would suggest that VKGB borrower-farmers should use more credit for crop cultivation to further accelerate the production instead of concentrating on irrigation purposes.

The logical conclusion drawn from the study is that institutional credit supplied to small and marginal farmers through VKGB in Sitamarhi district of North Bihar and LAMPS in Dumka district of Santhal Paraganas, the two distinct regions of Bihar, was not rationally utilised as far as their marginal value productivity was concerned. The RRB loan to Sitamarhi farmers who have relatively higher capital resource should be largely supplied for crop cultivation instead of for irrigation purposes since over 75 per cent of their operational

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holdings were already irrigated. On tribal farms in Dumka district where farmers have poor resource base it would be rationally advisable to supply draft cattle and dairy loans with crop loans followed by irrigation loans in order to make the tribal farm economy more viable and production oriented.

An Analysis of Impact of Institutional Credit for Agriculture on Income Distribution in India and Emerging Scenario in the Context of Financial Sector Reforms

C.L. Dadhich†

An attempt has been made in this paper to analyse the impact of bank credit for agriculture on income and wealth distribution, following the recommendations of the Narasimham Committee and to suggest measures to be taken towards fair distribution of income and wealth particularly in the context of the financial sector reforms. The analysis is mainly based on the pattern of distribution of land holdingwise direct agricultural advances of scheduled commercial banks for the year 1990-91. Gini coefficient is used to measure the incidence of the concentration of land and bank advances. Interestingly, the empirical evidence adduced by the study has brought to the fore that in spite of the highly skewed distribution of land in India, the distribution of credit was somewhat fair. This suggests that the measures taken in the period that followed nationalisation of the 14 major commercial banks have yielded positive results. There is a caveat that as a result of financing, the disparity of income between the borrowers and non-borrowers has enlarged, thereby accentuating the disparity of wealth, especially in the case of small farmers. The study has identified the factors contributing to the disparity of income and wealth which, *inter alia*, were negative real rate of interest on loans and higher leverage ratio. However, as a result of concessional rate of interest and higher leverage ratio for small farmers, the disparity of wealth between the borrowing small farmers and borrowing large farmers would register a decline. This has significant policy implications in the sense that in order to reduce the disparity, the policy of concessional rate of interest for small farmers should continue. As distribution of credit according to the size of loan was highly skewed as compared with distribution of credit according to the size of land holding, the rationalisation of interest rate structure on the basis of size of loan is a step in the right direction, but in order to discourage large farmers from splitting loan or borrowing small sized loans to take the benefit of concessional interest rate, it is desirable to charge commercial rate of interest from large farmers on loans borrowed by them, irrespective of the size of loan amount which may, in turn, improve the viability of rural lending. Further, with a view to reduce disparity between borrowers and non-borrowers, it is necessary to charge positive real rate of interest on loans and further increase the coverage of borrowing farmers. Incidentally, as many as 76 per cent of the farmers did not avail of any institutional credit support during 1990-91 and of the remaining 24 per cent of them who were financed during 1990-91 commercial banks financed only 4 per cent. The

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positive real interest structure would discourage large farmers from resorting to institutional borrowing and thereby augment the availability of funds for small farmers. This would also enable banks to offer positive interest rates on deposits, which may reduce the dependence of rural banking on external assistance.

The analysis points out that as against the existing availability of 23 per cent credit to the re-defined priority sector, the recommendation of the Narasimham Committee to set 10 per cent target for the re-defined priority sector would not only drastically curtail the availability of credit to the weaker sections of the agricultural sector but in turn would result in worsening income and wealth distribution in the agricultural sector.

Viability of Financing Long-Term Credit Needs of Punjab Farmers

Tarvinder Singh Chahal*

The paper makes an attempt to study the viability of long-term credit on different types and sizes of farms in Punjab. It seeks to study the present cropping pattern, to assess the level of capital use and to estimate the repayment capacity of the farmers. For the purpose of the study a random sample of 160 farmers was selected from eight villages of four development blocks from the central plain and western regions of the state. The data pertained to the year 1990-91. The budgeting technique was used for the analysis. Six synthetic farm situations were developed to represent different types and sizes of farms. The financial ratios such as capital ratio, equity ratio, leverage ratio and capital turnover were calculated to measure the efficiency of use of existing capital.

The cropping pattern was dominated by wheat in the *rabi* season in both the regions. In the kharif season, paddy and cotton predominated in the central plain and western regions which are denoted as paddy and cotton zones respectively. The use levels of non-liquidating capital (owned and borrowed) increased with the increase in the size of the farm. The owned funds on the farms in the paddy zone were used at a higher level than those in the cotton zone. The capital ratios indicated that the liabilities proportionate to available capital increased with the increase in the farm size. The equity position showed that the large farmers used proportionately lesser amount of owned capital than the medium and small farmers and the leverage ratios indicated more borrowing by the large farmers in both the paddy and cotton zones. The small farmers were able to re-capture their capital at a faster rate than the medium and large farmers in both the zones of the state.

The repayment capacity (without covering the estimated risk) for small farmers in the situation without credit level was positive in the paddy zone and negative in both the cotton zone and the study area. The small and medium farmers of the state had negative risk bearing ability as their net repayment capacity was negative both at without credit level and existing level of credit use and could repay credit by covering risk only at the recommended level of credit. Only the large farmers had the risk bearing ability to repay the credit used by them under all situations in all the zones and the study area. The study suggests ways to increase

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the viability of raising long-term loans by the farmers of the Punjab State. The Government should provide more subsidised credit facilities to the poorer sections of farmers for optimisation of the farm plans. The credit agencies and institutions should pay more attention towards the farming community especially the small and medium farmers by liberally financing their credit needs. The extension service agencies should provide better technical help to encourage the farmers to use the recommended levels of farm practices so as to safely cover the risks involved in financing the farming business.