Journal of Indian School of Political Economy

Vol. IX, No. 2
April-June 1997

A Journal devoted to the Study of Indian Economy, Polity, and Society

JOURNAL OF INDIAN SCHOOL OF POLITICAL ECONOMY is devoted to a study of the Indian Economy, Polity and Society. Emphasis is on reviewing developments since Independence with roots in the British administration where relevant. When a review is based on statistical data, as far as possible, full statistical base data are presented.

ANNOUNCEMENT

The publication and distribution of the Journal of Indian School of Political Economy has been transferred to New Age International (P) Ltd., Publishers (Journals Division), 4835/24, Ansari Road, Daryaganj, New Delhi - 110 002. All correspondence regarding subscription, and any other business matters relating to the Journal should be addressed to them directly. Details regarding subscription rates are given on the last page of JISPE.

Editorial communications should, however, continue to be sent to the Editor, Journal of Indian School of Political Economy, 'Arthabodh', 968/21-22, Senapati Bapat Road, Pune 411 016.

JOURNAL
OF INDIAN SCHOOL
OF POLITICAL ECONOMY

A Journal devoted to the study of
Indian Economy, Polity and Society

Vol. IX | April-June 1997 | No. 2

INSTRUCTIONS FOR AUTHORS

Please follow the instructions meticulously. It will greatly expedite the editorial process.

SUBMISSION

All manuscripts should have been proof-read before submission. Send (1+2 copies), preferably one ribbon copy and two xeroxes, to the Editor. Mimeographed copies are acceptable if clearly legible. With the manuscript, include a cover letter identifying the author with his present or past position, address and telephone number. Mention any special circumstance concerning the paper, such as its earlier presentation at a meeting or a conference. We will assume that papers submitted to this Journal are not under consideration elsewhere.

FORMAT

All text, including block quotations, footnotes, and table headings, should be double-spaced and typed on one side. Use medium-weight, opaque, bond paper. All pages should be of the same size, preferably 8-1/2" x 11", and unbound. Leave a minimum left-hand margin of one and a half inches, and a minimum right-hand margin of one inch. Number all pages, including footnotes and/or references, consecutively.

SUMMARY

In every paper, there should be a summary strictly not exceeding 100 words.

TEXTUAL DIVISIONS

If a paper is divided into major sections, the introductory section needs no heading. Subsequent sections should be given titles typed in capital letters and placed at the centre of the page. Do not use roman numerals. If there are subsections, the sub-titles should be underlined and placed justified with the left margin.

QUOTATIONS

All quotations should be checked carefully for accuracy, and should be unaltered except for ellipses and bracketed insertions. Block quotations should be double-spaced and set off from the text by indentation.

FOOTNOTES AND REFERENCES

All footnotes and references should be at the end, first footnotes, then references. In the text, footnotes should be numbered consecutively by superscripts following the punctuation. Reference citations in the text should be enclosed in square brackets, as follows: [Author, 1965, p. 9]. References listed at the end should be arranged alphabetically by author and should include the following information: for articles - author, year of publication, title, name of journal (underlined), volume and issue number; and for books - author, year of publication, title (underlined), and publisher, in the following format. We convert underlining into italics.

Maital, S., 1973; 'Public Goods and Income Distribution', *Econometrica*, Vol. XLI, May, 1973.

Chakravarty, S. 1987; *Development Planning: The Indian Experience*, Clarendon Press, Oxford.

If a Reference is cited in a Note, the Note may use the shortened reference form:

4. For a critique of recent industrial policy proposals, see Marshall [Marshall, 1983, Pp. 281-98].

The full name of any organization or government agency should be spelled out first if subsequent reference is to be by acronym.

MATHEMATICAL AND TABULAR MATERIAL

All tables, graphs, figures, and illustrations should be numbered and amply spaced on separate sheets of paper indicating in a marginal note in the text where such material is to be incorporated. Mathematical equations should be typed on separate lines and numbered consecutively at left margin, using Arabic numerals in parentheses. Use Greek letters only when essential. The word *per cent*, not the symbol %, should be used in the text and the tables.

COMPUTER DISK

If the manuscript is on a computer, send a copy of it on a disk covering text, tables, graphs, etc., with details of the software used.

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT PROMISE AND PERFORMANCE, 1982-83 TO 1995-96

M.V. Gadgil

This paper reviews the performance of NABARD from 1982-83, the year of its birth, through 1995-96 in relation to its mandate and the expectations about the institution in the mind of the Committee to Review Arrangements for Institutional Credit for Agricultural and Rural Development (CRAFICARD), the Committee that spawned NABARD. Since it was created to function as the apex institution for rural credit by hiving off the respective functions and funds of the Reserve Bank of India (RBI), the paper seeks to identify if NABARD has done anything new that RBI and the Agricultural Refinance and Development Corporation (ARDC), a subsidiary of RBI, did not do earlier. The review covers both credit and non-credit (developmental) functions. The changes in the policies on rural credit since 1967, including the recent Financial Sector Reforms, have also been discussed in so far as they are relevant for the theme. The paper concludes with a speculation on NABARD's future in a completely competitive rural financial market which is likely to emerge as a logical consequence of the ongoing economic reforms in India.*

This paper is intended to introduce to the reader a relatively new but less widely known financial institution in the RBI family, called the National Bank for Agriculture and Rural Development (NABARD). Having recently completed 14 years of its life, it may be interesting to examine NABARD's performance over this period in relation to the mandate embodied in the Act under which it was established. Since it has taken over the rural credit functions of RBI along with the latter's relative funds and the staff, it is necessary to explore the new directions and thrusts that might have been imparted by NABARD to the institutional credit system for farm and non-farm rural activities in India. In addition, the paper seeks to speculate on the future of NABARD in the context of the financial sector reforms, particularly the policy of a phased deregulation of interest rates initiated in 1991.

NABARD was established on July 12, 1982 to function as the apex bank in the field of credit for agricultural and non-agricultural rural development. It carries out not only credit and developmental functions (e.g., refinancing**, credit planning, promotion of national programmes for rural development, training, monitoring and evaluation) but also some regulatory work as an agent of RBI (e.g., inspection of co-operative banks and Regional Rural Banks and credit authorisation for co-operative banks). The Industrial Development Bank of India (IDBI) also functions as apex bank for industrial development but it has not been empowered to carry out inspection of banks. Secondly, while all the assets and liabilities associated with two funds built up in RBI - the National Agricultural Credit (Long Term Operations) Fund (NAC (LTO) Fund) and the National Agricultural Credit (Stabilisation) Fund (NAC (Stab) Fund) - were transferred to NABARD on its formation, involving an initial transfer of Rs 1,390 crore and subsequent annual contributions from out of RBI's surplus, the National Industrial Credit (Long Term Operations) Fund (NIC (LTO) Fund) continues with RBI. Both IDBI and the Small Industries Development Bank of India (SIDBI) have to borrow from the NIC (LTO) Fund at rates of interest fixed by RBI from time to time. It is in this sense that NABARD is a unique institution and a study of its performance over the fourteen years of its life up to 1995-96 (the latest year for which its published *Annual Report* is available) relatively to its mandate (NABARD Act, 1981) might prove instructive. Admittedly, fourteen years is too short a period in the life of an institution to permit an adequate assessment of its performance. However, it is possible to discern the new directions, initiatives, and thrusts that NABARD might have imparted to the process of

---

M.V. Gadgil is former Managing Director, NABARD, Bombay.

This paper is dedicated to the memory of Prof. V.M. Dandekar who suggested that the author should write a paper on NABARD. The author is grateful to Prof. N. Rath and Prof. A.S. Nadkarni for their comments on the draft of this paper.

* All the long forms for abbreviations are listed at the end of the paper.

** For an explanation of the term 'refinance', please see Section IV.

credit-financed agricultural and rural development in India during its life of 14 years and that is precisely the purpose of this paper. In other words, the main object of this paper is to explore the difference made by NABARD, since its inception, to the rural credit situation in India. Some changes in this situation follow new initiatives in the Government of India's (GOI) policies and programmes - e.g., Jawahar Rozgar Yojana, New Oilseeds Production Programme, Intensive Rice Production programme for Eastern States, Agricultural and Rural Debt Relief (ARDR) Scheme of 1989, and its financial sector reforms in the wake of the Economic Restructuring Programme launched in 1990-91, which led to a brake on the expansion of rural branches of commercial banks, rationalisation of interest rates, dilution of the mandate of Regional Rural Banks (RRBs) by enabling them to give 60 per cent of their fresh loans to non-target groups, etc. Since these changes cannot be ascribed to NABARD, this paper seeks to isolate NABARD-led initiatives in rural credit from the externally induced changes.

The paper is divided into the following sections:

(i) NABARD's Birth and Mandate,
(ii) CRAFICARD's Justification for NABARD,
(iii) Sources and Uses of Funds,
(iv) Refinance Operations: Farm Sector,
(v) Refinance Operations: Rural Non-Farm Sector,
(vi) Interest Rate Policy,
(vii) Non-Refinance Functions: Institutional Development,
(viii) Non-Refinance Functions: Micro Level Rural Credit Planning, and
(ix) Future of NABARD.

It may be noted that the period relevant for this paper extends from July 1982 (birth of NABARD) to March 1996 (end of accounting year 1995-96). As such, all quantitative data used in this paper end with March 1996. However, some policy changes and major developments in the field of rural credit, that have taken place later but up to the end of April 1997, have been considered in appropriate places.

I. NABARD'S BIRTH AND MANDATE

At the instance of the GOI, RBI appointed a committee towards the end of March 1979 under the chairmanship of B. Sivaraman to review the arrangements for institutional credit for agriculture and rural development, CRAFICARD, which submitted an interim report late in November 1979 and the final report in March 1981 [Sivaraman Committee, 1981]. In the context of the already accepted multi-agency approach to rural credit and the strategy of integrated rural development proposed in the Sixth Five Year Plan (1978-83), the CRAFICARD was asked, among other things, to review (i) the roles of RBI and ARDC, a subsidiary of RBI providing medium and long term refinance for fixed capital formation in agriculture, (ii) study the structural problems of co-operative credit institutions, and (iii) examine the need for and the feasibility of integration of short, medium and long-term credit structures at the national, state, district and village levels and make recommendations on these and related issues. The interim report, which recommended the establishment of NABARD, was accepted both by RBI and GOI in January 1980, i.e., in less than two months after its submission. The commendable speed in decision-making by the GOI and RBI suggests that a view on establishing NABARD was probably taken at the highest policy level well in advance of the interim report.

The justification provided by CRAFICARD for creating NABARD as a new institution is as under:

(i) There is need for a new organisational device for providing undivided attention, forceful direction and pointed focus to the credit problems arising out of the integrated rural development. The latter calls for grass root level planning and co-ordination of the activities of different participating credit institutions.

(ii) RBI has to perform diverse functions and duties, including rural credit. It would, therefore, be unable to earmark the necessary time for the complex credit problems of integrated rural development. In the past, some functions of RBI have been hived off to separate institutions, such as the Unit Trust of India (UTI), IDBI and ARDC. The time has come to take similar action in regard to rural credit.

(iii) The multi-agency approach to rural credit involves the participation of co-operatives, commercial banks and RRBs. In RBI, different departments look after these institutions and monitor their performance in rural credit. The Agricultural Credit Board of RBI, which is the main coordinating body at the policy level, does not enjoy a statutory status. It is also unable to devote the necessary time to the stupendous dimensions of integrated rural development. It is, therefore, necessary to decentralise the rural credit functions of RBI by delegating them to a new bank, while the essential monetary controls are still retained by RBI [Sivaraman Committee, 1981, Chapter 12, Pp 255-71].

Since the Committee's justification for creating NABARD focuses on credit for integrated rural development, it is necessary to understand what exactly its thinking was on the so-called concept of integration. In their own words:

> The Committee views the integration inherent in rural development in four dimensions. The first is the concept of 'overall development of all' with a focus on specified target groups. This means multipurpose and multi-term credit to a family. The second, which is an elaboration of the first, would refer to credit being integrated with technical services so that productive deployment of credit leads to its prompt repayment out of additional income generated. That is, from whichever primary level institution the rural producer opts to borrow under the multi-agency system, it should be in a position to take a total view of his requirements and to provide integrated service, backed by appropriate higher level institutions. The third dimension implies the integration of economic activities inherent in rural development to ensure balanced growth. This means intensification of the primary sector programmes of agriculture and enlarging and strengthening of the sècondary sector of village, cottage and other small-scale industries in rural areas coupled with creation of facilities for organised marketing, processing and allied activities in the tertiary sector to create larger employment opportunities. The last dimension is one of so integrating the credit disbursing activities under the multi-agency approach as to avoid duplication of efforts in extending credit or technical expertise. Based on these lines, integrated development aims at assisting the rural poor by combining credit and programme for (a) comprehensive agriculture, (b) tiny, village and cottage industries, (c) rural services including marketing, and (d) infrastructure for production and supporting services [Sivaraman Committee, 1981, Pp. 22-23].

Against this background, NABARD Act (Act 61 of 1981) was enacted by Parliament, which stipulated the following features:

(i) NABARD has to provide credit for the promotion of agriculture, small scale industries, cottage and village industries, handicrafts and other rural crafts and other allied economic activities in rural areas with a view to promoting integrated rural development and securing prosperity of rural areas, and for matters connected therewith or incidental thereto.

(ii) The Board of Directors, comprising the Chairman, the Managing Director and thirteen other members, is appointed by the Central Government in consultation with RBI (except the Central Government's own nominees). The Board is to have representatives from RBI (3), GOI (3), state governments (2), co-operatives (2) and commercial banks (1), besides experts in rural economics, rural development, rural crafts, etc., (2).

(iii) Its authorised share capital is Rs 100 crore (which can be and was raised to Rs 500 crore by March 1996), to be subscribed equally by RBI and the GOI[1].

(iv) Its credit functions include refinance (and even direct loans to an *institution* approved for the purpose by the GOI) of short, medium and long durations for production as well as fixed investments in the farm and non-farm sectors. The statutory ceilings on maturities are 18 months for short-term loans, 7 years for medium-term loans and 25 years for long-term loans. Other purposes eligible for NABARD's financial assistance include marketing of farm and non-farm output, marketing and distribution of inputs, contribution by state governments to the share capital of credit co-operatives, and conversion of short-term crop loans into medium-term loans when crops are adversely affected by natural calamities, military operations or enemy action. This facility of loan rescheduling is also permissible in respect of credit extended to artisans, tiny and cottage industries, handicrafts, etc., in cases where NABARD is satisfied that owing to unforeseen circumstances such rescheduling has become necessary. The institutions eligible for refinance are Regional Rural Banks (RRBs), credit co-operatives and commercial banks. The commercial banks' eligibility for refinance is, however, limited to their investment loans alone.

(v) Its non-credit functions include co-ordination of rural credit operations; study of problems relating to agriculture and rural development; training for officials of RRBs, co-operatives and commercial banks; research, monitoring and evaluation; and credit information.

(vi) It can raise resources by borrowing from RBI and the GOI, collecting deposits and floating of bonds and debentures. It can borrow foreign currency loans from any banks or financial institutions with prior approval from the GOI and can also receive gifts, grants, donations or benefactions from government or other sources.

(vii) The entire undertaking of the ARDC shall stand transferred to NABARD. Similarly, the assets and liabilities of RBI in respect of the NAC (LTO) Fund and the NAC (Stab) Fund stand transferred to NABARD. The LTO Fund was used for providing investment credit for agriculture. The Stabilisation Fund was used for (a) the conversion of short-term crop loans into medium-term loans, as also (b) giving medium term loans for approved agricultural purposes, and (c) purchase of shares of co-operative processing societies. Consistent with NABARD's mandate to provide credit for farm and rural non-farm activities, these Funds are redesignated as National Rural Credit Funds and are being used both for farm and non-farm activities. RBI is expected to continue making yearly contributions to these Funds from its annual surplus. However, beginning 1992-93, RBI contribution to these Funds has virtually disappeared due to the GOI's pre-empting of RBI surplus for reducing its fiscal deficit.

On its establishment, 'NABARD took over the functions of the erstwhile Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of RBI and Agricultural Refinance and Development Corporation (ARDC)...... NABARD is an apex institution accredited with all matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas. It will: (i) serve as an apex refinance agency for institutions providing investment and production credit for promoting the various developmental activities in rural areas; (ii) take measures towards institution building for improving the absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, training of personnel, etc;

(iii) co-ordinate the rural financing activities of all the institutions engaged in developmental work at the field level and maintain liaison with the GOI, state governments, RBI and other national level institutions concerned with policy formulation; and (v) undertake monitoring and evaluation of projects refinanced by it' [NABARD, *Annual Report 1982-83,* p. 74].

II. REVIEW OF CRAFICARD'S JUSTIFICATION FOR NABARD

The CRAFICARD's justification for creating NABARD rests on two planks: (i) RBI's inability to pay undivided attention to the growing complexity of rural credit, and (ii) the need for adopting an integrated approach to rural credit. As for the first reason, there were different departments in RBI looking after the health of commercial banks, co-operative banks and RRBs, and monitoring their performance in rural credit. Since different Deputy Governors of RBI were in charge of these departments, a coordinated view of rural credit under the multi-agency approach could be taken only by the Governor who could not spare the necessary time for the problems of rural credit because many other RBI functions also claimed his time. Let us assume that these observations of the CRAFICARD are valid. Let us also assume that for various administrative reasons, the overseeing of rural credit from the three types of credit institutions could not be entrusted to a single Deputy Governor of RBI, although it was the simplest solution to stop a truncated approach. This argument of the CRAFICARD, then raises two logical questions: (i) What is the integration that NABARD has achieved since its inception in the dispensing of rural credit? And (ii) apart from integration, if any, has it done something new and better than what was happening under the truncated approach in RBI? Only a positive answer to both the questions will vindicate NABARD's creation. It is proposed to discuss the first issue in this section and the second one in the section on NABARD's credit operations.

Before turning to a discussion of integration in rural credit, another relevant issue vital for integrated credit has to be tackled first, viz., the integration of the short-term and the long-term co-operative credit structures. On the important issue of such integration, the CRAFICARD's views were:

(1) The three-tier short-term structure in large states (State Cooperative Bank (SCB), Central Cooperative Bank (District) (CCB) and Primary Agricultural Credit Society (PACS)) and the two-tier structure in small states (SCB and PACS) should continue because a part cannot be removed without impairing the whole structure.

(2) The existing long-term structure, federal (State Co-operative Land Development Bank (SLDB) and Primary Land Development Bank (PLDB)) or unitary (SLDB and its branches), need not be disturbed.

(3) Since the two structures desire to maintain their separate identities, they may not be integrated. However, the PACS may be the focal point for channelling short-term and long-term credit.

Thus, the Committee did not think it necessary to recommend any structural changes in the co-operative credit sector or to integrate the two structures. 'The nature and magnitude of the present credit needs are such that each structure can continue to play its useful role provided it keeps an eye on the functional co-ordination .... One can even conceive of an informal body of the two institutions at the state level to ensure attention to common problems and co-ordination of activities, such as supervision and recovery of loans .... Once the composite loaning system based on project approach develops at the primary level after Land Development Banks (LDBs) start channelling their loans through PACS, a real integration would have been achieved' [Sivaraman Committee, 1981, p. 307]. The *Agricultural Credit Review Committee* (ACRC) *Report* (Khusro Committee) echoed the same views on the integration of the two structures [Khusro Committee, 1989, Pp. 310-19].

In the commercial banks and RRBs, the rural and semi-urban branches are able to provide both production credit (short-term) and investment credit (medium or long-term) for farm or non-farm activities. There is thus some degree of integration inherent in the rural credit activities of these banks. What is missing, however, in the current approach is an integrated view of the credit needs for farm and non-farm activities pursued by the same rural borrowers. The common observation on the field is that the credit needs for production and investment in the farm sector of the same borrowers are taken care of by commercial banks and RRBs, provided that the farmers do not prefer borrowing of production credit from primary credit societies and provided, further, that the combined borrowing of the two types of credit is within the ceiling based on the value of security. The eligibility of commercial banks for NABARD's refinance is limited only to their investment loans under the approved schemes. This limited eligibility probably inhibits the commercial banks taking an integrated view of the credit needs of rural borrowers, and explains why their share in investment credit has been larger than that of co-operatives and smaller in the case of crop loans. Another reason explaining the phenomenon is that many farmers borrowing investment loans from commercial banks prefer to borrow crop loans from co-operatives, due probably to the latter's proximity to borrowers' villages. Even the RRBs, eligible for all kinds of refinance, are required to approach NABARD with different refinance proposals for crop loans, farm investment loans and non-farm loans. In turn, the borrowers are also required to apply separately for such loans. Since NABARD's conditions to determine a bank's eligibility for refinance and the rate of interest thereon as also the maturity period thereof vary from facility to facility, a divided approach to rural credit at all levels has become unavoidable. In the co-operative credit sector, two different structures deal with crop loans and farm investment loans, thereby preventing an integrated view of rural credit.[2] In NABARD, different Departments handle short-term agricultural credit, long-term agricultural credit and credit for non-farm activities. The refinance for fixed farm investments, which call for long-term credit, is released on the basis of schemes which are prepared for only one of the different types of investments, such as minor irrigation dairy, poultry, etc. A farmer desiring credit for two investments (e.g., minor irrigation and poultry) simultaneously has to submit two applications to the bank of his choice and the latter, two different refinance applications to NABARD, one for each scheme. Such schemes or projects also contain no proposals to provide short-term credit along with long-term credit to borrowers, except a vague statement that adequate facilities exist in the scheme area for short-term credit. The credit needs for farm and non-farm activities pursued commonly by some rural families are also not viewed together. In short, the present system of dispensing rural credit remains as truncated as it was in the pre-NABARD days.

Rural credit is being used in India to subserve government's development programmes. The allocation of credit for agriculture, small industry, Integrated Rural Development Programme (IRDP), Scheduled Castes (SC) / Scheduled Tribes (ST) persons, Prime Minister's Rozgar Yojana ((PMRY), etc., in accordance with pre-determined levels, follows government's priorities. The latter involve a segmented view of rural credit, and adherence to priority sector norms by credit institutions rules out their taking an integrated view of the credit needs of borrowers envisaged by the CRAFICARD. The credit co-operatives continue to be divided into two structures. The multi-agency approach to rural credit and the partial deregulation of interest rates exacerbate the present system of a segmented view of rural credit. So long as this scenario continues, NABARD can do precious little to move towards an integrated rural credit system. Even the CRAFICARD's pious wish that all co-operative credit be routed through the primary co-operative society has remained a pipe-dream because (with the exception of Andhra Pradesh, where the two structures have been merged) the LDBs prefer to deal directly with their borrowers. To the extent that an integrated system of rural credit has failed to take roots due to endogenous and exogenous factors, one has to conclude, regrettably, that NABARD has failed in one of the two missions for which it was established. Whether it has succeeded in doing something better than RBI, by paying undivided attention to the growing complexity of rural credit, will be examined in appropriate sections which follow, particularly in the section dealing with its credit operations.

The IRDP, launched in 1978-79, envisaged the selected rural poor acquiring farm or non-farm assets which would generate incremental income and employment to a level where the total post-investment income of the assisted families would cross the poverty line. The assets were to be financed partly from government subsidy (33 per cent) and partly from institutional credit (67 per cent), the latter mainly from Commercial Banks (CBs) and RRBs. The ARDC could not extend refinance support for the non-farm investments under IRDP (industry, services and business (ISB)) due to statutory limitations, which could have been removed by amending the ARDC Act. Instead, the CRAFICARD chose to recommend the creation of NABARD, an institution fully under the control of the GOI, in contrast to ARDC which was under the control of RBI. All comments in the *CRAFICARD Report* on integrated rural credit thus appear to have been inspired by, and seem to have the limited context of, the IRDP. One can even go a step further and say that were it not for the IRDP, NABARD would not have taken birth.

III. SOURCES AND USES OF FUNDS

NABARD is a unique financial institution in that it does only refinancing with virtually no risk of default in the repayment of its dues,[3] it does not accept public deposits, and its lending rates on refinance are influenced both by economic and extra-economic considerations. The latter includes the government's desire to keep the ultimate lending rates on rural credit as low as possible. The prime economic consideration is that the rates on refinance must also be low, in order to direct credit to the desired activities up to the targeted levels. At the same time, NABARD's income must be high enough to enable it to discharge the mandated developmental, promotional and regulatory functions which generate no revenue. To operate successfully under these constraints is indeed a tight rope walk and a study of NABARD's sources and uses of funds would be rewarding in that context.

Table 1 shows NABARD's sources and uses of funds for each year from 1982-83 to 1995-96. The resources have increased fourfold over the 14 years from Rs 4,510 crore to Rs 19,608 crore. Owned funds - capital, reserves, National Rural Credit (Long-term Operations) Fund (NRC (LTO) Fund) and National Rural Credit (Stabilisation) Fund (NRC (Stab) Fund) - which are cost-free in the sense that there are no paid-out interest costs associated with their use, have grown from Rs 1,922 crore (42.5 per cent) to Rs 11,263 crore (57.4 per cent) over the same period. NABARD's paid-up capital has grown from Rs 100 crore in 1982-83 to Rs 500 crore in 1995-96, giving a capital adequacy ratio of 29.53 per cent [NABARD, *Annual Report 1995-96*, p. 171]. In his speech (Part A) made on July 22, 1996, presenting the Central Government's budget for 1996-97, the Finance Minister announced increasing NABARD's share capital to Rs 1,000 crore during 1996-97 and further to Rs 2,000 crore over the following four years. However, it is understood that the additional equity contribution of Rs 500 crore during 1996-97 is to be used by NABARD for setting up state level development finance institutions for promoting investment in high-tech agriculture, horticulture and floriculture, and agro-processing units. Few other financial institutions can boast of such a high weightage for owned funds and capital adequacy and this is the key to understanding how NABARD is able to lend at low rates and still earn a large profit. Among the components of owned funds, the most important is the NRC (LTO) Fund which has increased from Rs 1,252 crore or 65 per cent of the total owned funds in 1982-83 to Rs 8,185 crore or 73 per cent in 1995-96. This Fund (as also the Stabilisation Fund) was originally built up in RBI[4] from out of its annual surpluses, and the balance of Rs 1,025 crore to its credit was handed over to NABARD on the latter's formation in July 1982. Even after the establishment of NABARD, RBI used to transfer annually a part of its surplus to these two Funds until 1991-92. Since that year the GOI has pre-empted RBI surplus in the interest of curbing its fiscal deficit, reducing RBI's annual contribution to these Funds to a token amount of Rs 1 crore each [*vide* RBI, 1992, p. 142]. In consequence, RBI surplus transferred to the GOI has increased from Rs 350 crore in 1990-91 to Rs 1,500 crore in 1991-92 and to Rs 3,938 crore in 1995-96. Nevertheless, including the initial balances in the Funds transferred to NABARD in July 1982 and the annual contributions made thereafter, RBI's share in the amount of LTO Fund in March 1996 at Rs 4,093 crore is 50 per cent of the total of Rs 8,185 crore. The balance amount of Rs 4,092 crore reflects NABARD's contribution to the LTO Fund from out of its annual surplus. The corresponding RBI share in the Stabilisation Fund is Rs 693 crore or 83 per cent of the total.

The other important sources are RBI General Line of Credit (used by NABARD for providing short-term working capital refinance), accounting for 13 per cent to 25 per cent of NABARD's total resources in individual years, followed by borrowings from the GOI. These borrowings are Rupee counterpart loans against external credits to NABARD from multilateral (the World Bank, Food and Agriculture Organisation (FAO), International Fund for Agricultural Development (IFAD), etc.) and bilateral (Germany, Switzerland, etc.) institutions. However, the relative importance of this source has progressively diminished over the years, due mainly to withdrawal of the World Bank credit to NABARD.

The principal credit operations in respect of the farm and rural non-farm (RNF) sectors in the nature of refinance or loans and the resources available for the purpose can be summarised as under:

	Nature of Credit	Typical Duration of Credit to Borrowing Banks	Sources of Funds: Farm Sector	Sources of Funds: Non-Farm Sector
1	Production or Working Capital Loans and Loans for Marketing of Output	Short Term (12 months)	General Line of Credit I from RBI	General Line of Credit II from RBI for traditional activities of rural artisans, weavers' societies, etc.
2	Replacement of wasting fixed assets (Non-schematic Loans)	Medium Term (up to 5 years)	National Rural Credit (Long-Term Operations) Fund	
3	Conversion of short-term production credit into medium-term loans when borrowers' repaying capacity is adversely affected due to natural calamities, etc.	Medium Term (up to 5 years)	National Rural Credit (Stabilisation) Fund	
4	Creation of Fixed Productive Assets (Schematic Loans)	Medium or Long Term (5 to 15 years), depending on the cost-benefit relationship and life of asset	(i) National Rural Credit (Long Term Operations) Fund (ii) Rupee counterpart loans from GOI against foreign credits from multilateral or bilateral agencies (iii) Sale of bonds in the open market	Same but composite loans for both working and fixed capital are provided for non-farm activities from this source
5	Loans to state governments for contribution to the share capital of credit co-operatives	Long Term (8 to 12 years)	National Rural Credit (Long-Term Operations) Fund	

Of the total resources of Rs 19,608 crore in March 1996, as much as Rs 11,263 crore or 57.4 per cent (including the share capital of Rs 500 crore) was cost-free source for NABARD in the sense that it was not required to pay out any interest on this amount. When the General Line of Credit (GLC) from RBI is added to this figure, which is used by NABARD for providing short-term (ST) refinance for working capital and marketing credit for farm and non-farm activities and which provided some margin to NABARD (except for the period March 1988 to June 1996 during which NABARD provided crop loan refinance at zero margin), the proportion of cost-free or low-cost resources available to NABARD increased substantially to 82 per cent in 1995-96 (*vide* Table 1). A corollary of the same proposition is that borrowings from the GOI (at rates lower than those in the market) and from the open market (which carry a high rate) formed only 12 per cent of NABARD's total resources in 1995-96. Whenever NABARD is required to provide *ad hoc* credit facilities (e.g., loans to state governments under the ARDR Scheme, 1989, RBI obliges NABARD with additional resources. In sum, the structure of NABARD's resources is such that it is able to lend at concessional rates and still earn a profit. This is confirmed by Table 2 which shows that its profit each year before appropriations is a multiple of the amount it earns merely from interest margin. Section 47 of NABARD Act stipulates that after the expiry of 15 years following the accounting year in which it is established (i.e., from 1998-99), NABARD will be required to transfer all its surplus to RBI and the GOI at 50 per cent each. Of course, the Section also stipulates that the surplus is to be worked out after making provisions for bad and doubtful debts, depreciation of assets, NRC (LTO and Stab) Funds and Reserve Fund. But it remains to be seen whether the GOI will allow NABARD to appropriate large amounts to these Funds as before or whether it will direct NABARD, as it has directed RBI, to reduce annual provisions for these Funds in the interest of curtailing its fiscal deficit. In the latter event, NABARD may be compelled, after some years, to borrow more from the market for providing investment credit and, in consequence, to step up its lending rates. But such a situation can crop up only in the long-term future, when the weight of owned Funds in the total resources diminishes considerably.

As for the uses of resources (Table 1), it is apparent that medium-term/long-term (MT/LT) refinance for fixed investments and ST refinance for production and marketing credit account for 70 per cent to 81 per cent of the total.[5] While the resources for refinance for production and marketing credit come entirely from RBI, the structure of available resources for refinance for investment credit (schematic and non-schematic loans) is as under:

(Rs crore)

Year	NRC (LTO) Fund	Loans from GOI	Open Market Borrowings	Total
1982-83	1,252	1,216	406	2,874
	(43.6)	(42.3)	(14.1)	(100.0)
1995-96	8,185	1,294	1,045	10,524
	(77.8)	(12.3)	(9.9)	(100.0)

(Figures in brackets are percentages to the total)

Thanks to the generous annual credits to NRC (LTO) Fund from RBI and NABARD (and also stoppage of the World Bank Credit), the weight of this cost-free resource in the total refinance for fixed investments has increased from 44 per cent in 1982-83 to 78 per cent in 1995-96. This explains, once again, why NABARD is able to dispense such refinance at concessional rates and still earn a profit. Profit before appropriations as a proportion of total resources has grown from 2 per cent in 1982-83 to 4 per cent in 1995-96 (Table 2), indicating sound financial health of NABARD. The institution invests its short-term or long-term surplus resources in government securities, treasury bills, discounting of bills and call money market. Its income from these sources had grown from Rs 42 crore in 1982-83 to Rs 263 crore in 1994-95 or as a proportion of total income from 17 per cent to 21 per cent. NABARD's *Annual Report* for 1995-96 does not furnish a break-up of its total income for reasons which have not been mentioned therein.

As against the balance of Rs 840 crore in the NRC (Stab) Fund in March 1996, refinance for MT conversion loans outstanding by the same date amounted to only Rs 110 crore. Since this resource is cost-free for NABARD, the entire amount of interest from such loans is profit. Moreover, NABARD is free to invest the surplus in this Fund (Rs 730 crore) in government securities, etc., which earn interest.

Table 3 attempts an estimate of the interest margin available to NABARD for each year since 1983-84. The variation in the margin is from *minus* 0.14 in 1987-88 to 1.11 in 1984-85. The year-to-year fluctuations reflect the impact of variations in NABARD's lending rates as also those in the structure and proportion of borrowed resources and their cost. The interest margin was negative in 1987-88, due to a disparate growth in the average interest rates paid on borrowings (0.58) and received from refinance (0.22), compared with the previous year (both bracketed figures refer to change in percentage points). Nevertheless, the absolute amount of interest received during 1987-88 exceeds that of interest paid by Rs 194 crore. The explanation for this apparent paradox lies in the fact that borrowed resources formed only 55 percent of the amount advanced during the year, the balance 45 percent coming from the cost-free owned Funds of NABARD.

The abundant availability of cost-free resources to NABARD in the form of balances in the LTO and Stab Funds has given rise to fictitiously large profits before appropriations. If an interest cost of 9.5 per cent per annum, which is the rate RBI charged the SIDBI during 1995-96 on long-term loans,[6] is imputed as opportunity cost for the balances in these Funds as on March 31, 1995 (Rs 8,772 crore), the imputed interest cost for 1995-96 works out to Rs 833 crore, thereby reducing NABARD's profit before appropriations to minus Rs 73 crore. In other words, it would not have been able to make the contribution of Rs 350 crore to these two Funds and additionally provide Rs 496 crore for Reserve Fund during 1995-96. If RBI alone decided to charge 9.5 per cent interest on its cumulative contributions to the LTO and Stab Funds as on March 31, 1995 (Rs 4,484 crore), the interest cost would work out to Rs 426 crore, reducing NABARD's surplus in 1995-96 from Rs 760 crore to Rs 269 crore.

NABARD's gross income before appropriations from interest from advances and investments, discount, etc., has grown from Rs 250 crore in 1982-83 to Rs 1,440 crore in 1995-96 or at Rs 92 crore annually. The corresponding increase in gross expenditure (interest paid, salaries and allowances, travelling expenses, rent, etc. but excluding allocations to Funds) is from Rs 156 crore to Rs 680 crore or Rs 40 crore annually.[7] The increase in salary and allowances is from Rs 10.54 crore to Rs 83.77 crore. The latter figure includes arrears of increases in salary and allowances paid to the staff for the period November 1992 to March 1995. The expenditure on this item during 1994-95 was Rs 49.91 crore as against Rs 44.15 crore in 1993-94, Rs 41.01 crore in 1992-93 and Rs 35.52 crore in 1991-92. In other words, the 'normal' annual increase in the expenditure on this item between 1991-92 and 1994-95 works out to Rs 4.80 crore. On this basis, the expenditure for 1995-96, excluding the arrears, works out to Rs 54.71 crore and the amount of arrears for 29 months to Rs 29.06 crore, or an average of Rs 1 crore per month. The adjusted expenditure on salaries and allowances, including 12 months arrears during 1995-96, thus works out to Rs 66.71 crore. As a proportion of interest revenue from advances, the expenses on salaries and allowances stood at 5.1 per cent in 1982-83 and at 5.9 per cent in 1995-96, registering an increase of 16 percentage points. The total non-salary establishment cost (all items of expenses excluding salaries and interest paid) which stood at Rs 4.71 crore in 1982-83 (or 2.3 per cent of interest received from advances) increased to Rs 99.47 crore in 1995-96 (8.7 per cent of the estimated interest revenue from advances), registering a 278 per cent increase in the expenditure as a proportion of interest revenue. The upward trend in the outlay on salaries and non-salary establishment cost should be a matter of concern for NABARD, in view of the difficult times ahead.

IV REFINANCE OPERATIONS: FARM SECTOR

There are fourteen windows from which NABARD provides credit to eligible institutions in a recurring manner for securing the development of the farm and rural non-farm sectors in India (Table 4). Occasionally, additional facilities are provided for *ad hoc* purposes for a short period. For example, a special facility was installed in 1990 to provide medium-term loans to state governments to enable them to meet their share in the write-off of loans disbursed by co-operative banks which fell within the scope of the GOI's ARDR Scheme, 1989 [NABARD, *Annual Report 1989-90*, p. 58]. Similarly, a Rural Infrastructure Development Fund (RIDF) was established in NABARD in 1995-96, fed exclusively by five-year deposits from CBs corresponding with the shortfall in their agricultural credit relative to the target. The Fund is used by NABARD for giving 5-year loans to state governments to enable them to complete the ongoing medium and minor irrigation, soil conservation, watershed management and other rural infrastructure works. Such *ad hoc* facilities are disregarded in this section.

Of these 14 credit facilities, only one (loans to state governments for contributing to the share capital of credit co-operatives) is in the nature of 'loan', the rest thirteen being 'refinance' to eligible banks. It follows, therefore, that the discussion in this section must focus on refinance operations. The difference between the two forms of credit is: A 'loan' does not necessitate *prior* outlay on the purpose for which it is sanctioned; such outlay can be incurred after the receipt of loan within the prescribed period. On the other hand, 'refinance' means reimbursement of credit up to an agreed level already disbursed by an eligible institution for an approved purpose

Conceptually, refinance from NABARD is expected to supplement, and not supplant, the internal lendable resources of the borrowing banks in order to augment the flow of credit to the ultimate beneficiaries and direct it into desired channels [NABARD, 1993(a) Vol. I, p. 12]. It is necessary to examine whether this assumption is valid in fact.

It is apparent from Table 4 that SCBs are the most privileged institutions in that they are eligible for refinance from all the thirteen refinance windows. Not only that but seven of these windows are exclusively for the SCBs. Next come the RRBs with access to six windows. The SLDBs and CBs are the least privileged in that they each have access to only three refinance windows, though the former also benefit indirectly from NABARD's loans to state governments for contributing to the share capital of credit co-operatives.

Significantly, since its inception NABARD has opened only two new windows (S. Nos 12 and 13 in Table 4), both for augmenting credit supply to the rural non-farm sector. All the remaining 12 facilities represent continuance of credit which was provided earlier by RBI and ARDC. It may be added, however, that NABARD has attempted a few innovations in its refinance policy either on its own or in consonance with GOI's policies. Some instances of such innovations are: Instant Fresh Finance (crop loans) for new and non-defaulting members of PACS in the areas of CCBs not eligible for refinance and refinance support for crop loans under special programmes for increasing the output of pulses, oilseeds, cereals and fodder.

As is evident from Table 4, refinance for crop loans, schematic loans for agriculture and composite schematic loans for financing the working and fixed capital needs of rural non-farm enterprises under the Automatic Refinance Facility (ARF) are the three activities that account for the bulk of NABARD's refinance. As such, they merit a separate discussion, which is attempted below.

A - Refinance for Crop Loans

Refinancing crop loan disbursement by SCBs and RRBs with the help of RBI General Line of Credit, which activity accounts for the largest amount of annually drawn refinance, takes the form of NABARD sanctioning annual credit limits in favour of these banks individually. The CBs have never been allowed access to crop loan refinance from RBI/NABARD on the assumption that they have adequate short-term resources of their own for providing crop loans. Similarly, the SLDBs do not obtain crop loan refinance because they do not dispense crop loans.

The SCBs in individual states are sanctioned credit limits on behalf of the affiliated CCBs[8], the size of the limit depending on the area sown to *kharif, rabi,* summer or perennial crops in each district, the scale of finance fixed for each crop annually, based on the level of material (seed, fertiliser, pesticides and irrigation) and labour inputs and their estimated value at market prices. Other determinants of the limit include past trends in the disbursement and recovery of crop loans by district (CCB), audit classification of the CCB, its financial soundness as revealed by NABARD's bank inspection and its fulfilment of prudent banking norms prescribed in Sections 11, 18 and 24 of the Banking Regulation Act, 1949.[9] Each drawal against the sanctioned limit, which is treated as a separate loan repayable in 12 months, is subject to the following conditions:

(i) The outstanding debit balance (drawals minus repayments) in the account should not exceed the sanctioned limit.

(ii) The SCB and the CCB must have a minimum involvement (MI) equalling 25 per cent and 40 per cent, respectively, of their internal lendable resources (share capital, deposits and reserves after making allowance for Statutory Liquidity Ratio (SLR), Cash Reserve Ratio (CRR) and legal provisions regarding investment of owned funds in outside institutions) in relation to the CCB's outstanding loans against PACS. Funds corresponding to refinance and MI must be reflected in fresh crop loans by PACS.

(iii) The debit balance in NABARD's account must be covered by non-overdue crop loans. In other words, a CCB must repay NABARD's refinance on due date, whether or not it is able to recover its dues from PACS and the PACS from its members. However, this condition gets automatically relaxed to the extent NABARD approves conversion of short-term crop loans into medium-term loans, following widespread failure of crops due to natural calamities.

Table 5 shows the relative magnitudes of crop loan disbursement and refinance drawn by co-operatives[10] from 1971-72 to 1994-95, the latest year for which data on crop loans issued by PACS are available. Unfortunately, the RRBs are sanctioned a composite refinance limit for crop loans and production credit for non-farm enterprises and NABARD's *Annual Reports* do not provide separate statistics on the drawals of refinance for these purposes. In terms of the relative magnitudes of crop loan disbursement, the co-operatives constitute a much more important source of credit to farmers than the RRBs in that the aggregate disbursements by co-operatives over the thirteen years from 1982-83 through 1994-95 are 14 times those by RRBs which came into existence from 1975. Hence, the focus here is on co-operatives.

Credit purveyance is also expressed in two magnitudes: flow (fresh loans issued during an year) and stock (loans outstanding at the end of an year). The latter includes loans issued but not yet due for repayment as well as overdue loans. Since NABARD's refinance cannot be used for overdue loans, the appropriate comparison over a series of years would be between the flow of credit and the flow of refinance (maximum amount of drawal) during an year. However, comparisons between the stock of crop loans by PACS and stock of refinance are also attempted.

The period from 1971-72 to 1994-95 covered by Table 5 gets divided into two phases. The first phase covers the period from 1971-72 to 1981-82 when RBI used to provide refinance prior to NABARD's establishment and from 1982-83 to 1984-85 during which NABARD provided refinance on the lines of the discipline evolved by RBI. The second phase begins with 1985-86 when NABARD stipulated, for the first time, the MI condition, replacing the earlier RBI rule of linking refinance with deposit mobilisation by CCBs [NABARD, 1993(a) Vol. I, Pp. 16-20]. Drawal of refinance as a proportion of crop loans issued by PACS stood at 39 per cent in phase one as a whole but increased to 48 per cent during the second phase, despite the operation of MI condition. The proportion of outstanding refinance to outstanding crop loans at year-end (Col. 9 of Table 5) which stood at 22 per cent in the first phase increased to 31 per cent in the second phase, suggesting the ineffectiveness of MI condition for enhancing the self-reliance of the short-term co-operative credit structure. This conclusion is confirmed by Charts 1 and 2 below (in which data are in log-form) which show that the distance between the curves representing loans and refinance (both issued and outstanding) is narrowing since 1985-86. Thus, the effect of the MI condition seems to have been offset by two post-1985-86 developments: (i) a drastic reduction in the rate of interest on refinance from March 1988, as shown in Table 6, making it a cheaper resource than deposits, and (ii) the loan write-off in 1990 which made defaulter-members of PACS eligible for fresh loans. This conclusion is confirmed by the higher growth rates in refinance since 1985-86 (Table 7). An additional reason for the higher proportion of refinance in the post-1985 period could be selective relaxations in MI condition through executive action.

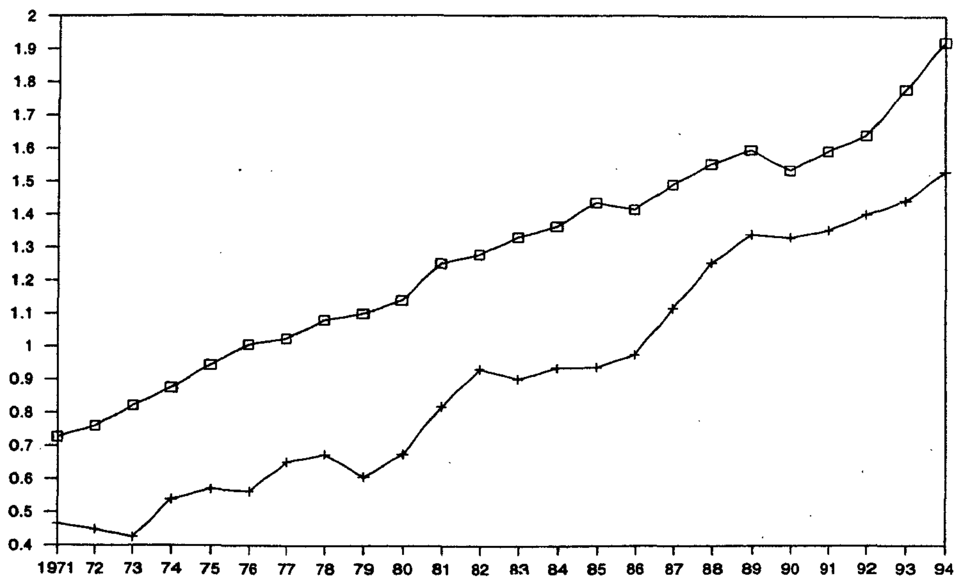
The compound annual growth rate (CAGR) of crop loans (Table 7) issued by PACS between 1971-72 and 1994-95 is 4.65 per cent while that for outstanding crop loans (1975-76 to 1994-95) is 4.47 per cent. The corresponding CAGRs for refinance are higher at 4.98 per cent for drawal and 5.96 per cent for outstanding. The CAGR for growth in the value of material crop inputs in current prices (1972-73 to 1992-93) works out to 4.73 per cent. In constant 1970-71 prices, the CAGR for inputs over the same period is 1.61 per cent. In other words, the growth of crop loans from PACS has almost kept pace with the rise in material input costs, thanks to the liberal refinance from RBI/NABARD.

The up-trend in the drawal of refinance since 1987-88 can be ascribed mainly to the lowering of interest rates on crop loans from March 1, 1988 and a consequent but drastic reduction in the interest rates on refinance from the same date as shown in Table 6. Supplementary causes explaining the up-trend in refinance include relaxations in refinance discipline for the co-operative banks in the North-Eastern region and the GOI launching special programmes for securing an increase in the domestic production of oilseeds, pulses and cereals [NABARD, *Annual Report 1995-96*, Pp. 73-74].

While the CAGR in the drawal of refinance between 1982-83 and 1986-87 works out to 1.28 per cent, that between 1987-88 and 1994-95 works out to 4.90 per cent. The corresponding growth rates for crop loan disbursement by PACS during the two periods are 3.80 per cent and 4.12 per cent, respectively. The influence of concessional interest rates on refinance on the growth of crop loan disbursement as well as on the drawal of refinance is thus obvious.

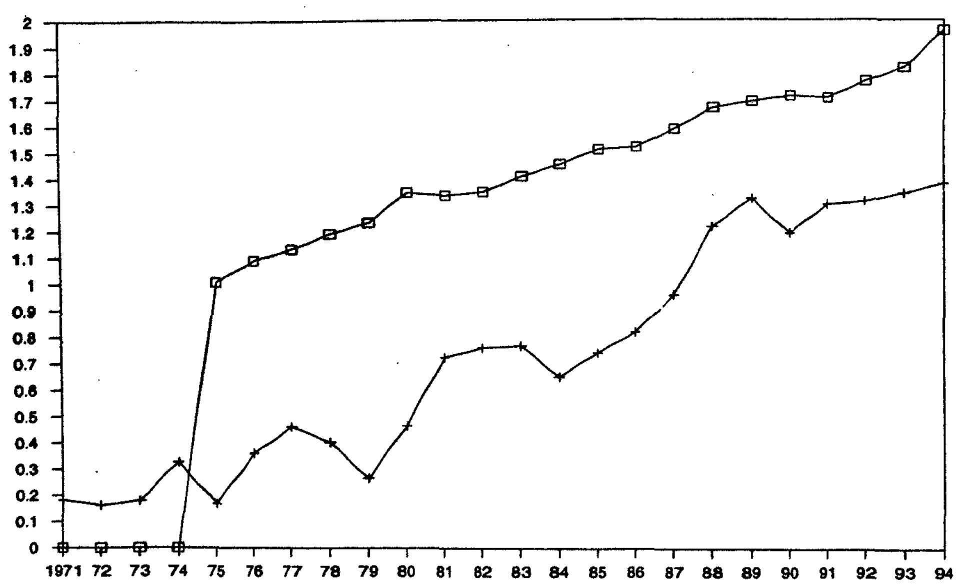
The impact of the Agricultural and Rural Debt Relief Scheme, 1989, which made loan defaulters eligible for fresh credit, is discernible in the year 1992-93 when there was a spurt of nearly Rs 2,000 crore in crop loan disbursement by PACS (and of Rs 115 crore by RRBs). The reduction in crop loan disbursement and drawal of refinance in 1990-91 over the preceding year's level appears to be the result of farmers withholding loan repayment in anticipation of debt relief, which was promised by all major political parties on the eve of General Election held in 1989.

Chart 1: Crop Loans Disburcement by PACS and Drawal or Refinance, 1971-72 to 1994-95



□ Crop Loans Issued during the Year (Data are in log-form)   + Refinance Drawal during the Year Maximum Outstanding

Chart 2: Crop Loans Outstanding with PACS and Outstanding Refinance, 1971-72 to 1994-95



□ Crop Loans Outstanding at Year end (Data are in log-form)   + Refinance Outstanding at Year end

The rationale for continuing the low rates on refinance since October 1991, marking the era of progressive increase in the lending rates to farmers in the wake of financial sector reforms, is difficult to comprehend. From July 1980 to February 1988, the rate on refinance was 2 to 3 percentage points lower than the Bank Rate (Table 8). Between March 1988 and June 30, 1996, the refinance rate has been 5.50 to 9.00 percentage points lower than the Bank Rate. Due to a reduction in the Bank Rate to 11 per cent from April 18, 1997 and an increase in the rate on refinance to 5.0 to 7.5 per cent from July 1996, the difference between the Bank Rate and the rate on refinance now diminishes to 3.5 to 6.0 percentage points. The co-operative banks dispensing crop loans are free to charge their own rates from October 1994 subject to a minimum of 12 per cent 'In as many as 8 states, PACS have raised their minimum lending rates ranging between 12.5 and 14.5 per cent per annum...' [NABARD, *Annual Report 1995-96,* p. 13]. Maharashtra is one such state where the rates payable by farmers in 20 of the 29 districts vary from 13.0 per cent to 18 per cent, according to the size of loan.[11] The interest spread against crop loan refinance available to the three tier co-operative credit structure in these districts in Maharashtra and probably in 7 other states as well thus varies from 5.5 per cent to 13 per cent, which is higher than the spread against deposits. The generous margins to co-operatives against crop loan refinance appear all the more baffling because NABARD allows much lower margins to all banks (including cooperative banks) against its refinance for schematic MT and LT investment loans to farmers, ranging from 3.0 per cent to 3.5 per cent for CBs and 5.5 per cent and above for RRBs, SCBs and LDBs [NABARD, *Annual Report 1995-96,* p. 17].

Prior to March 1988, NABARD used to enjoy a 1 per cent interest margin against its refinance for crop loans which was given up in order to compensate the co-operative credit structure's loss in interest income due to the lowering of rates on crop loans to farmers. Against a refinance level of about Rs 3,400 crore each in 1994-95 and 1995-96, the loss in NABARD's interest income due to zero margin thus works out to Rs 34 crore in each year or cumulatively to Rs 206 crore between 1988-89 and 1995-96. Prior to March 1988, RBI used to receive 6 per cent interest against its General Line of Credit to NABARD which enabled the latter to provide crop loan refinance to co-operatives (and RRBs). According to the *Khusro Committee Report* [p. 362], nearly 90 per cent of the CCBs availing of crop loan refinance were eligible for the lowest interest rate of 3 per cent on such refinance. Assuming, therefore, that NABARD received an average rate of 3.50 per cent from its crop loan refinance (all of which was passed on to RBI since March 1988) the loss in RBI's interest revenue since March 1988 becomes 6.0 per cent minus 3.50 per cent, i.e., 2.50 per cent per annum On this basis, RBI has lost an estimated interest revenue of Rs 85 crore each in 1994-95 and 1995-96, or Rs 515 crore cumulatively from 1988-89 through 1995-96. Thus, RBI and NABARD have together provided a cross-subsidy of more than Rs 700 crore to the short term co-operative credit structure between March 1988 and March 1996. In view of the deregulation of lending rates for the rural co-operatives since October 1994, there appears to be no justification for the highly concessional interest rates on refinance except, perhaps, some unknown extra-economic reasons.

The higher growth rate in refinance than that in the crop loan business of PACS, noted earlier, calls into question the hypothesis that refinance is supplemental in nature. Before examining this issue empirically, it is necessary to discuss NABARD's approach to sanctioning refinance and allowing drawals thereon.

Two important conditions governing refinance are minimum involvement (MI) and non-overdue loan cover (NODC). The MI condition applies jointly and severally to SCBs and CCBs. In other words, each SCB and CCB must fulfil this condition independently. If there are, say, 25 CCBs in a state, the SCB (operating at state level) can theoretically satisfy the MI condition by allocating the required amount of credit only to a single CCB. The CCBs, operating at the district level, can similarly comply with the MI condition by allocating the required resources to a single PACS. Since NABARD sanctions refinance limits on behalf of individual CCBs, a state-wide view of the refinance requirement, based on the total deposit resources of all the CCBs within the state and of the SCB, does not appear valid because there is an inherent discrimination in the system against the CCBs whose deposit growth outpaces that in crop loans and in favour of CCBs with the opposite trend. The surplus resources available with some strong CCBs are not set off against the deficient resources of the weak CCBs within the state. If remunerative avenues for lending for activities other than crop loans are not available locally, the surplus lendable resources of the strong CCBs find their way into the SCB as deposits and to the extent the deposits of the SCB increase in this manner, the amount of MI for the latter increases. Thus, over 80 per cent of the deposit of SCBs in Andhra Pradesh, Gujarat, Maharashtra and Kerala are owned by 'co-operative societies' including and mainly by the CCBs. The recent interest rate policy under which the rate of interest to the borrower increases with the loan size, without any concessionality for agriculture, is reportedly discouraging affluent farmers growing high value crops from borrowing crop loans from any credit institution. The CCBs with a strong deposit base are thus facing a dilemma: the growth in deposits increases their MI but the demand for large crop loans is declining. On the other hand, the SCBs and CCBs are generally reluctant to increase the involvement of their own resources in crop loans, especially small loans, beyond the minimum required for claiming refinance for two reasons: risk of default and high transaction costs. Thus, the present situation, under which limited resources become available for providing crop loans at the level of PACS, leads to informal credit rationing with a built-in bias especially against the small landholders practising rain-fed farming. Few of the latter class of farmers are able to obtain loans which can be deemed adequate according to the approved scales of finance and this may be one of the reasons contributing to unwilful loan delinquency. How credit rationing affects different types of farmer-borrowers (small, medium and large practicising rain-fed or irrigated crop husbandry) and their decisions on the use of crop inputs remains a dark area. It is high time NABARD and co-operative banks installed a monitoring system to study the efficiency of the credit delivery system at the grass root level to improve the marginal productivity of credit and reduce unwilful loan delinquency.

Co-operation is a state subject and, with the exception of multi-state co-operatives, the co-operative institutions are governed by the respective state co-operative societies acts. NABARD may not therefore be able to treat the lendable resources of the short-term co-operatives credit structures all over India as a single pool to determine the need for refinance. Should such a scheme become feasible in the future, Table 9 clearly shows that the need for refinance would be substantially curtailed.

Why can't NABARD at least treat the lendable resources of the short-term co-operatives credit structure in each state as a single stream, since it is feasible in law? Table 10, which attempts an illustrative exercise for four important states, shows that if such a view is taken, the need for refinance would be lower in some, if not all, the states. In other words, the present system of refinance does not appear to be truly supplemental all over the country.

The segmentation of the rural financial market, inherent in the present system of refinance for crop loans, is aggravated by ignoring the deposits held by the PACS or the potential that exists for mobilising such deposits. The *Statistical Statements* for 1992-93, of NABARD, show that the deposits held by PACS in Kerala (Rs 1,506 crore) are the largest in the country and for that reason their borrowings from CCBs are also low (Rs 409 crore), constituting only 18 per cent of their total liabilities. Deposits held by PACS in Kerala in 1992-93 were more than 3 times the outstanding amount (against the loans issued) at the end of that year. At the all-India level (for the reporting states), however, the deposits of PACS at Rs 2,294 crore formed only 27 per cent of their outstanding loans. This also explains why PACS in Kerala report the highest loan recovery rate of

75 per cent. The Kerala model suggests the revival of the twin principle of thrift and mutual help (credit) underlying the early co-operative credit movement in India, which was unfortunately relegated to the background since the *All India Rural Credit Survey Report, 1954* [Gorwala Committee, 1954]. A gradual replacement of patronage banking, which is how the present system of institutional credit is viewed by the rural population, by a deposit-based lending system at the PACS level may improve not only loan recovery but the quality of lending as well.

It may be added as a postscript that there has been a realisation in RBI and NABARD of some of the above weaknesses in the crop loan refinance system, leading to the following corrective action in respect of co-operative banks with effect from July 1, 1996[12]:

(i) RBI will charge a uniform rate of 5.50 per annum against its General Line of Credit to NABARD.

(ii) NABARD will charge the SCBs a rate of interest varying from 5 per cent to 7.5 per cent as the proportion of refinance in the CCB loans outstanding against PACS increases from less than 35 per cent to 55 per cent and above. The exceptions to this rule are the co-operative banks in the North-Eastern region and crop loans to tribal farmers elsewhere in the country under the Development of Tribal Population Programme, both of which will attract the concessional rate of 5 per cent.

(iii) A rebate of 0.2 per cent in the rate on refinance will be paid to the CCBs which register (a) a minimum growth of 30 per cent in deposits during 1996-97 over the level in 1995-96, or (b) if the realised growth in deposits during 1996-97 is not less than 5 percentage points over and above the average deposit growth rate of all banks in the district as well as a minimum of 5 percentage points over and above the CCB's rate of growth in deposits during the preceding year.

The first two changes mentioned above suggest that NABARD may now be able to retain some interest margin against its crop loan refinance after a time-lag of 8 years.

Two aspects of formal direct crop loans would be interesting to discuss, viz., credit widening (percentage of farmers with access to crop-loans) and credit deepening (percentage of crop loans to costs of cultivation). The Agricultural Census, 1990-91 places the number of operational holdings (number of individual farms) in India at 10.53 crore [India, 1996, p. 407]. Judging by the growth in the number of such holdings since 1980-81 (8.89 crore), the annual increase appears to be 0.16 crore. The number of farms in 1992-93 can therefore be placed at 10.53+0.32 = 10.85 crore. No uniform data are available on the number of farmers who borrowed crop loans in 1992-93 (the latest year for which the required statistics are available) directly from different credit institutions. RBI's *Report on Currency and Finance*, 1993-94, Vol II, p 77, shows the number of crop loans accounts outstanding with CBs in June 1992 to be 0.79 crore. The same *Report* for 1994-95, Vol. II, p. 95, shows the number of borrowers who had taken loans from PACS during 1992-93 to be 2.43 crore. It has to be assumed that all of them had borrowed crop loans from PACS. These reports do not furnish corresponding statistics for RRBs but RBI's banking statistics, *[Basic Statistical Returns*, Vol. 22, March 1993, Pp. 134-38], report that the number of direct agricultural loan accounts of RRBs (short, medium and long-term) in their rural, semi-urban and urban branches as of March 1993 totalled 0.64 crore. The proportion of outstanding direct short-term agricultural credit formed 36 per cent of their total direct agricultural credit in March 1993 [RBI, 1996(a), Vol. I, Table V-12]. Assuming that the number of borrowers of crop loans is in the same proportion, the number of farmers borrowing crop loans from RRBs can be placed at 0.26 crore. Thus, assuming mutual exclusiveness in borrowing, the total number of farmers who had access to formal crop loans in 1992-93 from one or the other credit institution can be placed at 0.79 + 2.43 + 0.26 = 3.48 crore, constituting 32 per cent of the estimated total farmer population in India. Admittedly, this estimate is somewhat on the lower side because we have no data on the number of outstanding crop loan accounts with PACS and that number is always higher than the number of farmers borrowing afresh during an year. Making allowance for this deficiency in data, one can infer that about 35 per cent of the farmer population in India have access to formal crop loans. The low credit widening, however, appears to be due mainly to farmers abstaining from borrowing of crop loans. This inference is supported by the *Statistical Statements Relating to Co-operative Movement in India* which show that the number of indebted members of PACS formed just 36 per cent of all the landholding members in 1992-93 [NABARD, 1993(b)].[13]

As for credit deepening, Table 11 provides the necessary data for twenty-one years from 1972-73. Crop loans issued formed 32 per cent and those outstanding 48 per cent of the costs of cultivation of crops over the entire period. The up-trend in both these values in the second decade (1983-84 to 1992-93) is noteworthy. That, despite only about 35 per cent of the farmers borrowing institutional crop loans, the amount of such loans constitutes 48 per cent of the aggregate costs of cultivation of borrowing and non-borrowing farmers together is significant for understanding the element of equity associated with such loans.

To sum up the discussion on crop loan refinance:

(i) The proportion of refinance in the crop loans issued by PACS has tended to increase since 1985-86, despite the stipulation of MI condition, fuelled mainly by the highly concessional interest rates on refinance between March 1988 and June 1996.

(ii) Refinance does not appear to be truly supplemental in nature.

(iii) The segmentation of rural financial market is aggravated by the present refinance system which ignores the deposits held by PACS or the need for PACS to mobilise rural deposits and by not treating the internal lendable resources of all the CCBs within a state as a common resource.

(iv) The annual growth in the volume of crop loans by PACS has almost kept pace with the rise in the prices of material crop inputs.

(v) The widening of the institutional crop loan system appears unsatisfactory in that only about 35 per cent of the farmers in the country had borrowed such loans from one or the other Primary Lending Institutes (PLI) during 1992-93. All the same, the flow and stock of crop loans constitute, respectively, a third and a half of the costs of material inputs of all farmers.

(vi) In the absence of a monitoring system, the efficiency of the credit delivery mechanism at the grass root level (impact of credit on the input-output matrix of borrowers) remains a mystery.

B. Refinance for Investments

NABARD provides medium and long-term refinance for fixed investments in the farm and rural non-farm sectors. Such refinance falls into two types: schematic and non-schematic. Non-schematic medium-term refinance, is available to only two types of institutions: to SCBs for approved agricultural purposes (e.g., replacement of bullocks, farm implements, irrigation pumps) and to RRBs for financing similar investments both in agriculture and RNFS. The amount of such refinance is relatively insignificant - its average annual drawal over the five years from 1991-92 to 1995-96 was Rs 26 crore for SCBs and Rs 52 crore for RRBs, compared with the corresponding average of Rs 2,647 crore of total schematic refinance. Since the basic aim of non-schematic refinance is to facilitate replacement of wasting business assets, there is no techno-economic appraisal preceding the issue of such loans. The LDBs also finance replacement of farm assets and, to a smaller extent, purchase of land and redemption of debt, but the resources for these purposes are raised by selling ordinary debentures to CBs, General Insurance Corporation (GIC), Life Insurance Corporation (LIC) and other financial institutions. These debentures, with maturities of up to 15 years, carry a lower rate of interest than the market rate but since they are eligible investments for SLR, CBs and other financial institutions buy them up to restricted amounts (or are persuaded to buy by RBI/NABARD). NABARD itself does not buy ordinary debentures; it buys only special debentures floated exclusively for financing schematic investments by LDBs. The outstanding liabilities of all LDBs together at the end of 1992-93 stood at Rs 984 crore under ordinary debentures and at Rs 4,153 crore under special debentures, showing the relative unimportance of the former [NABARD, 1993(b), Part I, p. 504]. By and large, non-schematic loans do not contribute to new capital formation.

On the other hand, schematic investment loans, refinance for which is available to SCBs, LDBs, RRBs and CBs, are issued only after predetermining the techno-economic feasibility of the proposed investments. With the exception of loans for replacement of some capital goods (tractors, pump sets, etc.), schematic investments contribute to additional capital formation.

The limitations of data on ground level loan disbursements for different types of farm investments may be noted. Firstly, a classification of such disbursements under schematic and non-schematic approaches is not available for any class of banks. RBI's *Currency and Finance Reports,* Vol I, provide consolidated data on the flow of direct term loans for agriculture and allied activities separately for CBs, RRBs and cooperatives, the last for PACS and LDBs together. In a separate table, these *Reports* also provide data on purpose-wise annual disbursements of such loans but only for CBs. The *Statistical Statements Relating to Co-operative Movement In India (SS)* published by NABARD, do contain data on purpose-wise disbursements of term loans by PACS but it is not clear whether these loans are schematic or non-schematic. Secondly, there is the problem of non-reporting in several states. As for LDBs, the *SS* do contain data on purpose-wise disbursements, but they are also incomplete due to non-reporting in several states, notably Bihar, Madhya Pradesh, Haryana, Punjab and West Bengal. We were unable to trace a purpose-wise classification of RRBs' investment loans in any RBI/NABARD publication. Under the circumstances, the ensuing discussion of purpose-wise classification of investment loans has perforce to be confined to refinance.

Table 12 shows the purpose-wise annual disbursements of schematic refinance from 1982-83 through 1995-96. The CAGR of total refinance disbursement for all purposes works out to 4.68 per cent. The most important purpose, claiming the largest share of refinance, over the entire period, is IRDP but its relative importance is declining since 1992-93. Next in importance is minor irrigation, which term includes construction of new dug wells, tubewells, surface water lift irrigation works, installation of pump-sets, repairs to/deepening of existing wells and laying of pipes for conveying water. The refinance disbursed to State Electricity Boards and Rural Electrification Corporations for energisation of pumps and to state level corporations for installing and maintaining public tubewells, river lifts, etc., is also included under this head. However, the amount of such refinance, which indirectly benefits farmers, is relatively small and the major part of the refinance for minor irrigation facilitates private investment in small irrigation works. Investment in minor irrigation yields quick results due to its short gestation. It facilitates multiple cropping together with the adoption of high yielding (HY) technology and generates additional on-farm employment on a recurring basis. For these private and social benefits associated with them, minor irrigation investments were preferred by NABARD, as is evidenced by the lower rates of interest on refinance to banks and to the ultimate borrowers until September 1990 when the new interest rate policy became operative. Owing to depletion of ground water potential in many parts of the country, the proportion of refinance for minor irrigation has been declining since 1987-88. The most important parameters governing the technical feasibility of new wells in a watershed are: (a) annual recharge from rainfall and from seepage of water from existing surface irrigation works, and (b) annual draft of ground water from existing wells. The difference between (a) and (b) gives an estimate of the balance of recharge, which is used for deciding the sustainable population (density) of new wells. Apart from density, spacing between wells is also prescribed to prevent mutual interference. Banks can lend for new wells only if the latter satisfy the density and spacing criteria, irrespective of whether the loans are schematic or otherwise. The technical parameters were first evolved by ARDC in collaboration with the World Bank, and NABARD adopted them on its formation. In the absence of laws regulating the construction of new wells, however, farmers construct new wells violating these conditions, which are financed by informal loans or farmers' own savings.

The IRDP has cumulatively claimed a slightly larger share of refinance than minor irrigation. This trend is discernible particularly for the period from 1988-89 to 1994-95. The ISB component of the IRDP has claimed 42 per cent of the total IRDP refinance. Despite the adverse findings of several IRDP evaluation studies, NABARD continues to release refinance for the programme because, as already observed, it was created to promote the IRDP. Until recently, IRDP was the only rural poverty eradication programme of the GOI. The addition of some new anti-poverty programmes involving bank credit might have contributed to a decline in the importance of the IRDP.

Farm mechanisation ranks third in the order of importance. Although the term covers all farm machines such as tractors, power tillers, threshers, sprayers for pest control and harvester combines (but excludes irrigation equipment since it is classified under minor irrigation), the most important farm machine refinanced, in terms of the volume of refinance, is the tractor. This is because NABARD does not finance combines due to their high capital intensity and questionable impact on labour employment. The demand for power tillers, which was confined to a few rice-growing regions, has been low. The other farm machines like threshers are much less capital-intensive than tractors and the amount of refinance for them is also much lower than that for tractors. NABARD finances the purchase of not only new but also second-hand tractors (in Punjab and Haryana) since 1993-94 [NABARD, *Annual Report 1994-95*, p. 37]. A break-up of refinance for farm mechanisation by types of machine is, however, not provided in NABARD's *Annual Reports*.

RNFS comes next, but it will be discussed separately in the following section. The ISB part of IRDP and RNFS together account for 19 per cent of cumulative refinance. The balance of 81 per cent is claimed by agriculture, which term includes field and tree crops, animal husbandry, fishery, storage and market yards, etc.

Among the different types of banks, the share of CBs in the cumulative refinance at 43 per cent is the highest, though it is declining since 1991-92 (Table 12) due to NABARD's discriminatory policy.[14] The LDBs, with a share of 36 per cent come next, followed by the RRBs (14 per cent) and the SCBs (7 per cent). *Pari passu* with the declining share of the CBs, the share of LDBs has been rising since 1991-92. The policy under which NABARD prefers co-operative banks and RRBs in the allocation of schematic refinance at the expense of the CBs had led to a stagnancy in the CBs' absolute level of disbursement of direct term loans for agriculture from 1991-92 to 1993-94 followed by a spurt in 1994-95 [RBI, 1996(a), Vol. I, p. V 44]. Historically, the CBs assumed increasing importance in schematic refinance from ARDC and NABARD since 1969, when several agricultural credit projects supported by the World Bank Group were launched and the nationalisation of the CBs had taken place. The release of refinance under these projects was linked with loan recovery. The LDBs with a poor recovery performance had limited capacity to absorb refinance. However, as the CBs opened more and more rural branches since 1969, the new branches became eligible for unrestricted refinance as they had no past overdues. The GOI, anxious to claim foreign exchange as quickly as possible, persuaded ARDC and NABARD to allocate larger refinance to the CBs. Whether the de-emphasis on CBs begun in 1991-92 will continue, if another agricultural credit project from the World Bank comes through, remains to be watched[15].

NABARD's schematic refinance for agriculture as a proportion of total direct term loans for agriculture (schematic and non-schematic) issued by all banks, which stood at about 40 per cent from 1982-83 to 1985-86, declined thereafter to about 35 per cent and again picked up in 1992-93 (Table 13). Cumulatively, the share of refinance was 37 per cent. Under schematic loans, farmers' equity in the estimated investment cost varies from 5 per cent to 25 per cent and the share of refinance in the bank loans from 50 per cent to 90 per cent. The fact that the overall share of refinance in the bank loans works out to a mere 37 per cent, therefore, suggests that non-schematic investment loans, especially from CBs and PACS, were sizable. The inclusion of non-schematic medium term refinance to SCBs for approved agricultural purposes (the annual drawal of which averaged Rs 26 crore for SCBs and Rs 52 crore for RRBs between 1991-92 and 1995-96) does not increase the share of refinance in investment credit significantly.

What is the share of agricultural investment credit and refinance therefore in the private gross fixed capital formation in agriculture (PGFCFA)? Bank credit financed 53 per cent of PGFCFA cumulatively from 1982-83 through 1992-93 (Table 14). However, this proportion is clearly declining since 1990-91. The cumulative contribution of refinance to PGFCFA works out to 19 per cent but the proportion in individual years is also diminishing since 1988-89. The growth rate of PGFCFA in real terms was minus 1.30 per cent between 1980-81 and 1986-87 and 5.85 per cent between 1986-87 and 1992-93 [Gandhi, 1996, p. 547]. 'The decline in private investment in the 1980 to 1986 period may be associated with squeezing of rural savings, as well as less commercial bank and co-operative credit in real terms. Relative improvements in these later as well as a growth in replacement investment may have fostered the rise in private investment in the subsequent period' [Gandhi, 1996, p. 555]. Given that commercial banks still supply over 50 per cent of the total institutional investment credit for agriculture but that their relative share is declining since 1991-92, that the system of directed landing still continues and that the level of PGFCFA depends, among other things, on credit supply, NABARD may have to ensure that the re-allocation of refinance to different banks does not adversely affect credit supply to farmers. Otherwise, future private capital formation in agriculture is likely to be jeopardized.

NABARD inherited schematic lending for agriculture from the erstwhile ARDC. The latter, in turn, developed its schematic lending approach in consultation with the World Bank which funded several state-oriented agricultural credit projects beginning 1967-68 up to March 1989. NABARD and ARDC had received the Rupee equivalent of US$ 2,753 million under 44 externally aided projects, of which 39 were World Bank projects [NABARD, *Annual Report 1988-89*, p. 127]. The principal private investments financed under these projects were minor irrigation and tractors, which contributed to the accelerated spread of HY technology. These projects were time-bound and target-oriented. The amount of World Bank funding in foreign exchange, available only to the GOI, was also fixed in relation to the Rupee-US dollar official exchange rate at the time a project became effective on the one hand, and the estimated project outlay in local or foreign currency, on the other. However, as the Rupee-Dollar exchange rate began lowering since 1967,[16] the domestic outlay under these projects had to be raised correspondingly to enable the GOI to claim the pre-determined amount of foreign exchange. This necessitated an increase in physical and financial targets under the projects, along with an extension in the project period. Since the amount of credit disbursed under the projects was the main basis which enabled the GOI to claim US$ from the World Bank and since the credit outlay in local currency had to be raised due to the falling external value of the Rupee, and that too within the prescribed time limit, there ensued a deterioration in the quality of lending. For instance, the construction of a dug well in the hard rock areas, which necessitates excavation, blasting of rock, masonry work and installation of a pump set, typically required 18-24 months for completion. Since loan disbursement was tailored to the physical progress of work, the higher financial target could be achieved only by exceeding the physical target. This, in turn, led to incomplete loan disbursement and incomplete physical progress of wells. In the absence of a system for monitoring the physical progress of investment works, loan targets were achieved through partial disbursements to more borrowers. To illustrate, instead of disbursing all the loan instalments for 100 dug wells, partial disbursements were made for 150 wells so as to achieve the credit target. Since the monitoring of physical progress is laborious, time-consuming and too expensive to be accommodated within the narrow interest margins, it is absent even now in all rural credit institutions. This continues to be a major weakness of schematic lending, leading to sub-optimal incremental capital-output ratio and increase in unwilful default in loan repayment.

Lack of attention to credit for associated investments (e.g., land levelling in respect of fields irrigated from private wells and replanting occasioned by plant mortality in the case of plantation and horticulture) is another weakness of schematic lending, which also leads to involuntary loan delinquency. Although such associated investments are eligible for refinance, security-oriented lending, under which the estimated value of mortgaged land determines the maximum loan size, practised by all the banks but more particularly the LDBs, contributes to under-financing of investments, thereby forcing farmers to borrow supplementary informal loans.[17] Regrettably, NABARD has not been able to rectify these defects.

Schematic lending for agriculture is a legacy to NABARD from the erstwhile ARDC. NABARD has not changed the basic ARDC approach to schematic lending. ARDC's mandate required it to confine itself to investment credit for agriculture. As such, its scheme documents merely expressed the pious platitude that the beneficiary farmers would be able to obtain crop loans from RRBs/PACS/CBs in addition to the schematic investment loans. However, field observations suggest that in several cases the borrowing of an investment loan precludes the borrowing of a formal crop loan, especially for small farmers whose entire land holding is mortgaged to secure the investment loan. Such preclusion stems from voluntary and involuntary decisions. The voluntary decision to abstain from a crop loan arises from the borrower's perception to limit borrowings to a prudent level, lest in the event of a delinquency in repayment he may forfeit his land. The involuntary decision is the perception of a credit institution that a farmer has borrowed to the hilt relative to the value of land mortgaged against the investment loan and that additional credit can be given only if the borrower can supply additional collateral. It may, however, be added that voluntary abstention from formal crop loan is more common than the rejection by a credit institution. The field reality is thus far from the situation of integrated approach to rural credit envisaged by CRAFICARD.

Since its inception, NABARD has extended the scope of schematic lending to cover a number of new on-farm and non-farm investments, a mention of which can be found in its *Annual Report.* Some illustrations to the point are pump set improvement and stand-by oil engines [*Annual Report 1982-83,* Pp. 90-91], bio-gas [*Annual Report 1983-84,* p. 41], tyre carts [*Annual Report 1984-85,* p. 42], self-employment for ex-servicemen and solar cookers [*Annual Report 1987-88,* Pp. 65 and 90), wasteland afforestation by mining companies [*Annual Report 1988-89,* p. 48], rubber plantation in Goa [*Annual Report 1989-90,* Pp 71-72], manufacture of badminton shuttle cocks from poultry waste [*Annual Report 1990-91,* p. 81], and purchase of trained elephants as drought/pack animals in the North Eastern (NE) states, computer assembly units/training centres in rural areas [*Annual Report 1995-96,* Pp. 29-31].

V. REFINANCE FOR NON-FARM SECTOR

The preamble to the NABARD Act, 1981, states that the Bank is to be established 'for providing credit for the promotion of agriculture, small scale industries, cottage and village industries, handicrafts and other rural crafts, and other allied activities in rural areas with a view to promoting rural development'. NABARD has operationally defined non-farm sector to include all manufacturing and service activities in the private sector in rural areas. Pure trading (e.g., a grocery shop) is excluded, except under the IRDP.

Section 2(9)(6) of the Act defines a 'rural area' to mean '.... the area comprised in any village and includes the area comprised in any town, the population of which does not exceed ten thousand or such other figure as the Reserve Bank may specify from time to time'. RBI revised this definition in 1995-96 to include any village irrespective of the population size and any town with a population not exceeding fifty thousand [NABARD, *Annual Report 1995-96*, p. 33]. It is, however, interesting to note that refinance to SCBs and LDBs is available irrespective of the location of units financed[18] [NABARD, *Annual Report 1989-90*, p. 67], probably to reward them for not going to SIDBI. In other words, the obligation to finance non-farm units in rural areas with NABARD's refinance appears to be confined to CBs and RRBs.

Clearly, NABARD's mandate extends to 'tiny industry in the decentralised sector' and 'small-scale industries' in rural areas, the concepts of both of which are defined by the GOI from time to time in terms of a ceiling on investment in plant and machinery. The current ceiling for Small Scale Industries (SSI) is Rs 75 lakh if it is an ancillary or export-oriented unit and Rs 60 lakh for other units [NABARD, *Annual Report 1993-94*, p. 27].

A perusal of NABARD's *Annual Reports* since 1982-83 shows that for the first four years, it interpreted its mandate to mean that it should confine its refinance to the tiny, traditional non-farm activities such as handloom, sericulture, coir, handicrafts and khadi and village industries. With this aim in view, NABARD appointed seven Task Forces to formulate guidelines and lending parameters for such activities and established a Soft Loan Assistance Fund for Margin Money to stimulate cottage, tiny and village industries. In 1985-86, it installed the ARF for CBs and RRBs to promote tiny/cottage industry and village artisan activities. The ARF had two components: (i) general refinance for term loans and composite loans up to Rs 2 lakh for individual/proprietary concerns or up to Rs 5 lakh for groups of individuals, and (ii) composite loans for working and fixed capital for individual artisans/craftsmen up to Rs 30,000. It was in 1986-87 that NABARD shed its pre-occupation with the smallest of the small traditional industry and extended the scope of ARF to modern small industry approved by the Development Commissioner (SSI), GOI, but still within the limit of Rs 5 lakh. This new facility was called integrated loans. The real distinction between 'composite loans' and 'integrated loans' appears to be that the former are intended for the tiny sector and the latter for the non-tiny small industry. In 1987-88, refinance on a project basis against loans up to Rs 3 crore was offered for agro-industrial units engaged in agro-processing or manufacture of agro-chemicals. The fillip for more liberal policies towards RNFS by NABARD appears to be, strangely, the establishment of SIDBI, which commenced its operations from April 1990, as also the aid from Switzerland. Since there was some functional overlap between SIDBI and NABARD in relation to rural industries, RBI decided that small and tiny industries in rural areas will be refinanced exclusively by NABARD. In addition, NABARD can also assist integrated units, mother units and ventures that support rural small units, even if they are located in urban areas. Co-operative banks will be eligible for refinance from NABARD irrespective of the location of small industrial units financed by them [NABARD, *Annual Report 1989-90*]. In 1990-91, NABARD extended refinance for service units like restaurants, hotels, laundries and xeroxing units which was hitherto banned. In the same year, the ceiling on composite loans was raised to Rs 50,000 and that for integrated loans to Rs 7.50 lakh. In 1991-92, NABARD removed the locational and cost restrictions for agro-processing units and appointed technical consultants in its Regional Offices (ROs) for the formulation and appraisal of non-farm projects. In 1992-93, the Agricultural and Rural Enterprises Incubation Fund was set up for sharing the risk with entrepreneurs. In 1993-94, the ceiling on investment in plant and machinery for SSI units was raised to Rs 75 lakh. Thus, despite the initially hesitant approach, NABARD seems to have shown considerable dynamism since 1987-88 in its policies towards RNFS.

Besides relaxing the conditions for refinance, NABARD has taken several measures to promote the growth of RNFS. Briefly, the promotional measures are:

(i) Grants to voluntary agencies in the private sector and public promotional agencies to set up Training-cum-Production centres for imparting training and technical skills to entrepreneurs.
(ii) Conduct of entrepreneurship development programmes.
(iii) Promotion of artisan guilds and training for master craftsmen.
(iv) Launching of Area Plan for Rural Industries through voluntary agencies.
(v) Launching of District Rural Industries Plan.
(vi) Conducting of training programmes for bank officials.
(vii) Conducting of studies by experts on several dimensions of RNFS.

All these and other promotional measures implied expenditure by NABARD in the form of grants. Such expenditure was facilitated by Swiss Development Co-operation or SDC (an agency of the Federal Government of Switzerland) which has been giving bilateral assistance to NABARD and its forerunner, the ARDC. Beginning 1987-88, SDC changed the focus of its assistance from support for the overall lending by NABARD to support exclusively for NABARD's RNFS lending. Simultaneously, SDC also changed the form of its assistance. Prior to 1987-88, SDC gave grants to the GOI in Swiss Francs, the Rupee counterpart of which was passed on by the GOI to NABARD as loans. Beginning 1987-88, however, the GOI was required to pass on the Rupee counterpart to NABARD as grant so that the latter can meet the expenses on the promotion of RNFS and build up a corpus for augmenting its RNFS lending. From a modest level of Rs 12.50 crore in June 1988, the corpus has grown to Rs 107.61 crore in March 1996 [NABARD, *Annual Reports, 1987-88*, p. 214 and *1995-96*, Pp. 154-56].

According to a NABARD brochure titled *One Day District Level Orientation Meet on Rural Non-Farm Sector (Study Material)*, the annual growth rate of employment between 1978 and 1987 was 0.92 per cent in agriculture but 5.4 per cent in RNFS. The capital per worker, the capital-output ratio and power requirement are all lower for rural industry than for urban industry. Since NABARD recognises the merits of RNFS, which accounts for 22 per cent of rural employment, one can question the adequacy of its refinance for that sector. As shown in Table 12, refinance for RNFS, excluding the ISB component of the IRDP, was 14 per cent to 15 per cent of its total refinance disbursements during 1994-95 and 1995-96. If share in employment and growth potential of employment can be the basis for refinance allocation, it is evident that RNFS should share 22 per cent to 25 per cent of refinance in the coming five years. For this purpose, NABARD may prune its refinance for agriculture, if necessary, by denying refinance for purposes, such as the purchase of second-hand tractors, and reducing the refinance support for SCBs. In any case, the allocation of refinance between the farm and non-farm sectors should be based on some explicit principles.

An activity-wise break-up of RNFS refinance or of loans to the ultimate borrowers is not available for all the banks. Similarly, data on credit or refinance disbursements for working and fixed capital are not available separately.

VI INTEREST RATE POLICY FOR RURAL CREDIT

In the sections on Refinance Operations, some discussion on interest rate policy for rural credit has been attempted, covering the movement in rates since 1980 applicable to refinance as well as the ultimate borrowers. The process of rationalisation of such rates, initiated by RBI since September 1990, was also touched upon. In this section, it is proposed to trace and review the policy underlying the process of rationalisation.

A - Rates to Ultimate Borrowers

A re-thinking on the interest rate policy for rural credit was triggered by the November 1990 report of the Narasimham Committee (NC) which recommended, among other things, a deregulation of interest rates and an abolition of concessive lending rates so that all rates become positive in real terms. The official reaction to this recommendation can be discerned in RBI's *Report on Trend and Progress of Banking in India, 1991-92,* [Pp. 3-9] and in its *Annual Report 1992-93* [Pp. 101-102], which can be summarised as under:

(i) The recommendation that the real rates should be positive is accepted.

(ii) The lending rates have been rationalised with a reduction in the number of concessive slabs and enhancement of some rates, thereby reducing the element of subsidy, although there is need for further rationalisation.

(iii) There is need for a cautious step-by-step approach rather than a rapid deregulation of all interest rates which can be destabilising.

(iv) Since there is inadequate margin between the cost of funds and lending rates (to cover the cost of transactions and risk), there is need for evolving a two-slab structure of lending rates with one rate (for loans above Rs 2 lakh) being freely determined by the market and one concessional rate which could be, say, 2 to 3 percentage points below the Prime Lending Rate. While this may imply some increase in the rate for small loans, what is important is the provision of timely and adequate credit.

(v) The credit co-operatives, CBs and RRBs have all sustained large financial losses in rural lending mainly because of high administrative costs, heavy overdues and a non-viable interest structure. One thought has been that the co-operative credit structure should be totally freed from deposit/lending rate control so that these rates could settle at realistic levels. (Accordingly, lending and deposit rates of all co-operative banks, excluding Primary Co-operative Banks (PCBs), i.e., Urban Co-operative Banks, were totally deregulated in October 1994 subject to a minimum lending rate of 12 per cent. From July 1995, the lending rates of PCBs were also deregulated subject to a minimum of 13 per cent, followed by a deregulation of RRBs' lending rates in August 1996. Even the CBs' lending rates for loans above Rs 2 lakh were deregulated in October 1994).

The main features of the policy changes in the interest rates to the ultimate borrowers since September 1990 and their impact are:

(i) With the exception of the Differential Rate of Interest Scheme operated by CBs and RRBs, identical rates are prescribed for all sectors of the economy, including agriculture, which vary directly with the size of loan and there are only three size slabs now. The rates are also identical for short-term and long-term loans of a given size. The idea of lower rates for priority sector and for agricultural investment loans has thus been abandoned. However, with the freedom given to rural credit co-operatives since October 1994 and to RRBs since August 1996 to determine their own lending rates, the uniformity in the ultimate lending rates has probably vanished. Secondly, the rates on loans above Rs 2 lakh from all rural credit institutions are likely to carry different rates since they have been deregulated for CBs as well.

(ii) The demand for rural credit does not appear to have abated due to increase in the ultimate lending rates, as can be judged from the statistics on Direct Institutional Finance for Agriculture and Allied Activities for the years 1990-91 to 1993-94 furnished in RBI's *Report on Currency and Finance 1994-95,* [Vol. I, p. V- 60]. The increase in NABARD's refinance corroborates this hypothesis.

(iii) Despite the deregulation of lending rates, as described above, no rural credit institution is allowed to charge a rate of less than 12 per cent on farm or non-farm loans. Thus, what has been deregulated is the ceiling rate and not the floor rate.

(iv) The partial deregulation of lending rates achieved so far is unlikely to create a fully competitive rural financial market. The majority of farm loans being less than Rs 2 lakh each, the regulated rates applicable to CBs for loans of this size may deter some, if not all, RRBs and co-operatives from charging economic rates.

The ACRC had estimated the lending costs of rural credit institutions for the period 1983-84 through 1985-86 as under:

(per Rs 100 loan outstanding)

Institution	Financial Cost	Transaction Cost	Risk Cost	Total Cost
PACS	9.90	5.40	1.00	16.30
LDB (unitary)	6.51	4.04	1.00	11.55
LDB (federal)	7.78	4.74	1.00	13.52
RRB	7.80	6.90	1.00	15.70
CBs	7.48	6.00	1.00	14.48

Khusro Committee, 1989, Chapter XVIII, Pp. 651-704.

In a more recent study of one institution each in Thane district in Maharashtra, the 1992-93 lending costs were estimated by NABARD as under:

Institution (1)	Financial Cost Including Cost of Servicing Deposits (2)	Transaction Cost (3)	Risk Cost Based on Estimated Bad and Doubtful Debts (4)	Total Cost (5)	Average Rate of Interest Earned (6)	Margin (6-5) (7)
PACS	9.32	6.15	3.93	19.40	12.96	-6.44
RRB Branch	16.24	7.38	3.68	22.30	11.92	-10.38
LDB (unitary)	8.43	3.20	2.62	14.25	13.30	-0.95

GRAMEEYA, Journal of NABARD, Vol I, No. 1, July 1994, p. 10.

Evidently, the presently prescribed rates for CBs on loans up to Rs 2 lakh are inadequate to cover the costs of rural lending. Since the lending rates of RRBs and co-operative banks have been totally deregulated (subject to the minimum of 12 per cent), it is up to them to raise the rates suitably. Whether an increase in lending rates by RRBs and co-operatives in such a scenario will induce their borrowers to turn to CBs remains to be watched. Even if such a shift in demand takes place, the CBs are unlikely to allow their agricultural credit to expand beyond the prescribed level of 18 per cent of total net bank credit.

B - Rates on Refinance

As for the rates on NABARD's refinance for agriculture, the changes since October 1990 are:

(i) The rates on refinance to SCBs for crop loans which stood at 6 per cent to 7 per cent from July 1980 to February 1989, at 3 per cent to 5 per cent from March 1989 to October 1991 and at 3 per cent to 6.5 per cent from November 1991 to June 1996 have been raised to 5 per cent to 7.5 per cent from July 1996. The variation in the corresponding rates for RRBs is from 7 per cent (July 1980 to February 1989) to 5 per cent (July 1989 to October 1991) and to 6.5 per cent (since November 1991). Thus the rates on crop loan refinance continue to be highly concessive, much more so far the SCBs than for the RRBs.

(ii) The rates on refinance for schematic investment loans which varied from 6.5 per cent to 12.5 per cent between July 1980 and September 1991, according to the nature of

> investment and size of land holding of the borrower, were revised for all banks from October 1991 to 6.5 per cent to 4 per cent less than the ultimate rate according to the size of loan and the type of borrowing bank. Since August 1995, the rates for SCBs, LDBs and RRBs vary from 6.5 per cent to 12.0 per cent according to loan size and for CBs from 8.5 per cent to 3 per cent less than the ultimate lending rate. Thus, the present rates discriminate against the CBs and favour the SCBs, LDBs and RRBs by providing them wider margins against refinance. In addition, the proportion of refinance to loans disbursed which stands at 80 per cent for co-operative banks and RRBs has been reduced to 50 per cent for CBs from August 1995 .... Further, a system of refinance rationing has also been applied to CBs under which the absolute amount of refinance to them is restricted on the grounds that they are resource-based and under an obligation to priority sectors [NABARD, *Annual Report 1995-96*, p. 27 and p. 93].

How does the cost of bank deposits compare with the rates on refinance? Table 15 attempts to work out the average cost of deposits with commercial banks with reference to the rates obtaining in January 1997. The imputed cost of loss of income from SLR and CRR requirements has been ignored. Similarly, the cost of servicing the deposits has been disregarded. The average interest cost of deposits with CBs works out to 7.90 per cent. Assuming the same deposit structure, the corresponding cost for co-operative banks and RRBs, which pay higher rates on deposits, is likely to be higher by a half to one percentage point. The lowest rate on schematic refinance to CBs (8.5 per cent) thus comes close to their average cost of deposits including the CRR and SLR loss in income.[19] Assuming that for loans in excess of Rs 2 lakh, CBs charge a rate of 14.5 per cent (the January 1997 Prime Lending Rate) or more, the present margin of 3 per cent against refinance for such loans is much lower than that against overall deposits. In the circumstances, the demand for refinance from CBs can be deemed to arise owing to two reasons: (a) tight credit situation, and (b) non-credit services from NABARD without any charge such as techno-economic appraisal of projects contributing to saving in the transaction costs of the banks. The co-operative banks and RRBs, on the other hand, have wider margins against refinance than against deposits both for crop loans and schematic loans and for that reason the refinance to those banks may turn out to be substitutional rather than supplemental.

As for rates on refinance (other than those under schematic refinance for agriculture and Automatic Refinance Facility for the RNFS both of which attract identical rates), the following anomalies can be observed:

(i) The RNFS activities fall into two types - traditional (artisans, weavers, collectors of minor forest produce, etc.) and non-traditional (iron fabrication, servicing of petrol/diesel vehicles, food processing, eating houses, ready-made clothes, vehicular transport, etc.). Many from both types of activities need short-term credit for production and marketing. Statistical Statement 1 of NABARD's *Annual Reports* provides information on the rates of interest on short-term refinance to SCBs and RRBs for some of the traditional activities. For instance, the rate on refinance for production and marketing activities of co-operative weavers' societies has been 9.5 per cent from February 1994. The corresponding rates for rural artisans borrowing from PACS is 7 per cent from March 1994 and 12 per cent (at Bank Rate) for those engaged in the collection and marketing of minor forest produce. No information is available in RBI/NABARD publications on the rates charged to the end-users of such refinance or on the historical movement in such rates, but it is likely to be available in the circulars of the two institutions which were not easily accessible. If it is assumed that the uniform rates, which are prescribed by RBI since March 1994 for all economic activities, and which vary directly with the loan size, apply to the traditional activities as well, it does not sound plausible that an SCB would borrow refinance at 12 per cent for financing the collection and marketing of minor forest produce and lend at the same rate to the ultimate beneficiaries borrowing up to Rs 25,000 for the purpose.[20] The deregulation of lending rates of co-operative banks since October 1994 does not diminish the validity of this point for the pre-October 1994 period. Further, the rationale for prescribing a lower rate on refinance for rural artisans (7 per cent) and a much higher rate (12 per cent) for collection and marketing of minor forest produce is not available, unless it is assumed that loans for the latter purpose are borrowed by traders in minor forest produce. However, it is widely known that the collection of minor forest produce is typically an activity undertaken by the tribal and non-tribal rural poor. The RRBs are also given refinance for financing short-term loans to those engaged in non-farm activities at a uniform rate of 8.5 per cent. Some of the beneficiaries of such RRB loans could be those engaged in the collection and marketing of minor forest produce or rural artisans but the rates on refinance are different for RRBs than those for SCBs.

(ii) If individual farmers desire to avail of short-term loans for marketing their crops from the short-term co-operative credit structure under the Produce Marketing Loans Scheme introduced by NABARD in 1988-89 at the behest of the GOI, the rate on refinance is the same as for crop loans (3 per cent to 6.5 per cent but revised from July 1996 to 5 per cent to 7.5 per cent). Outside this Scheme, short-term refinance for marketing of crops is at the BR of 12 per cent. Thus, NABARD has contributed to a segmentation of the rural financial market by providing refinance from different windows at different rates of interest for the same activity.

(iii) If a rural artisan desires a medium or long-term loan for fixed investment, he can obtain a non-schematic medium-term loan from RRB (which is refinanced at 7.5 per cent) or a schematic loan from CB/RRB/LDB/PACS under NABARD's (ARF), the rate of interest on refinance for which varies for RRBs and co-operative banks from 6.5 per cent to 12 per cent and for CBs from 8.5 per cent to 3 per cent less than the ultimate lending rate. The preclusion of CBs from the deregulation of lending rates for loans up to Rs 2 lakh and complete freedom to SCBs and co-operative credit institutions affiliated to them as well as to LDBs and RRBs to determine their lending rates, on the one hand, and the differential rates on refinance, on the other, thus compound the confusion in rural credit.[21]

(iv) As for non-traditional non-farm activities, composite loans for working and fixed capital are available from all rural credit institutions under NABARD's ARF. The ultimate lending rates as also the rates on refinance under the facility are identical with the respective rates on agricultural schemes.

The above discussion clearly shows that although the ultimate lending rates of rural credit institutions have been considerably rationalised, there is room for rationalising the rates on refinance for crop loans. With the ultimate lending rates being uniform now for loans of a given size for all economic activities, the rationale for providing refinance from different windows at different rates of interest is not clear. Thus, a rethinking on the refinance operations of NABARD, in order to make refinance truly supplemental, and a package of refinance and non-credit services contributing to the economy in the transaction costs of lending institutions, appear imperative. Above all, NABARD should re-orient its operations to achieve an integrated system of rural credit, the objective for which it was established.

Before concluding this section, it would be interesting to note the historical structure of lending rates for agriculture. The first-ever RBI advance for crop loans was to the United Provinces Co-operative Bank in April 1945 at 1.5 per cent below the then Bank Rate (BR) of 3 per cent, i.e., at 1.5 per cent [RBI, 1970, p. 479]. Even so, only a few provincial co-operative banks availed of the facility. Since July 1996, NABARD's rate of interest on refinance to SCBs which varies from 5.0 per cent to 7.5 per cent is 4.5 to 7.0 percentage points below the BR of 12 per cent. (The BR has been lowered to 11 per cent from April 1997). The rates applicable to the ultimate borrowers in the year 1945 are not available. However, around the same time and certainly not later than 1950-51, the rates in Bombay and Madras regions stood at 6.25 per cent to 7.50 per cent, while in the states of Uttar Pradesh, Madhya Pradesh, Punjab, West Bengal, Assam, PEPSU, etc., they ranged from 12.5 per cent to 15 per cent, 'almost bordering the maximum rates which private moneylenders are allowed to charge under the law' [RBI, 1970, p. 795]. At that time, some co-operative banks opposed RBI attempts to reduce the ultimate lending rates (for loans for marketing of farm produce) from $9\frac{3}{8}$ per cent to 5 per cent [RBI, 1970, p. 477]. The contrast between the situations in the mid-forties and mid-nineties is conspicuous in respect of access to RBI (a cautious access then and a facile access now to the lender of last resort) and the ultimate lending rate to farmers (2 to 5 times the BR then and equal to or 1.5 times the BR now).

VII. NON-REFINANCE FUNCTIONS: INSTITUTIONAL DEVELOPMENT

The corporate mission of NABARD includes the following main elements:

(i) securing integrated growth of the farm and RNF sectors so as to achieve prosperity of rural areas;
(ii) subserving national development plans for rural development;
(iii) liaising with institutions concerned with policy and planning, such as the GOI, Planning Commission, RBI and State Governments;
(iv) getting acquainted with technological innovation and assisting in their dissemination so as to improve the marginal productivity of rural credit;
(v) undertaking micro level credit planning, co-ordination of the credit institutions and linking credit with physical resource endowment of regions;
(vi) strengthening of rural credit institutions; and
(vii) extending refinance [NABARD, *Annual Report 1995-96*, Pp. 145-47].

The most important of the above elements, in terms of manpower and money expended, are the last three. The refinance operations have already been reviewed. In this section, therefore, it is proposed to discuss NABARD's role in institutional development, while the following section will address credit planning.

The basic aim of institutional development is to ensure that a credit institution attains sustainable financial viability, i.e., adequacy of annual income from interest, service charges, investments, etc., to meet the annual expenses on establishment, financial costs and risk (non-performing assets) and leave a surplus for building up reserves to permit future growth of business. The milieu in which an institution operates (policies on interest rates, directed lending, loan write-offs, industrial relations laws affecting salary revisions and staff retrenchments) has a great bearing on its viability. However, these basic issues are rarely addressed in any institutional strengthening exercise because even the higher level institutions preparing the exercise are themselves the victims of exogenous policies. More often than not, therefore, the plans for institutional development remain mere palliatives and eventually prove futile, calling for successive doses of rehabilitation.

The institutions providing rural credit direct to borrowers are the CBs, RRBs and the co-operatives in the short-term and long-term structures. Of these, the CBs are the responsibility of RBI in the sense that it is the latter that supervises their operations and issues directives on SLR, CRR, priority sector lending, selective credit controls, interest rates, branch licensing, customer service, transactions in foreign exchange, prudential accounting norms, and all other aspects of banking business. NABARD's role in developing the CBs is limited to two main aspects: manpower training in rural credit and liaising with the Lead Bank in individual districts for rural credit planning. The RRBs and the credit co-operatives are, however, mainly the responsibility of NABARD and the following discussion will therefore focus on them.

The 196 RRBs in the country were established from 1975 onward to provide credit exclusively for the weaker sections of the society. As of March 1996, they had 14,497 branches covering 427 districts, their deposits stood at Rs 13,835 crore (June 1996) and advances at Rs 7,320 crore (June 1996), giving a credit-deposit ratio of 53 per cent. Their borrowings from NABARD stood at Rs 2,067 crore by March 1996 constituting 28 per cent of advances [RBI, 1996(b), Pp. 42-43]. Overdues as a proportion of demand stood at 56 per cent in March 1994 [NABARD, *Annual Report 1994-95*, p. 47]. During 1991-92, 178 RRBs incurred losses of Rs 232 crore (losses accumulated up to March 1992 being Rs 617 crore) while the remaining 18 RRBs earned profits of Rs 11 crore [NABARD, *Annual Report 1992-93*, p. 163]. It was not until September 1992 that the RRBs were allowed to give 40 per cent of their fresh loans for the non-target group, which proportion was subsequently raised to 60 per cent. In other words, on par with CBs which have to earmark 40 per cent of their credit for the priority sectors, the RRBs are also required to provide an equal proportion of their fresh credit to the weaker sections of society. The non-viability of the majority of RRBs can be ascribed to the following reasons: (i) small loan size, (ii) high transaction costs, (iii) low interest margin, and (iv) poor loan recovery. Since 1989, the RRB staff enjoy parity in salary and allowances with their counterparts in the commercial banks, following an award to that effect by the National Industrial Tribunal. Thus, the RRBs have ceased to be a low-cost alternative to the rural branches of CBs. The share capital of all the RRBs (Rs 1.56 crore by March 1996 or an average of Rs 79,400 per RRB) is held by the sponsor bank (35 per cent), GOI (50 per cent) and state governments (15 per cent) [NABARD, *Annual Report 1992-93*, p. 44]. Right from day one, non-viability was built into the RRBs by the mandate that they must cater only to the weaker sections of the society. This is evident from the fact that in the case of 174 RRBs, the share capital and reserves were totally eroded by the accumulated losses [NABARD, *Annual Report 1995-96*, p. 115], besides a portion of the deposits.

What are the reasons which explain why a handful of RRBs (18-20) earned profit when the majority of them incurred losses? The ACRC records the following reasons for this peculiar situation:

(i) deposit of share capital and other funds with sponsor banks to such an extent that the interest earned from it produced profit; and
(ii) low level of lending to the target group, resulting in a lower C-D ratio than the all-India average for all the RRBs [Khusro Committee, 1989, p 141].

In other words, the RRBs that faithfully fulfilled their mandate had incurred losses because loss making was inherent in the mandate. In view of this intrinsic weakness, the ACRC recommended the merger of RRBs into the sponsor banks [Khusro Committee, 1989]. The Narasimham Committee similarly recommended the formation of new regional banks by merging into them the RRBs and the rural branches of CBs. The decision of the GOI, however, appears to be to continue the *status quo* with some action for the strengthening of RRBs.

The following steps were taken since 1993-94 to rehabilitate the sick RRBs:

(i) freedom for all RRBs to determine their own lending rates from August 1996;
(ii) augmentation of share capital of each RRB from Rs 25 lakh to Rs 1 crore in a phased manner. However, only 48 RRBs had a paid-up capital of Rs 1 crore each by March 1996;
(iii) preparation and monitoring of Development Action Plan (DAP) to improve RRB efficiency. As of December 1995, DAPs were prepared for 192 of the 196 RRBs. The DAPs focus on productivity, cash management, loan portfolio, branch relocation and loan recovery;

(iv) restructuring of selected RRBs in respect of managerial, organisational and operational matters including cleaning of balance sheets. Under Phase I, 49 RRBs and under Phase II, 70 RRBs have been selected for restructuring. During 1994-95 and 1995-96, the GOI released Rs 150 crore and Rs 223.57 crore, respectively, for cleaning the balance sheets of 53 RRBs. These payments from the GOI reflect its share of 50 per cent towards additional contribution to equity. An equal amount is expected to be contributed jointly by the sponsor banks (70 per cent) and state governments (30 per cent) [RBI, 1995, p. 38; RBI, 1996(b), p. 44; NABARD, *Annual Reports 1994-95*, p. 47 and *1995-96*, p. 39].

Thus, the immediate strategy appears to be to increase the paid-up capital of the sick RRBs to wipe out their accumulated losses so as to safeguard their solvency. But the more fundamental problem of intrinsic unsoundness arising from the mandate to earmark at least 40 per cent of fresh credit for the weaker sections of the society, poor loan recovery and high transaction costs would still persist. Whether these steps will succeed in pulling the RRBs out of the mess remains to be watched in the future. It is however, learnt from NABARD officials that the action taken towards the strengthening of RRBs has produced a tangible improvement in their performance, judging by a reduction in the annual losses, a more careful selection of borrowers (except those under the IRDP) and a decline in the proportion of overdues to demand. And all this, despite the application of prudential norms for income recognition and asset classification from the accounting year 1995-96 and, additionally, of norms on provisioning effective from the accounting year 1996-97 to RRBs.[22] What is even more gratifying to learn is that there is an attitudinal change in the RRB staff, arising from a fear of possible merger/winding-up of the institution, that has spurred them into action to attain institutional viability rapidly.

The sheer number of credit co-operatives is staggering. The short-term structure comprises 28 SCBs, 364 CCBs and nearly 91,000 PACS. In the large states, the structure consists of all these tiers but in the small states, particularly those in the North-Eastern area, the structure consists of only two-tiers, SCB and PACS. In the latter states, an independent long-term structure also does not exist with the result that investment loans are also dispensed by the short-term structure. Elsewhere, the long-term structure includes 20 SLDBs and 727 PLDBs. Here, again, there is some diversity. In Andhra Pradesh, Bihar, Gujarat, Jammu and Kashmir, Maharashtra and Uttar Pradesh the structure is unitary in the sense that there are no PLDBs, and the SLDBs operate through their branches. Elsewhere, the structure is federal in the sense that there are SLDBs federating the PLDBs. The long-term structure does not accept public deposits and raises lendable resources mainly by selling debentures, whereas the SCBs and CCBs in the short-term structure raise resources mainly through public deposits. The PACS also accept deposits but barring Kerala deposits with PACS do not constitute a significant part of their lendable resources. Since the SCBs and CCBs are licensed by RBI to accept deposits from the public, they are subject to obligations under the Banking Regulation Act, 1949 in matters like SLR, CRR and a minimum amount of share capital and reserves in the interest of their solvency. The new prudential norms for income recognition, asset classification and provisioning are applicable to SCBs and CCBs from the accounting year 1996-97.[23] NABARD inspects the SCBs, CCBs, SLDBs and PLDBs but not the PACS. Thus, the complexities in the structures of their organisation and resources, the diversity in these matters across the states, as also the fact that all credit co-operatives are subject to control from the respective state governments, make identification of the sick cooperative institutions and taking remedial action a difficult task. NABARD's *Annual Reports* or RBI *Reports on Trend and Progress of Banking in India*, moreover, do not contain details of the remedial action taken in respect of sick co-operatives.

According to NABARD *Annual Report 1995-96,* there were 51 CCBs and one SCB that were 'weak' [Pp. 111-115]. NABARD issued guidelines to these banks advising them to focus on loan recovery, deposit mobilisation, income leakage and funds management, besides apprising the concerned state governments of the precarious financial position of the weak banks.

Two criteria can be employed for identifying sick credit co-operatives, viz., (a) proportion of overdues to demand, and (b) whether an institution is in profit or loss. The latest available statistics on both, (a) and (b), relate to the year 1993-94 published by NABARD [NABARD, 1995]. The proportion of overdues to demand as on June 30, 1994 with the SCBs was the highest in Bihar (97 per cent) followed by Tripura (95 per cent), Mizoram (84 per cent), Manipur (84 per cent), Nagaland (76 per cent), Himachal Pradesh (74 per cent) and Assam (67 per cent). Only the Manipur SCB reported a loss during 1993-94. Thus, in terms of both (a) and (b), the Manipur SCB is a sick institution. As for CCBs, the proportion of overdues to demand was high in Bihar (88 per cent), Assam (64 per cent), Orissa (61 per cent), Karnataka (55 per cent) and Himachal Pradesh (54 per cent). Loss-making CCBs were numerically larger and more than half of the total in Bihar (19 out of 34), Orissa (15 out of 17), and Rajasthan (22 out of 26). The data on profit/loss during the year are not available in respect of CCBs in Assam, Jammu and Kashmir, Karnataka, Kerala, and Uttar Pradesh. But sick CCBs appear endemic to Assam, Bihar, Orissa and Rajasthan. The statistics on PACS is too sketchy or not available at all for several states. It would appear, however, that the occurrence of weak PACS coincides with the sick SCBs (in the two-tier structure) and sick CCBs (in the three-tier structure) because at least a part of the weakness arising from poor loan recovery is communicated by the PACS up the line. It is clear from the above that credit co-operatives in the short-term structure are conspicuously weak in the North-Eastern states, besides Assam, Orissa and Bihar.

As for the long-term co-operative credit structure, the statistics show the LDBs in the above states to be weak, besides those in Karnataka, Maharashtra, Himachal Pradesh, Tamil Nadu and Pondicherry. The proportion of overdues to demand at the SLDB level in March 1994 varied from 67 per cent to 87 per cent in Assam, Bihar, Karnataka, Orissa, Tamil Nadu and Tripura. The lowest proportion of 32 per cent occurred in Kerala. The SLDBs which incurred a loss during 1993-94 occurred in Bihar, Himachal Pradesh, Maharashtra, Manipur, Pondicherry and Tripura but those in Maharashtra and Pondicherry had no previously accumulated losses. No information is available on profit or loss of Assam SLDB. As for PLDBs (in the states with a federal structure), the proportion of overdues to demand in March 1994 was the highest at 71 per cent in Orissa and more than 50 per cent in Haryana, Karnataka, Madhya Pradesh, Tamil Nadu and West Bengal. Loss-making PLDBs predominated in Karnataka (130 out of 177), Orissa (34 out of 56) and Tamil Nadu (104 out of 180), no information on this aspect as also on profit/loss during the year being available for Assam.

The remedial action taken by NABARD towards strengthening of LDBs seems to be, again, preparation of DAPs, signing of Memoranda of Understanding (MOU) with the concerned institutions and holding of meetings with their chief executives [NABARD, *Annual Report 1995-96*, p. 39]. Despite the chronic weakness of credit co-operatives in the North-Eastern states and in Bihar and Orissa, NABARD gives them special dispensation by waving the financial discipline. The credit co-operatives in several states are overburdened by the wage bills of state government officials on deputation, who have no stake in the institutions they serve. Added to this is the apathy of state governments to loan recovery and financial viability of the co-operatives. So long as politicization of co-operatives continues and the co-operative laws are not amended to give the co-operatives independence in management, the efforts made by NABARD to strengthen them will continue to be of mere cosmetic value. NABARD cannot also use the weapon of refinance withdrawal to correct the situation because clearance from the GOI for such harsh action does not come forth and any unilateral action by NABARD may lead to the GOI issuing directives to NABARD in terms of Section 6 of NABARD Act.

The weakest point in NABARD's plans for developing the credit co-operatives is probably the complete lack of attention to PACS, the grass root level institution. Of course, RBI and NABARD have long been exercised about the viability of PACS. However, only 52,211 PACS out of a total 90,783 were viable as in March 1994 [NABARD, 1995, P. 21]. If profit earning is taken as the criterion to decide viability, then only 31,000 PACS out of a total of 66,000 in the reporting states were viable in 1991-92 and 1992-93 [NABARD, 1993(b) *Annual Report 1992-93*, Pp. 251 and 262]. Despite the fact that about a half of the PACS are unviable, why are steps not being taken by NABARD to strengthen them? Three plausible reasons suggest themselves. Firstly, as in the case of LDBs, the Banking Regulation Act does not apply to PACS. Secondly, the PACS come under the direction of state governments. Even the action to reorganise them to ensure their viability rests with the state governments and such action has not been taken in some states. Finally, the number of PACS is too large to enable NABARD to pay attention to them individually.

A major weakness in the past and present refinance policy has been the absence of any incentive for PACS to mobilise deposits and a disincentive for failure to do so. This has generated a feeling in the minds of members of PACS that howsoever bad the society's management, external resources from RBI, NABARD, SCB and CCB[24] will continue to pour in because these institutions have their targets to fulfil and that the loans given to them from out of 'outside' resources need not be repaid. Now that the interest rates of credit co-operatives have been totally deregulated, it is time the PACS became self-sufficient in raising resources for lending, mainly by mobilising deposits as in Kerala.

Some idea of the deposit potential in rural India can be had from the following figures. Between 1969 and 1989, the rural deposits with CBs (inclusive of RRBs) increased from Rs 306 crore to Rs 24,383 crore or by Rs 1,204 crore annually [RBI, 1989, p. 133]. Since there are few institutions (companies, Government Departments, etc.) in villages, almost all of these deposits would have come from rural individuals. We could not lay our hands on the *Statistical Statements* for 1968-69 to obtain the data on deposits with co-operatives in 1969 but those for June 1989 are as follows:

Deposits from Individuals as in June 1989

	Rs Crore
CCBs	4,599
PACS	1,017
Total	5,616

NABARD, 1989, Pp. 40 and 296.

The CCBs have their head-offices in district headquarters which are urban centres, though they may have some branches in rural areas. It is likely therefore that a major part of their individually owned deposits come from urban residents. Even assuming, however, that all such deposits came from villages, it is evident that the total deposits held by CCBs and PACS together were less than a fourth of the rural deposits with CBs. The complacency of the CCBs and PACS in deposit mobilisation is thus obvious, abetted in part by the facile flow of funds from NABARD and SCBs. One can only hope that this matter, basically a revival of the old principle of thrift and credit, will receive NABARD's attention in the future and that institutional development will include PACS as well.

The foregoing discussion shows that the real bane of credit institutions is governmental intervention in their working, what with directed lending, interest subsidy from state governments against co-operative loans, embargo on loan recovery through coercive measures, appointment of chief executives on the basis of political patronage instead of professional competence, imposition of government employees on co-operative institutions, loan write-off and a host of similar things. Unless these basic weaknesses are removed and credit institutions allowed to function independently on professional lines, there can be no abiding strengthening of credit institutions.

VIII. NON-REFINANCE FUNCTIONS: MICRO LEVEL RURAL CREDIT PLANNING[25]

Towards the late sixties there was a feeling in the GOI that the private investment for rural development envisaged in the Five Year Plans would not fructify without a massive credit support. Hence the 'social control' on CBs in 1967, followed by the first phase of nationalisation of 14 CBs in 1969. The system of directed lending, under which both the private and public CBs were required to allocate the prescribed minimum part of their total credit for agriculture, IRDP, Differential Rate of Interest (DRI) loans and other rural economic activities, continues to this day.

While it was easy for the GOI to issue a fiat on priority sector lending in order to align credit with the priorities in development plans, it was left to RBI to ensure that such credit allocation followed some rational principles. In other words, RBI had to draw up guidelines to ensure that the micro level decisions relating to bank loans not only conformed to the macro level priorities but that the individual bank loans contributed optimally to increase in output and employment, apart from being financially feasible. And all this in the absence of micro level data on physical and human resources, agricultural technology, extension service, power supply, markets, transport and other infrastructural support which influence the productivity of credit-financed investments.

Nevertheless, a beginning was made in 1969 (Fourth Plan) with area approach to credit with the appointment of a Lead Bank (LB) for each district. Each LB was required to prepare a three-year District Credit Plan (DCP) in consultation with officials of the state government and other banks. It was not until 1979 that the DCPs attempted sectoral and block wise credit targets. Since the DCPs were not based on local potential or sectoral linkages in the absence of relevant data, they were at best supply-side documents for credit allocation. Thus, the DCPs suffered from the weakness of centralised development planning, despite the establishment of state planning boards in 1972. The introduction of service area approach (SAA) to rural credit in 1989 marks the next phase in credit planning. Under the SAA, each of the six lakh villages in the country was allocated to one or the other CB or RRB or a co-operative bank. The concerned bank had to carry out a survey in the allotted villages to gauge the credit needs of local people and a service area plan (SAP) emerged for a group of 15 to 30 contiguous villages based on the village surveys, the data from which was updated annually. While the SAPs were thus based on the aspirations and participation of local people, they still lacked a linkage with local resources and infrastructure. In anticipation of the need to overcome this weakness, NABARD launched a pilot scheme for the preparation of Potential Linked District Credit Plans (PLP) in 1987-88. To facilitate the preparation and monitoring of PLPs, NABARD opened offices at the district level manned by its own District Development Managers (DDM). The PLPs are based on the physical resource potential and infrastructure network at the district level as also on the district development plans, data on which are available with the local offices of the state governments. The really difficult issue is to disaggregate the district level data to the SAP level. In the absence of village-wise data, the disaggregation is only to the block level so that a data base, however rough and ready, is available for the SAPs within a block. The DDMs attempt such a break-up in consultation with the concerned technical officers of the state government. The bank branches and co-operatives operating in a service area are thus equipped with information on the scope for and limits to financing new investments in wells (ground water balance and power supply bottlenecks), surface water lift irrigation works (available supply and likely changes therein due to public dams), animal husbandry (grazing land, fodder supply, chilling and transport facilities and market for products), tractors (existing population and scope for custom work) and other farm investments. Although the PLPs are expected to cover non-farm activities as well, the relevant data base is not uniformly good across the districts or states. Attempts are still made to identify the scope for and the safe limits to financing some non-farm activities (agro-processing and other manufactures, transport, services, etc.) in consultation with District Industries Centres, Khadi and Village Industries Board (KVIB), Industries Department, successful entrepreneurs and other knowledgeable persons. The financing banks are thus equipped with an indicative reference frame but they are free to finance activities not listed in the PLP. Similarly, they are free to ignore the safe limits indicated in the PLPs but there is an awareness of the attendant risk for the bank. It is in this sense that there is some synthesis but not a complete integration between the SAPs, and PLPs. However, the block level credit plans (BLCP) emerge from the aggregation of SAPs, and the DCPs from the aggregation of BLCPs.

Although they are updated annually in the light of new information and past experience, the PLPs substantially remain valid for 5 to 7 years. The annual credit plan under each PLP is based upon the lendable resources of the credit institutions, past growth in credit, loan recovery and the resultant ability of banks to absorb refinance. The PLPs thus represent a curious blend of centralised and decentralised planning.

The monitoring of SAPs has received a great deal of attention from RBI and NABARD. After some experimentation, four returns have been prescribed for the banks. These formats contain information on loans issued for farm and non-farm activities by individual credit institutions participating in a SAP, which is consolidated by the Lead Bank and filed with the DDM. All financial parameters (loan amount, purpose of loan, recovery of loan, etc.) are covered by the returns. As for physical parameters, an investment unit is deemed completed when the loan disbursal is complete. However, no information is sought to monitor the success of the completed units, such as area irrigated from a well or the milk obtained from a cow, although such information is vital for loan recovery as well as future credit planning.

To facilitate credit planning, monitoring and institutional co-ordination (the main functions of a DDM), NABARD had 216 DDM offices covering a total of 249 districts in 1995-96. An evaluation of the DDM offices was entrusted by NABARD to the Institute of Rural Management, Anand (IRMA), which has since submitted its report [NABARD, *Annual Report 1994-95,* p. 29]. The salient findings of the report and the action taken by NABARD thereupon have, however, not been mentioned even in its *Annual Report for 1995-96.*

The effectiveness of DDMs and PLPs, therefore, continues to remain a dark area. However, the GOI and the Planning Commission are reportedly happy with SAA and PLP [NABARD, *Annual Report 1992-93,* p. 89].

Thus, micro level credit planning has travelled a long way since 1969. The need for as well as some of the weaknesses in such planning stem from exogenous causes: centralised development planning, directed lending and superimposition of social welfare objectives on credit, such as separate sub-targets for lending to the poor, Scheduled Castes/Scheduled Tribes persons, educated but unemployed persons and women. Given this scenario, it would be futile to expect that each of the large number of rural loans dispensed each year from over a lakh of credit outlets conforms to the economic rationale underlying credit planning.

Some of the post-1991 policies resulting from Financial Sector Reforms evidence the ambivalence in the GOI policies. While the Government was reluctant to dispense with directed lending to priority sectors, it has permitted an escape valve in respect of credit for agriculture since 1994-95. Any shortfall in allocating 18 per cent of net bank credit for agriculture on the part of a scheduled CB (except foreign banks) has to be deposited by the concerned bank in the RIDF established in NABARD. Such deposits have a maturity of five years and carry a floating interest rate equal to 0.5 per cent above the maximum permissible rate on term deposits or, in the absence of a prescribed maximum rate, the simple average of the highest deposit rates of 5 major CBs. NABARD is to use the deposits in RIDF for giving five-year loans to state governments at a rate 0.5 per cent higher than that paid to CBs to enable the governments to complete ongoing projects for medium and minor irrigation, soil conservation, watershed management or other components of rural infrastructure [NABARD, *Annual Report 1994-95*, p. 23]. The audited account of RIDF appears for the first time in NABARD's *Annual Report* for 1995-96. As of March 1996, deposits in RIDF totalled Rs 350 crore and loans disbursed to 19 state governments Rs 387 crore [NABARD, *Annual Report 1995-96*, Pp. 79 and 152]. Although RIDF thus implies a transfer of credit from private to public investment, it underlines the importance of rural development. It also signals a move towards making up for the decline in public investment in agriculture during the last few years.

Since NABARD now has a new instrument in the form of RIDF, one would like to know whether it is being used to bridge the infrastructural gaps identified in the PLPs.

If directed lending is abolished in the future as an inevitable consequence of economic reforms, micro level credit planning as an adjunct of centralised development planning will become redundant. The methodology developed under PLPs will, however, prove useful for those institutions that *elect* to engage themselves in rural credit.

IX. THE FUTURE OF NABARD IN A COMPETITIVE CREDIT MARKET

The important functions of NABARD over the fourteen years of its life have been reviewed so far in relation to its mandate. The implicit milieu for the review was a highly regulated rural credit market characterised by directed lending, concessional lending rates, intervention in loan recovery and even loan write-off at the cost of public exchequer. If these features continue to operate, NABARD's future role will not be materially different from that in the past. India has, however, embarked on an economic restructuring programme (ERP) since 1990-91 under which the role of governmental direction has diminished and that of the market forces has increased. Financial sector reforms (FSR), an integral part of ERP, are also under way. New institutions in the field of rural credit, called Local Area Banks (LABs), are in the offing. Income recognition, identification of non-performing assets (NPA), provisioning for NPA and capital adequacy have now to follow internationally accepted norms. Considerable progress has been made in the deregulation of interest rates. Directed lending still continues but it may be abolished before long as an inevitable consequence of the steps taken so far. All this evidence suggests that the institutional rural credit market in the future, hopefully in the next ten years, will be characterised by a total removal of all governmental directions (except the independent direction from RBI as part of the normal monetary and banking discipline) and allocation of credit on the basis of professional judgement of banks in a competitive environment. Since halfway economic reforms do not produce the desired result, the Government will have to do some rethinking on its welfare-oriented credit programmes such as IRDP and DRI. If it wishes to continue such programmes, the Government will have to provide all the resources therefor, including banks' transaction costs, from the public budget and all the risk of loan default associated therewith will have to be borne by the Government itself. Following these changes, it will be inevitable for RBI and NABARD to rationalise their lending rates by dispensing with the long existing subsidies on refinance. In a sense, all these expectations may appear a fantasy. But judging by the progress made in the last seven years and the desiderata of a market-oriented economy, they do not appear totally fanciful and, if and when they become a reality, what will be the role of NABARD? We wish to conclude this essay with a speculation on NABARD's future against such a scenario, however imaginary it may appear today.

The *raison d'etre* of NABARD is its refinance operations. Logically, therefore, its future will depend upon the future demand for refinance. In the past, the demand for refinance was sustained mainly by directed lending for agriculture and rural poverty eradication programmes, low lending rates for these activities and the consequently lower rates on refinance. Since such distortions have been assumed away from the future scenario, projecting the future demand for refinance in a market-oriented rural credit system becomes the crux of this speculative exercise.

Focusing on refinance to project NABARD's future need not be interpreted to suggest that we play down the importance of its non-credit functions such as micro-level credit planning, institutional development and imparting training to bank officials. However important these functions may be, they do not fetch any revenue to NABARD, and the participation of PLIs in these non-credit functions is itself greatly influenced by the need for refinance. Mere survival of NABARD is not the issue; its capital and reserves in March 1996 are adequate to enable NABARD to earn a recurring revenue to meet the present annual establishment costs by investing the entire amount in government securities and other permitted instruments. Similarly, in the event of a total atrophy of the demand for refinance, whether NABARD can sustain itself by resorting to direct financing after obtaining the necessary authorisation therefor is another issue we deliberately skip here. Such an eventuality would imply a fundamental change in the role and mission of NABARD from a bankers' bank to a direct lending institution competing with the existing and future primary lending institutions (PLIs). The feasibility of the alternative also appears doubtful because NABARD lacks experience in direct lending, as well as, as a ground level organisation of the required magnitude.[26]

Historically, RBI refinance was conceived as an instrument to bridge the gap in the lendable resources of co-operatives relatively to the demand for credit and to substitute institutional credit for moneylender's credit. RBI, in its 1937 *Statutory Report,* stated that it would not be able to advance large sums to co-operative banks because a major part of its resources came from the cash reserves of scheduled banks which had to be maintained in liquid form [RBI, 1970, p. 206]. There was also no thought then of a subsidised interest rate on RBI accommodation; the 1.5 per cent rebate in BR in the forties was granted because RBI was convinced that the cost of deposits with the CCBs was close to the BR and it also wanted a reduction in the rate to the ultimate borrowers [RBI, 1970, p. 477]. The prevailing huge rebate in the rate on crop loan refinance (Section VI), despite an increase in the ultimate lending rates, has demolished the original idea that refinance should supplement and not substitute the lendable resources of the co-operatives, besides making the latter indifferent to deposit mobilisation.

If such substantial rebates in the rates on refinance are continued, the demand for it can be perpetual because all PLIs would like to substitute cheap refinance for costly deposits. The model that we have in mind, however, pre-supposes a rationalisation of RBI/NABARD lending rates as well.

Before proceeding further, it is imperative to tackle the definition of the term 'rural credit'. Logic suggests that all credit dispensed in rural areas for rural activities, whether farm or non-farm, is rural credit. And what is the definition of a rural area for identifying rural credit? RBI uses the 1981 Census definition for the purpose [RBI, 1994, Para 8 of Introduction], which is as under:

Type of Area	Population Size
Rural	Under 10,000
Semi-urban	10,000 to 1.00 lakh
Urban	1.0 to 10.0 lakh
Metropolitan	10.0 lakh or more

Thus, depending on the population size of the place of sanction and utilisation, credit may be classified as rural or otherwise [RBI, 1994, Para 7 of Introduction]. In practice, however, both RBI and NABARD treat all credit for agriculture and allied activities as part of rural credit, even if the financed units (e.g., marine fishery, poultry and floriculture) are located in urban or metropolitan centres. NABARD Act also does not stipulate any qualifications based on population size in regard to refinance for agriculture and allied activities. When it comes to refinance for non-farm activities, however, NABARD Act stipulates that it should be restricted to rural areas, as defined by RBI from time to time. And, as already stated, RBI has recently revised the definition of a rural area to include all places, *including towns*, with a population not exceeding 50,000. This revision thus cuts across the 1981 Census concept of semi-urban areas. Further, as already stated, the locational qualification for the non-farm units financed by the co-operative banks has been totally relaxed by NABARD. Given the present and future pace of urbanisation, NABARD may well be allowed to finance non-farm activities in places with a population much in excess of 50,000 in the next ten years.

Given the absurdity of following three definitions of rural areas - the 1981 Census, the permissive definition for agriculture and the restrictive, though recently liberalised, definition for non-farm purposes - makes the task of estimating the need for NABARD refinance for rural credit very difficult. Taking into account the spirit behind NABARD Act, viz., that NABARD should focus on agriculture and tiny and small industry, activities typical to rural India of yore, it is proposed to steer clear of the problem by defining *'rural credit' to mean credit dispensed in the presently classified rural and semi-urban areas.*

Table 16 shows the deposit and credit situation for all the rural credit institutions as of March 1994. Unfortunately, a rural-urban classification of deposits and of *direct* credit outstanding with SCBs and CCBs is not available. The deposits with LDBs are insignificant and a rural-urban classification of their loans is also not available. However, the LDBs' agricultural credit is included in the figure shown against PACS. Similarly, the resources transferred by NABARD, SCBs and CCBs to PACS for crop loans and investment loans as also NABARD's refinance to LDBs get included in the credit figure shown against PACS. Since all PACS are located in villages and since their jurisdiction is small, their deposits have been assumed to be wholly of a rural character.

Using the new definition of rural credit set out above, total outstanding credit from all institutions adds up to Rs 72,665 crore and the deposits (excluding those with SCBs and CCBs) to Rs 1,14,733 crore, giving an aggregate credit-deposit ratio of 63. Inclusion of 25 per cent of SCB deposits and 40 per cent of CCB deposits, corresponding with the minimum involvement condition, lowers the Credit-Deposit ratio to 59. It is thus evident that the 'rural credit' system at the all-India level can be self-sufficient and that no refinance from NABARD is needed to supplement the lendable resources of the credit institutions. If the loan recovery were better, the Credit-Deposit ratio would be even lower.

The dismal performance of the co-operative institutions, particularly the PACS, in deposit mobilisation is obvious from the Table.[27] That loans from PACS (excluding LDB loans) were more than four times their deposits speaks volumes for their indifference to deposit mobilisation, induced mainly by the facile flow of cheap funds from NABARD, SCBs and CCBs. On the other hand, the deposits of CBs and RRBs are large enough to take over the credit from PACS and LDBs. The apathy of LDBs to deposit mobilisation stems from the following reasons: (i) They are not allowed to accept deposits from the public withdrawable by cheque, (ii) in the past, RBI had permitted them to raise 1 to 2 year deposits on the prescribed terms but the cost of such deposits was higher than the interest rate on refinance, and, even so, (iii) the rate of interest on deposits was not attractive to the savers [Khusro Committee, 1989, Pp. 274-294]. Again, the blame lies with cheap refinance.

Will there be demand for refinance in the future against the projected perspective? The answer to the question depends upon:

(i) the growth in the demand for rural credit relatively to the growth in the deposits of rural credit institutions, and
(ii) the cost of deposits relatively to that of refinance.

As to the first point, no attempt will be made to project the size of demand for and the supply of rural credit in the next ten years to estimate the likely credit gap necessitating refinance. Instead, we shall seek to identify the factors which were responsible in the past for the primary lending institutions (PLIs) seeking refinance. While discussing both the above issues, we shall be required to reiterate the points which have already emerged in the preceding pages. However, they will bear repetition for putting the role of refinance in perspective as a finale to this essay.

The demand for *productive* rural credit depends upon a host of factors. Notable among these are:

(i) Changes in technology. After the emergence of HY seed technology, there was a spurt in the demand for credit for tubewells, tractors, fertilisers and pesticides in Punjab, Haryana, and western Uttar Pradesh initially and later in other states.
(ii) Remunerative output prices to make the investments profitable.
(iii) Interest rate on credit relative to the rate of return from investment.
(iv) Adequacy of infrastructure such as power supply, markets and transport to sustain private investments.

The supply of credit, in the projected scenario of completely elective lending, would depend upon:

(i) The size of lendable resources, i.e., deposits and refinance.
(ii) Adequacy of interest margin to cover the transaction costs and normal risk of default and to leave some surplus.
(iii) Abnormally high risk perceived on the basis of past loan recovery in some areas.

Historically, the spurt in the supply of agricultural credit from 1969 can be ascribed to the nationalisation of CBs, directed lending for priority sectors, sizeable amounts of concessional credit from the World Bank routed to PLIs through ARDC /NABARD and diffusion of the Green Revolution. These factors do not appear to be important in the assumed future scenario. As already stated, the potential for minor irrigation has almost been fully used up in many parts of the country and future agricultural development is unlikely to be triggered by the expansion of private irrigation as in the sixties and seventies. Dryland development by means of soil and water conservation works under an integrated watershed development approach holds great promise but the pace of such development depends upon public investment in community works and people's participation in abiding by the discipline necessary for the success of dryland farming, e.g., to refrain from allowing animals to graze freely, to reduce the animal population, to contribute labour for the maintenance of community works and to stop indiscriminate chopping of trees for fuel. The prospects for both do not appear very optimistic. Further, given the higher risk to crops in the dryland farming areas from low and uncertain rainfall, an innovative approach to farm credit is required under which repayment of loans annually should be related to the level of crop yields. In view of the risk aversion attitude of all PLIs, it is doubtful if financing of dryland agriculture will gain momentum in the coming eight to ten years.

In sum, the demand for farm credit is likely to increase at the same rate at which it has actually grown since 1992 when the lending rates to farmers were rationalised. Judging by the past trend, the rural and semi-urban deposits of CBs and RRBs are likely to grow faster than the demand for farm credit. As for RNFS, which has shown considerable vibrancy since 1978 in terms of growth in employment, the growth in the demand for such credit is likely to overtake that for farm credit. But the future growth in rural and semi-urban deposits with RRBs and CBs will be adequate to provide resources for the required increase in RNFS credit. It is only the co-operatives whose future growth in deposits appears questionable for taking care of their share in the future growth in the demand for rural credit. The new LABs, which will be private banks, are also likely to mobilise deposits to an extent to make them independent of refinance. Thus, except the co-operatives, the PLIs are likely to be self-sufficient in lendable resources based on deposits.

Some sort of shock therapy is needed to galvanize the co-operatives into action for deposit mobilisation. The action initiated by NABARD since July 1996 - a small rebate in the rate of interest on refinance for those CCBs that reach the prescribed increase in deposits - is too mild to shake the institutions out of their chronic lethargy and complacency.

What is required is: (i) a deterrent rate on refinance for the co-operatives that fail to attain the prescribed growth in deposits, (ii) denial of refinance to the chronic defaulters in deposit mobilisation, and (iii) applying this discipline equally to PACS, CCBs, SCBs and LDBs. Apart from collecting term deposits, the LDBs should also be allowed to mobilise resources by floating new instruments such as tax-free bonds. And, above all, the rate of interest on refinance should match the cost of deposit mobilisation by the concerned institutions.

The foregoing discussion reveals the redundancy of refinance for rural credit in the future at the macro level. This does not, however, mean that there will be no occasion for the banks to resort to refinance to bridge the genuine credit gaps. The CBs are national institutions and can transfer surplus lendable resources from one region to another, if necessary. All the other PLIs, however, operate at a sub-national level. As such, there may be a genuine need for refinance in some regions from time to time. What the conclusion suggests is that routine sanction of refinance should be replaced by a system under which *refinance is related to credit gaps.* If the rates of interest on refinance are rationalised, access to it will automatically be cautious because the interest margin against refinance will be equal to that against deposits. Loan recovery is also likely to improve in the process because borrowers will get the message that 'outside' money will not be pumped in, in as facile a manner as before. The suggested approach may produce an unsettling effect on rural credit initially but, after the necessary readjustment, the system of institutional rural credit is likely to witness a healthy growth.

The lavish interest subsidy on RBI accommodation to NABARD for rural credit is evident from Table 17.

It is the subsidised refinance, among other things, made possible by cheap RBI funds that has probably weakened the co-operative credit structure and made the latter perpetually dependent on it. Even granting the inherent weaknesses of agriculture (small farms, vulnerability to weather and pests, fluctuations in output prices, etc.) and its importance in the national economy, the continuance of a massive subsidy on refinance for farm credit is difficult to defend, particularly because the ultimate lending rates are now uniform for agriculture and other activities in the non-priority sectors. One wonders whether the system of subsidised refinance is designed to insulate NABARD from a situation of probable redundancy.

What has been said so far should not convey the impression that this author has a cynical view of NABARD's role in rural credit. On the contrary, if NABARD can deliver a package of services, with or without refinance, which will facilitate PLIs reduce their transaction costs and improve the quality of their lending, its usefulness will be considerably enhanced. The package, to be perfected after some experimentation on the field, should contain the following elements:

(i) Integrated credit under which all the credit needs of a borrower and the gainfully employed members of his family are taken care of by a single PLI,
(ii) steps to reduce the borrower's as well as the lender's transaction costs,
(iii) deposit mobilisation,
(iv) simplification of paper work associated with loans,
(v) greater focus on non-farm credit, and
(vi) monitoring the physical impact of credit.

Given its strong position in owned resources and income, NABARD can afford to concentrate on the above non-credit functions in order to improve the quality of credit delivery at the grass root level. The fear that a reduction in refinance would lead to a shrinkage in the supply of rural credit has no empirical foundation, except for the LDBs which depend mainly on NABARD for resources for new loans. For example, several SCBs and CCBs have been unable to draw crop loan refinance from time to time for various reasons. Such situations have not been known to have produced a severe scarcity in crop loan disbursement from PACS in the concerned areas. Likewise, despite a curtailment of schematic refinance to CBs during the last few years, their disbursement of term loans for farm investments has witnessed the same nominal growth as before. NABARD can thus afford to re-orient its functions to meet the challenges that lie ahead and as competently as any other financial institution because of its rich manpower resource. A redundancy of refinance does not necessarily mean a redundancy of the refinancing institution.

NOTES

1. NABARD's share capital is to be further augmented, with RBI contribution exceeding that of GOI, *vide* Section III.

2. While the short-term co-operative credit structure (comprising the SCB, CCB and PACS) is able to provide limited amounts of investment credit in addition to production credit, the long-term structure comprising the LDB provides only investment credit, due partly to its origin as Land Mortgage Bank providing long-term loans to farmers for redemption of lands mortgaged to private money lenders against loans, and partly to resource structure (debentures with maturity of 9 to 15 years). The security for production loans is 'first charge' on crops but that for investment loans is mortgage of land. An LDB cannot float debentures unless it has already acquired mortgages.

3. The only instances of bad debt in the 14-year history of NABARD are the refinance given to the Bank of Karad (Rs 0.31 crore) and some RRBs (Rs 38.15 crore), *vide* NABARD *Annual Report 1995-96*, p. 171.

4. Until July 1982, these funds were designated as National Agricultural Funds. Consistent with NABARD's mandate extending to farm and rural non-farm sectors, they were redesignated as National Rural Credit Funds.

5. It may be noted that all figures in Table 1 relating to use of resources are amounts outstanding at year-end. Since MT/LT refinance for fixed investments is tenable for 5 to 15 years, the outstanding amount increases from year to year to the extent fresh refinance issued exceeds repayment received during the year. The relative importance of different refinance operations, discussed in the next section, is in terms of the amount of refinance issued annually.

6. Please see Table 17.

7. These and other figures quoted in the paragraph have been taken from NABARD's *Annual Reports* for the respective years.

8. The SCBs are scheduled banks and are therefore eligible for accommodation from RBI/NABARD. The CCBs are not scheduled banks. The SLDBs are also not scheduled banks but they become eligible for NABARD refinance for schematic investment loans under Section 25(1)(a) of the NABARD Act. The RRBs and CBs are scheduled banks.

9. NABARD Circular No. NB PCD (OPR) 694/A1/96-97 dated June 1, 1996.

10. Refinance for crop loans is expressed in two magnitudes: Maximum amount outstanding during an year showing the peak level of drawal and amount outstanding at year-end. The latter reflects the net result of drawals minus repayments.

11. Information obtained from NABARD's Pune regional office.

12. NABARD Circular No BB PCD/17/96-97 dated August 8, 1996.

13. The *Statistical Statements* both for 1991-92 and 1992-93 do not contain data for Assam, Madhya Pradesh, Uttar

Pradesh, West Bengal and several small states in the North-East. There is no reason, though, to believe that the proportion of non-borrowing members in these states is materially different from that in the rest of the country.

14. The need for NABARD to resort to rationing of refinance arises from RBI having stopped its annual contribution to the NRC (LTO) Fund and the high cost of market borrowings, *vide* Section III Sources and Uses of Funds.

15. According to reports in *Economic Times* dated December 6, 1996 and February 25, 1997, attempts have begun to revive the World Bank support for rural credit.

16. The Rupee-US $ rate was 6.36 in 1966, 7.50 in 1967, 8.10 in 1974, 9.46 in 1982, 12.61 in 1986 and 16.12 in 1989. The average annual loss in Rupee against the US$ was 3.15 per cent between 1965 and 1980 and 9.20 per cent between 1980 and 1988, *vide* CMIE, *Basic Statistics Relating To Indian Economy*, August 1989, Vol I, Table No 20.10.

17. These weaknesses have been mentioned in several evaluation reports published by NABARD, too numerous to be documented.

18. RBI *Annual Report 1989-90*, however, states that SCBs and CCBs are free to seek refinance from IDBI/SIDBI or NABARD [Pp. 170-71].

19. Assuming however, that the medium/long-term schematic loans from CBs are given only from term deposits with maturities in excess of one year, the rate on refinance is found to be lower than the cost of such deposits (12.2 per cent).

20. There have been no sanctions or drawal of refinance against this item since 1992-93 and the item does not figure in NABARD's *Annual Report* (Statement 1) for 1995-96.

21. The lending rates of RRBs were deregulated from August 1996 *vide* RBI Circular DBOD-DIR-BC 114/13:67:01/96 of August 24, 1996.

22. RBI, Rural Planning and Credit Department, Circular No. RPCD.RRB.BC 112 dated March 22, 1996.

23. *vide* RBI, RPCD, Circular No. BC 155 dated June 22, 1996.

24. Such resources constituted 56 per cent of the working capital of all the PACS in March 1994, [*vide*, NABARD, 1995, p. 22].

25. The credit planning account in this section is based primarily on NABARD, *Annual Reports, 1988-89* [Pp. 19-34], 1989-90 [Pp. 19-54] and 1992-93 [Pp. 87-89].

26. NABARD had only 216 district offices in 1995-96.

27. The rural deposits of CBs increased annually by an average of Rs 323 crore over 1969-79, by Rs 2,084 crore over 1979-89 and by Rs 3,174 crore over 1989-94. The annual growth in rural deposits with RRBs from June 1984 to March 1994 is Rs 671 crore. In contrast, the average annual deposit growth for co-operatives from 1981 to 1991 was: SCBs Rs 741 crore, CCBs - Rs 1,245 crore and PACS - Rs 160 crore.

REFERENCES

Gandhi, V.P., 1996; 'Investment Behaviour in Indian Agriculture', *Indian Journal of Agricultural Economics*, Vol. 51, No. 4.

Gorwala Committee, 1954; *All India Rural Credit Survey Report, 1954*, Chairman: A.D. Gorwala, RBI, Bombay.

India, 1996; *India A Reference Annual (1995)*, Research and Reference Bureau, Ministry of Information and Broadcasting, Government of India, Delhi.

Khusro Committee, 1989; *Report of the Agricultural Credit Review Committee (ACRC): A Review of the Agricultural Credit System of India*, Chairman: A.M. Khusro, RBI, Bombay.

NABARD, 1989; *Statistical Statements Relating to Co-operative Movement in India, 1988-89*, NABARD, Bombay.

NABARD, 1993(a); *Manual on Short Term and Medium Term Non-schematic Finance to SCBs and Long Term Loans to State Governments*, NABARD, Bombay.

NABARD, 1993(b); *Statistical Statements Relating to Co-operative Movement in India*, NABARD, Bombay.

NABARD, 1995; *Important Items of Data, Credit and Non-credit Co-operative Societies, 1993-94*, NABARD, Bombay.

NABARD, *Annual Reports* Various Years, NABARD, Bombay.

Narasimham Committee, 1992; *Report on the Financial System in India*, Chairman: M. Narasimham, Ministry of Finance, Government of India, New Delhi.

RBI, 1970; *History of the Reserve Bank of India, 1935-1951*, RBI, Bombay.

RBI, 1989; *Statistical Tables Relating to Banks in India, 1988-89*, RBI, Bombay.

RBI, 1992; *Annual Report 1991-92*, RBI, Bombay.

RBI, 1994; *Basic Statistical Returns*, Vol. 23, March 1994.

RBI, 1995; *Report on Trend and Progress of Banking in India, 1994-95*, RBI, Bombay.

RBI, 1996(a); *Report on Currency and Finance, 1995-96*, Reserve Bank of India, Bombay.

RBI, 1996(b); *Report on Trend and Progress of Banking in India, 1995-96*, RBI, Bombay.

Sivaraman Committee, 1981; *Report of the Committee To Review the Arrangements for Institutional Credit for Agriculture and Rural Development (CRAFICARD)*, Chairman: B. Sivaraman, RBI, Bombay.

GLOSSARY OF ABBREVIATIONS

ACD	Agricultural Credit Department
ACRC	Agricultural Credit Review Committee
ARDC	Agricultural Refinance and Development Corporation
ARDR	Agriculture and Rural Debt Relief Scheme, 1989
ARF	Automatic Refinance Facility
BLCP	Block Level Credit Plan
BR	Bank Rate
C-D ratio	Credit-Deposit ratio
CAGR	Compound Annual Growth Rate
CB	Commercial Bank
CCB	Central Cooperative Bank (District)
CMIE	Centre for Monitoring Indian Economy
CRAFICARD	Committee to Review Arrangements for Institutional Credit for Agricultural and Rural Development

CRR	Cash Reserve Ratio
CSO	Central Statistical Organisation
DAP	Development Action Plan
DCP	District Credit Plan
DDM	District Development Manager
ERP	Economic Restructuring Programme
FAO	Food and Agriculture Organisation
FSR	Financial Sector Reforms
GLC	General Line of Credit
GOI	Government of India
HY	High-Yielding
IDBI	Industrial Development Bank of India
IFAD	International Fund for Agricultural Development
IRDP	Integrated Rural Development Programme
IRMA	Institute of Rural Management, Anand
ISB	Industry, services and business
LAB	Local Area Bank
LB	Lead Bank
LDB	Land Development Bank
LT	Long -Term
MI	Minimum Involvement
MOU	Memoranda of Understanding
MT	Medium-Term
NABARD	National Bank for Agriculture and Rural Development
NAC (LTO) Fund	National Agricultural Credit (Long Term Operations) Fund
NAC (Stab) Fund	National Agricultural Credit (Stabilisation) Fund
NAS	National Account Statistics
NC	Narasimham Committee
NIC (LTO) Fund	National Industrial Credit (Long Term Operations) Fund
NODC	Non-Overdue Loan Cover
NPA	Non-Performing Assets
NRC (LTO) Fund	National Rural Credit (Long-term Operations) Fund
NRC (Stab) Fund	National Rural Credit (Stabilisation) Fund
PACS	Primary Agricultural Credit Society
PGFCFA	Private Gross Fixed Capital Formation in Agriculture
PLDBs	Primary Land Development Bank
PLI	Primary Lending Institution
PLP	Potential Linked District Credit Plan
PLR	Prime Lending Rate
PMRY	Prime Minister's Rozgar Yojana
RBI	Reserve Bank of India
RIDF	Rural Infrastructure Development Fund
RNFS	Rural Non-farm Sector
RPCC	Rural Planning and Credit Cell
RRB	Regional Rural Bank
SAA	Service Area Approach
SAP	Service Area Plan
SC	Scheduled Castes
SCB	State Cooperative Bank
SDC	Swiss Development Co-operation
SIDBI	Small Industries Development Bank of India
SLDB	State Co-operative Land Development Bank
SLR	Statutory Liquidity Ratio
SS	Statistical Statements
SSI	Small Scale Industries
ST	Scheduled Tribes
ST credit	Short-Term Credit
UTI	Unit Trust of India

Table 1. Sources and Uses of Funds in NABARD, 1982-83 to 1995-96

(Amount Outstanding at Year-end in Rs Crore)

Sr. No.	Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
							Sources								
1.	Capital	100	100	100	100	100	100	100	100	100	100	100	120	330	500
		(2.2)	(1.9)	(1.7)	(1.5)	(1.3)	(1.1)	(1.0)	(0.8)	(0.8)	(0.7)	(0.6)	(0.8)	(1.8)	(2.5)
2.	Reserves	122	157	187	228	271	316	350	408	471	576	654	767	1232	1738
		(2.7)	(3.0)	(3.2)	(5.0)	(3.6)	(3.6)	(3.4)	(3.4)	(3.7)	(4.0)	(4.1)	(4.9)	(6.8)	(8.9)
3.	NRC Long-Term	1252	1577	1992	2482	3082	3667	4232	4912	5687	6602	7127	7683	7934	8185
	Operations Fund	(27.7)	(29.8)	(34.1)	(37.6)	(41.2)	(41.5)	(40.6)	(41.5)	(44.6)	(45.3)	(45.1)	(49.0)	(44.1)	(41.7)
4.	NRC Stabilisation Fund	448	533	628	663	683	703	723	743	773	813	833	836	838	840
		(9.9)	(10.1)	(10.8)	(10.1)	(9.1)	(8.0)	(6.9)	(6.3)	(6.1)	(5.6)	(5.3)	(5.3)	(4.7)	(4.3)
5.	Borrowings from GOI	1216	1383	1616	1610	1716	1912	1906	1930	1786	1609	1463	1291	1229	1294
		(26.9)	(26.1)	(27.7)	(24.4)	(22.9)	(21.7)	(18.3)	(16.3)	(14.0)	(11.0)	(9.3)	(8.2)	(6.8)	(6.6)
6.	RBI General Line of Credit	904	1039	762	861	950	1417	2427	2951	2391	3022	3437	3425	4343	4787
		(20.0)	(19.6)	(13.1)	(14.6)	(12.7)	(16.1)	(23.3)	(24.9)	(18.8)	(20.7)	(21.8)	(21.8)	(24.1)	(24.4)
7.	Borrowings from RBI under	0	0	0	0	0	0	0	0	692	723	781	249	318	204
	ARDR Scheme, 1990	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(5.4)	(5.0)	(4.9)	(1.6)	(1.8)	(1.0)
8.	Borrowings from RBI	0	0	0	0	0	0	0	0	0	0	0	0	117	0
	against GOI securities	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)
9.	Open Market Borrowings	406	436	453	478	518	537	493	543	633	732	832	910	1000	1045
		(9.0)	(8.2)	(7.8)	(7.2)	(6.9)	(6.1)	(4.7)	(4.6)	(5.0)	(5.0)	(5.3)	(5.8)	(5.6)	(5.3)
10.	Short-Term Borrowings	0	0	0	0	0	0	0	0	0	0	0	0	86	0
	from Term Money Market	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.5)	(0.0)
11.	Foreign Currency Loan	0	0	0	0	0	0	0	0	0	0	0	0	0	70
	(Germany)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.8)
12.	Rural Infrastructure	0	0	0	0	0	0	0	0	0	0	0	0	0	350
	Dev. Fund	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.4)
13.	Others	71	68	96	174	163	176	193	259	268	395	560	413	564	595
		(1.6)	(1.3)	(1.6)	(2.6)	(2.2)	(2.0)	(1.9)	(2.2)	(2.1)	(2.7)	(3.5)	(2.6)	(3.1)	(3.0)
	Total	4,519	5,293	5,834	6,596	7,483	8,828	10,424	11,846	12,751	14,572	15,787	15,694	17,991	19,608

(Contd.)

TABLE 1. (Concld.)

Sr. No. (1)	Item (2)	1982-83 (3)	1983-84 (4)	1984-85 (5)	1985-86 (6)	1986-87 (7)	1987-88 (8)	1988-89 (9)	1989-90 (10)	1990-91 (11)	1991-92 (12)	1992-93 (13)	1993-94 (14)	1994-95 (15)	1995-96 (16)
	Uses														
1.	Refinance (MT & LT) for Fixed Investments	2,292	2,775	3,333	3,900	4,461	5,074	5,342	5,968	6,646	7,295	8,085	8,970	10,134	11,145
		(50.7)	(52.4)	(57.1)	(59.1)	(59.6)	(57.5)	(51.2)	(50.4)	(52.1)	(50.1)	(51.2)	(57.2)	(56.3)	(56.8)
2.	Refinance (ST) for Production and Marketing Credit	896	957	765	898	965	1,431	2,450	2,956	2,412	3,001	3,463	3,454	4,344	4,789
		(19.8)	(18.1)	(13.1)	(13.6)	(12.9)	(16.2)	(23.5)	(25.0)	(18.9)	(20.6)	(21.9)	(22.0)	(24.1)	(24.4)
3.	Refinance (MT), Other than 1 above, for Approved Purposes	29	32	158	168	228	247	266	266	260	262	310	255	214	178
		(0.6)	(0.6)	(2.7)	(2.5)	(3.0)	(2.8)	(2.6)	(2.2)	(2.0)	(1.8)	(2.0)	(1.6)	(1.2)	(0.9)
4.	Refinance for Conversion of ST Loans into MT Loans	123	120	120	142	175	322	355	299	353	224	161	100	110	32
		(2.7)	(2.3)	(2.1)	(2.2)	(2.3)	(3.6)	(3.4)	(2.5)	(2.8)	(1.5)	(1.0)	(0.6)	(0.6)	(0.2)
5.	Loans to State Govts. for Contributing to Share Capital of Credit Co-ops	125	116	105	96	91	163	195	213	226	236	235	236	282	363
		(2.8)	(2.2)	(1.8)	(1.5)	(1.2)	(1.8)	(1.9)	(1.8)	(1.8)	(1.6)	(1.5)	(1.5)	(1.6)	(1.9)
6.	Loans under ARDR Scheme, 1990	0	0	0	0	0	0	0	0	666	687	495	118	292	198
		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(5.2)	(4.7)	(3.1)	(0.8)	(1.6)	(1.0)
7.	Rediscounting of Bills & Call Money Market	0	0	0	0	0	0	385	814	305	611	42	22	0	108
		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(3.7)	(6.9)	(2.4)	(4.2)	(0.3)	(0.1)	(0.0)	(0.6)
8.	Investment in Government Securities	267	570	697	835	1,104	1,191	1,029	861	910	1,100	1,688	1,573	1,745	1,298
		(5.9)	(10.8)	(11.9)	(12.7)	(14.8)	(13.5)	(9.9)	(7.3)	(7.1)	(7.5)	(10.7)	(10.0)	(9.7)	(6.6)
9.	Special Deposits with RBI in r/o NRC Funds	631	531	399	267	135	0	0	0	0	0	0	0	0	0
		(14.0)	(10.0)	(6.8)	(4.0)	(1.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
10.	Loans from RIDF	0	0	0	0	0	0	0	0	0	0	0	0	0	387
		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(2.0)
11.	Other Uses	156	192	257	290	324	400	402	469	973	1,156	1,308	966	870	1,110
		(3.5)	(3.6)	(4.4)	(4.4)	(4.3)	(4.5)	(3.9)	(4.0)	(7.6)	(7.9)	(8.3)	(6.2)	(4.8)	(5.7)
	Total	4,519	5,293	5,834	6,596	7,483	8,828	10,424	11,846	12,751	14,572	15,787	15,694	17,991	19,608

Note: Figures in parentheses indicate percentages to total.
Source: NABARD, *Annual Reports* for respective years, Table on Sources and Uses of Funds.

Table 2. Annual Profit of NABARD Before Appropriation and Sources of Income

(Rs Crore)

Year	Profit before Appropria-tions	Col. 2 as per cent of Total Resources	Amount of Income Estimated by Way of Interest Margin from Loans and Advances	Gross Income From		Total
				Refinance and Loans	Other Sources	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1982-83	93.89	2.1	-	207.63	41.87 (16.8)	249.50
1983-84	143.30	2.7	31.53	254.85	70.27 (21.6)	325.12
1984-85	184.83	3.2	44.40	293.83	91.23 (23.7)	385.06
1985-86	241.59	3.7	22.40	334.08	137.75 (29.2)	471.83
1986-87	303.68	4.1	11.45	373.61	171.79 (31.5)	545.40
1987-88	265.39	3.0	-8.29	438.22	181.94 (29.3)	620.16
1988-89	281.88	2.7	8.68	357.67	145.27 (28.9)	502.94
1989-90	418.61	3.5	50.76	542.89	205.74 (27.5)	748.63
1990-91	483.46	3.8	45.60	626.61	246.29 (28.3)	869.90
1991-92	640.82	4.4	20.07	775.63	331.39 (29.9)	1,107.01
1992-93	622.83	3.9	65.55	846.18	332.97 (28.2)	1,179.11
1993-94	641.86	4.1	133.85	864.09	251.82 (22.6)	1,115.91
1994-95	749.03	4.2	141.83	989.27	262.76 (21.0)	1,252.03
1995-96	760.16	3.9	135.31	NA	NA	1,439.84

Notes: Col. 4 - Estimated from data in Cols. 3 and 8 of Table 3.

Col. 6 - Represents income from investment in government securities, bill discounting, money at call and all other income except that in Col. 5. Figures in bracket are percentages to total income.

NA - Not Available.

Source: NABARD, *Annual Reports* for respective years.

Table 3. NABARD's Interest Margin, 1983-84 to 1995-96

(Rs Crore)

Year	Interest Received from Advances	Outstanding Advances at End of Previous Year	Average Interest Rate Received (per cent p.a.)	Interest Paid on Borrowings	Outstanding Borrowings at End of Previous Year	Average Interest Rate paid (per cent p.a.)	Interest Margin per cent p.a. (Col. 4 - Col. 7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1982-83	207.63	-	-	140.35	-	-	-
1983-84	254.85	3,464.55	7.36	163.72	2,537.08 (73.2)	6.45	0.91
1984-85	293.84	4,000.15	7.35	179.11	2,872.24 (71.8)	6.24	1.11
1985-86	334.08	4,480.18	7.46	198.76	2,855.31 (63.7)	6.96	0.50
1986-87	373.61	5,203.74	7.18	211.66	3,040.18 (58.4)	6.96	0.22
1987-88	438.22	5,919.56	7.40	244.58	3,245.85 (54.8)	7.54	-0.14
1988-89 (9 months)	357.67	7,235.90	4.94	189.27	3,930.71 (54.3)	4.82	0.12
1989-90	542.89	8,603.77	6.31	279.69	4,885.59 (56.8)	5.72	0.59
1990-91	623.61	9,702.58	6.43	326.88	5,486.52 (56.5)	5.96	0.47
1991-92	775.63	10,562.88	7.34	396.11	5,543.32 (52.5)	7.15	0.19
1992-93	846.14	11,705.54	7.23	416.91	6,247.48 (53.4)	6.67	0.56
1993-94	864.09	12,747.86	6.78	381.85	6,665.33 (52.3)	5.73	1.05
1994-95	989.27	13,132.13	7.53	388.11	6,016.54 (45.8)	6.45	1.08
1995-96	1,137.60 (Estimated)	15,375.76	7.40	470.69	7,218.80 (46.9)	6.52	0.88
Total	7,831.50	1,12,134.60	6.98	3,847.34	60,544.95 (54.0)	6.35	0.63

Notes: Col. 2 - Includes interest received from all refinance activities and loans to state governments but excludes interest from government securities and bill discounting, etc. The figure for 1995-96 is estimated by assuming that the relative proportions of interest incomes from advances and investments in 1994-95 remained unchanged in 1995-96.

Col. 3 - Includes all advances shown as assets in the Balance Sheet.

Col. 5 - Includes interest paid on loans from the GOI, borrowings from the RBI, and on bonds and deposits.

Col. 6 - Includes borrowings from the GOI and the RBI, deposits and bonds.

Figures in bracket show the percentage of outstanding borrowings to outstanding advances (Col. 3).

Source: Same as for Table 2.

Table 4. Credit Operations of NABARD, 1993-94 To 1995-96

Sr. No.	Purpose and Source of Fund for NABARD	Whether Refinance (R) or Loan (L)	Eligible Institu-tions	Maximum Duration of Credit as per NABARD Act	Year	Amount of Credit (Rs Crore)			March 96 Rate of Interest on Refinance (per cent p.a.)
						Sanc-tioned	Drawals	Outstand-ing at Year-end	
(1)	(2)	(3)	(4)	(5)	(6)*	(7)	(8)	(9)	(10)
				Farm Sector Short-Term					
1.	Crop Loans (GLC from RBI)	R	SCBs	18 Months (12 Months)	1993-94	3,507	4,496	2,220	3 to 6.5
					1994-95	4,115	5,220	2,413	
					1995-96	4,700	3,880	3,460	
	Crop Loans, Production Credit for Non-Farm Activities and Loans for Marketing of Farm & Non-Farm Products (GLC from RBI)	R	RRBs	-- do --	1993-94	588	462	547	6.5 to 8.5
					1994-95	728	672	666	
					1995-96	829	572	748	
2.	Marketing of Crops by Farmers (GLC from RBI)	R	SCBs	18 Months (12 Months)	1993-94	9	3	1	
					1994-95	18	3	2	12.0
					1995-96	-	-	-	
3.	Distribution of Fertilisers by Co-op Marketing Federations (GLC from RBI)	R	SCBs	-- do -- (12 Months)	1993-94	68	71	-	
					1994-95	53	19	-	13.0
					1995-96	57	38	-	
				Medium-Term					
4.	Conversion of Crop Loans into MT Loans (NRC Stab Fund)	R	SCBs	7 Years (3 to 5 Years)	1993-94	47	27	100	As Applicable to Crop Loan Refinance
					1994-95	161	77	84	
					1995-96	63	8	30	
		R	RRBs	-- do --	1993-94	6	1	3	
					1994-95	4	1	2	
					1995-96	1	1	1	
5.	Non-schematic Loans for Approved Farm Purposes (NRC LTO Fund	R	SCBs	-- do --	1993-94	8	4	53	
					1994-95	9	5	32	
					1995-96	6	2	7	8.5
	-- do -- (Including Non-Farm Purposes)	R	RRBs	-- do --	1993-94	61	45	188	
					1994-95	83	68	180	8.5
					1995-96	50	34	169	

(Contd.)

Table 4 (Contd.)

Sr. No.	Purpose and Source of Fund for NABARD	Whether Refinance (R) or Loan (L)	Eligible Institu-tions	Maximum Duration of Credit as per NABARD Act	Year	Amount of Credit (Rs Crore) Sanc-tioned	Drawals	Outstand-ing at Year-end	March 96 Rate of Interest on Refinance (per cent p.a.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Medium & Long-Term					
6.	Schematic MT and LT Loans for Fixed Farm & Non-Farm Investments	R	SCBs	25 Years (upto 15 years)	1993-94	182	245	NA	6.5 to 12.0
					1994-95	343	270	NA	
					1995-96	200	280	NA	
	(Including Items 12 & 13 below)	R	RRBs	-- do --	1993-94	296	357	NA	-- do --
					1994-95	506	441	NA	
					1995-96	419	492	NA	
	(NRC LTO Fund)		CBs	-- do --	1993-94	1,392	1,092	NA	8.5 to 15.0
					1994-95	1,387(112)	1,093	NA	
					1995-96	651	841	NA	
			SLDBs	-- do --	1993-94	9,612	1,113	NA	6.5 to 12.0
					1994-95	1,542(16)	1,207(155)	NA	
					1995-96	720	1,451	NA	
				Non-Farm Sector Short-Term					
7.	Production & Marketing Acti-vities of Co-op. Weavers' Societies (GLC from RBI)	R	SCBs & CBs	18 Months (12 Months)	1993-94	530	889	278*	9.5 for Pri-mary Soci-eties 11.5 for Apex Soci-eties
					1994-95	610	1,213	494	
					1995-96	701	603	543	
8.	Financing Rural Artisans Through PACS (GLC from RBI)	R	-- do --	-- do --	1993-94	7	6	6	9.5
					1994-95	7	7	6	
					1995-96	9	6	6	
9.	Purchase & Sale of Yarn by Co-op. Weav-ers' Societies (GLC from RBI)	R	-- do --	-- do --	1993-94	20	23	6	12.0
					1994-95	24	73	15	
					1995-96	27	28	11	
10.	Working Capi-tal of Co-op. Sugar Factories (GLC from RBI)	R	-- do --	-- do --	1993-94	-	-	-	17.0
					1994-95	200	338	175	
					1995-96	275	220	4	

(Contd.)

Table 4 (Concld.)

Sr. No.	Purpose and Source of Fund for NABARD	Whether Refinance (R) or Loan (L)	Eligible Institutions	Maximum Duration of Credit as per NABARD Act	Year	Amount of Credit (Rs Crore) Sanctioned	Drawals	Outstanding at Year-end	March 96 Rate of Interest on Refinance (per cent p.a.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Medium-Term					
11.	Purchase of Shares of Co-op. Sugar Factories & Other Processing Societies by Members (NRC LTO Fund)	R	-- do --	7 Years	1993-94	-	-	1	
					1994-95	2	-	-	12.0
					1995-96	-	2	2	
12.	Financing Working and Fixed Capital of Non-Farm Enterprises (Automatic Refinance Facility) (NRC LTO Fund)	R	SCBs RRBs SLDBs CBs	25 Years (upto 9 years)	1993-94	329	329	881	As Applicable to Schematic Loans (Item 6)
					1994-95	407	411	1,291	
					1995-96	470	460	1,752	
13.	Integrated Rural Development Programme (Industry, Services & Business Component only) (NRC LTO Fund)	R	-- do --	25 Years (upto 9 years)	1993-94	NA	253	NA	-- do --
					1994-95	NA	263	NA	
					1995-96	NA	224	NA	
				Loans to State Govts.					
14.	Loans to State Govts. for Contribution to the Shares of Credit Co-ops. (NRC LTO Fund)	R	State Govts.	25 Years (20 years)	1993-94	40	30	236	
					1994-95	73	75	282	6.0
					1995-96	100	108	363	

Notes: R = Refinance; L = Loan; NA = Not Available.
The parenthetical remarks in Column 2 indicate the source from which refinance is given by NABARD, while those in Column 5 indicate the actual maturity period allowed by NABARD.
Source: NABARD's *Annual Reports* for the respective years.

Table 5. Crop Loans Disbursements by PACS and Refinance, 1971-72 to 1994-95

		Crop Loans by PACS(Rs crore)		Refinance to SCBs(Rs crore)		Percentage (%) of		
Sr. No.	Years	Issued during the Year	Outstanding at Year-end	Drawal during the Year (Max. Outstanding)	Outstanding at Year-end	Col. 5 to Col. 3	Col. 5 to Col. 4	Col. 6 to Col. 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	1971-72	534	NA	292	152	55	-	-
2	1972-73	576	NA	281	145	49	-	-
3	1973-74	663	NA	266	151	40	-	-
4	1974-75	750	NA	346	212	46	-	-
5	1975-76	881	1,012	373	147	42	37	15
6	1976-77	1,016	1,216	366	229	36	30	19
7	1977-78	1,058	1,348	449	289	42	33	21
8	1978-79	1,206	1,540	473	252	39	31	16
9	1979-80	1,260	1,697	405	184	32	24	11
10	1980-81	1,386	2,206	475	291	34	22	13
11	1981-82	1,796	2,149	660	527	37	31	25
12	1982-83	1,908	2,225	858	573	45	39	26
13	1983-84	2,158	2,554	803	584	37	31	23
14	1984-85	2,323	2,836	868	446	37	31	16
Sub-total		17,515	18,783	6,915	4,182	39	37	22
15	1985-86	2,747	3,237	873	550	32	27	17
16	1986-87	2,620	3,293	954	660	36	29	20
17	1987-88	3,120	3,871	1,320	910	42	34	24
18	1988-89	3,594	4,668	1,813	1,652	50	39	35
19	1989-90	3,974	4,948	2,210	2,110	56	45	43
20	1990-91	3,448	5,178	2,168	1,566	63	42	30
21	1991-92	3,937	5,110	2,277	2,010	58	45	39
22	1992-93	4,394	5,900	2,545	2,068	58	43	35
23	1993-94	6,039	6,640	2,802	2,220	46	42	33
24	1994-95	8,377	9,136	3,417	2,414	41	37	26
Sub-total		42,250	51,981	20,379	16,160	48	39	31
Total		59,765	70,764	27,294	20,342	46	39	29

Note: NA = Not Available.
Sources: Cols. 2 and 3 - RBI, *Report on Currency and Finance*, Vol. I, Cols. 4 and 5 for the years 1971-72 to 1981-82; NABARD, *Manual on Short Term & Medium Term Non-Schematic Finance*, 1993, Vol. I, p. 43 and, for subsequent years, NABARD, *Annual Reports* (narrative part) for respective years.

Table 6. Lending Rates for Crop Loans

(per cent p.a.)

Amount Rs	To Ultimate Borrowers		Per cent of Average Borrowings from NABARD to Average Outstanding Amount Against PACS at CCB Level	NABARD's Rate on Refinance to SCBs From 1-3-1988	Prior to 1-3-1988
	Upto 29-2-1988	From 1-3-1988			
(1)	(2)	(3)	(4)	(5)	(6)
Upto 5,000	11.50	10.00			uniform rate of 7 per cent
5001 - 7500	12.50	10.00	Below 60	3.00	
7501 - 10,000	12.50	11.50	60 Below 80	4.00	
10,001 - 15,000	12.50 - 14.00	11.50	80 & above	5.00	
15,001 - 25,000	12.50 - 14.00	12.50 - 14.00			
Over Rs 25,000	14.00 - 15.50	14.00 - 15.50			

Note: Upto 28-2-1988, the rate on NABARD Refinance was 7 per cent, *vide* Khusro Committee, 1989, p. 361.
Sources: RBI, *Currency and Finance Report, 1987-88,* Vol. I, p. 139.

Table 7. Relative Compound Annual Growth Rates In Crop Loans & Refinance

Period	Year to Year Compound Annual Growth Rate (%)				
	Costs of Cultivation (1972-73 to 1992-93)	in the Amounts of			
		Crop Loans Issued by PACS	Drawal of Refinance	Crop Loans Outstanding	Refinance Outstanding
(1)	(2)	(3)	(4)	(5)	(6)
1971-72 to 1994-95	-	4.65	4.98	4.47	5.96
1975-76 to 1994-95	-	4.52	6.55	4.47	5.39
1971-72 to 1984-85	-	4.99	4.04	4.80	5.96
1985-86 to 1994-95	-	4.67	6.26	4.39	6.90
1982-83 to 1994-95	-	4.40	5.70	4.46	6.66
In current prices	4.73				
In 1970-71 prices	1.61				

Note: Growth Rates for Crop Loans Outstanding relate to the period from 1975-76, due to non-availability of data for the preceding years.
Source: Growth Rates for Crop Loans derived from Table 5. Growth Rates for Costs of Cultivation derived from data in *National Account Statistics*, CSO.

Table 8. Movement in Interest Rates on Crop Loans, in Rates on Refinance to SCBs and in Bank Rate, 1980-1996

(per cent per annum)

Size of Loan (Rs) (1)	Rates to Farmers: Before July 1980 (2)	From 1.7.80 (3)	From 2.3.81 (4)	From 1.4.83 (5)	From 1.9.87 (6)	From 1.3.89 (7)	From 22.9.90 (8)	From 9.10.91 (9)	From 22.4.92 (10)	From 8.4.93 (11)	From 1.3.94 (12)	From 18.10.94 (13)
Upto 2,500	11.00	11.85	12.50	11.50	11.50	10.00	10.00	11.50	11.50	12.00	12.00	Co-ops. are free to charge any rates subject to a minimum of 12.00%
2,500-5,000	13.00	14.00	12.50	11.50	11.50	10.00	10.00	11.50	11.50	12.00	12.00	
5,001-7,500	13.00	14.00	15.00	14.00	12.50	10.00	10.00	11.50	11.50	12.00	12.00	
7,501-10,000	13.00	14.00	15.00	14.00	12.50	11.50	11.50	13.00	13.50	12.00	12.00	
10,001-15,000	13.00	14.00	15.00	14.00	12.50 to 14.00	11.50	11.50	13.00	13.50	12.00	12.00	
15,001-25,000	13.00	14.00	15.00	14.00	12.50 to 14.00	12.00	12.00	13.50	13.50	12.00	12.00	
25,001-50,000	13.00	14.00	15.00	14.00	14.00 to 15.50	14.00 to 15.50	14.00	15.50	16.50	16.50	15.00	
50,001-2 lakh	13.00	14.00	15.00	14.00	14.00 to 15.50	14.00 to 15.50	15.00	16.50	16.50	16.50	15.00	
Above 2 lakh	13.00	14.00	15.00	14.00	14.00 to 15.50	14.00 to 15.50	16.00 (Minimum)	20.00 (Minimum)	19.00 (Minimum)	17.00 (Minimum)	15.00 (Minimum)	

Rates on Refinance

Type of Institution (1)	From July 1980 to June 1981 (2)	From July 1981 to February 1989 (3)	From 1.3.1989 to 31.10.1991 (4)	From 1.11.1991 to 30-6-1996 (5)	From 1-7-1996 (6)
Co-operatives	6.00	7.00	3.00 to 5.00 depending upon refinance as percentage of loans outstanding with PACS	3.00 to 6.50 depending on refinance as percentage of loans outstanding with PACS	5.0 to 7.5 depending on the proportion of refinance as percentage of loans outstanding with PACS

Bank Rate

Before July 1980	From 1-7-80	From 11-7-1981	From 4-7-1991	From 9-10-1991	From 18-4-1997
9.00	9.00	10.00	11.0	12.00	11.00

Source: NABARD, *Annual Reports* (Various Years). For information in Column 13, *vide* RBI, *Report on Currency and Finance, 1994-95*, Vol. I, p. V.21.

Table 9. Crop Loans of PACS, Lendable Resources of SCBs, CCBs and NABARD Refinance, 1991-92 and 1992-93 - All India

(Rs Crore)

Sr. No.	Item	1991-92			1992-92		
		SCBs	CCBs	Total	SCBs	CCBs	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Deposits at Previous Year-end	6,708	10357	17,065	7,321	11,010	18,331
2	Deduct 35 per cent for CRR, SLR, etc.	2,348	3625	5,973	2,562	3,853	6,416
3	Lendable Deposits (1-2)	4,360	6732	11,092	4,759	7,157	11,915
4	Minimum Involvement @ 25 per cent of Item 3 for SCBs & 40 per cent for CCBs	1,090	2693	3,783	1,190	2,863	4,053
5	Crop Loan Business of PACS						
	(i) Loans Issued during the Year	-	-	3,937	-	-	5,907
	(ii) Loans Outstanding at Year-end	-	-	5,110	-	-	6,108
	(iii) Loans Overdue at Year-end (estimates)	-	-	2,197	-	-	2,199
	(iv) Percentage of Item (iii) to (ii) (per cent)	-	-	43	-	-	36
6	NABARD Refinance	-	-		-	-	
	(i) Drawal during the Year	-	-	2,277	-	-	2,545
	(ii) Outstanding at Year-end	-	-	2,010	-	-	2,068
7	Members' Deposits with PACS at Year-end	-	-	988	-	-	1,268
8	Difference between the Sum of Items 4 and 7 and						
	(i) Item 5(i)			+834			-586
	(ii) Item 5(ii)			-339			-757

Note: It has been assumed that the percentage of overdues for all types of PACS loans is valid for crop loans as well.
Sources: Item 1 - RBI, *Report on Trend and Progress of Banking in India*, 1992-93, p. 80.
Items 5(i) & (ii) - RBI, *Report on Currency and Finance, 1994-95*, Vol. I, p. V 60.
Items 5(iii) & 7 - NABARD, *Statistical Statements Relating to Co-operative Movement in India, 1992-93*, Part I, Pp. 278 and 255.

Table 10. Crop Loans and Refinance, Andhra Pradesh, Gujarat, Maharashtra and Punjab, 1992-93

(Rs crore)

Sr. No.	Item	Andhra Pradesh			Gujarat			Maharashtra			Punjab		
		SCB	CCB	Total	SCB	CCB	Total	SCB	CCB	Total	SCB	CCB	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Deposits as at End-March 1992	331	358	689	592	1,616	2,208	2,224	3,633	5,857	461	767	1,228
2.	Deduct 35 per cent for CRR, SLR, etc.	116	125	241	207	566	773	778	1,272	2,050	162	268	430
3.	Lendable Deposits (1-2)	215	233	448	385	1,050	1,435	1,446	2,361	3,807	299	499	798
4.	Minimum Involvement @ 25 per cent of item 3 for SCBs & @ 40 per cent for CCBs	54	93	147	96	420	516	361	944	1,305	75	200	275
5.	Crop Loan Business of PACS												
	(i) Loans Issued			510			427			308			604
	(ii) Loan Outstanding at Year-end			720			559			872			532
	(iii) Loans Overdue at Year-end			249			169			474			187
				(35)			(30)			(54)			(35)
	(iv) Non-overdue Loans Outstanding			471			390			398			345
6.	Refinance												
	(i) Drawal During the Year			426			172			192			184
	(Maximum Outstanding)			(83)			(40)			(62)			(30)
	(ii) Outstanding at Year-end			370			131						97
	per cent to 5(iv)			(78)			(34)						(28)
7.	Members' Deposits with PACS at End-March 1992			21			32			23			37

Sources: For Items 1,5,7 - *Statistical Statements, 1992-93,* as under Table 9. For Item 6 - NABARD, *Annual Report, 1992-93,* Statement 1.

Table 11. Amount of Crop Loans Issued Directly by All Credit Institutions Relative to Costs of Cultivation of Crops

(Rs crore in current prices)

Year (1)	Material Input Costs of Cultivation in Current Prices (2)	Crop Loans Issued During the Year* (3)	Crop Loan Outstanding at Year End* (4)	Per cent of Col. 3 to Col. 2 (5)	Per cent of Col. 4 to Col. 2 (6)
1972-73	2,484	613	860	25	35
1973-74	3,005	769	985	26	33
1974-75	4,024	896	1,150	22	29
1975-76	4,412	1,095	1,376	25	31
1976-77	4,892	1,286	1,667	27	34
1977-78	5,223	1,390	1,894	27	36
1978-79	5,748	1,672	2,299	29	40
1979-80	6,504	1,714	2,814	26	43
1980-81	7,122	1,903	3,250	27	46
1981-82	8,557	2,587	3,792	30	44
1982-83	9,057	2,695	3,958	30	44
Sub-Total	61,028	16,620	24,045	27	40
1983-84	9,996	3,150	4,339	31	43
1984-85	11,079	3,472	5,006	31	45
1985-86	12,199	4,175	5,858	34	48
1986-87	13,614	4,302	6,236	32	46
1987-88	14,098	5,037	7,342	36	52
1988-89	16,985	5,615	8,561	33	50
1989-90	18,495	6,207	9,527	34	51
1990-91	20,908	6,285	10,002	30	48
1991-92	25,514	7,081	11,126	28	44
1992-93	26,777	8,458	13,713	32	51
Sub-Total	169,665	53,782	81,710	32	48
Grand Total	169,665	53,782	81,710	32	48

Notes: * The State Government Loans have been excluded.

Sources: Col. 2 - *National Account Statistics*, CSO.

Cols. 3 and 4 - *Reports on Currency and Finance* for respective years, Vol. I - Table on Direct Institutional Finance for Agriculture.

Table 12. Refinance Disbursement for Schematic Investments 1982-83 to 1995-96 - All India

(Amount in Rs crore)

Sr.	Purpose	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	Total All years	CAGR %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1.	Minor Irrigation	244	312	335	385	460	473	387	498	496	502	561	589	598	607	6,447	2.63
		(35)	(35)	(32)	(32)	(35)	(32)	(30)	(29)	(26)	(24)	(24)	(21)	(20)	(20)	(26)	
2.	Land Development	21	29	43	27	26	25	18	11	16	14	13	18	17	29	307	-1.87
		(3)	(3)	(4)	(2)	(2)	(2)	(21)	(1)	(1)	(1)	(-)	(1)		(1)	(1)	
3.	Farm Mechanisation	147	204	170	200	192	200	158	225	338	381	518	631	685	701	4,750	5.48
		(21)	(23)	(16)	(17)	(14)	(13)	(12)	(13)	(18)	(19)	(22)	(23)	(23)	(23)	(19)	
4.	Plantation & Horticulture	27	38	47	63	68	75	65	97	94	99	105	122	129	138	1,167	4.75
		(4)	(5)	(4)	(5)	(5)	(5)	(5)	(6)	(5)	(5)	(4)	(4)	(4)	(5)	(5)	
5.	Poultry	-	-	18	22	26	29	37	58	61	72	46	44	97	128	638	6.52
				(2)	(2)	(2)	(2)	(3)	(3)	(3)	(4)	(2)	(2)	(3)	(4)	(3)	
6.	Sheep/Goats/Pigs	-	-	5	4	6	9	8	10	12	13	16	52	43	37	215	9.57
				-	-	-	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(-)	
7.	Fishery	-	-	10	13	8	20	19	21	21	31	31	55	101	107	447	9.37
				(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(3)	(3)	(2)	
8.	Dairy	-	-	23	29	48	52	51	75	73	84	102	148	171	183	1,039	7.82
				(2)	(3)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(5)	(6)	(6)	(4)	
9.	Forestry	4	5	2	10	9	19	11	17	29	22	25	20	13	11	197	5.44
		(-)	(-)	(-)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(-)	(-)	(-)	
10.	Storage/Market Yards	13	9	12	19	26	29	16	13	14	9	15	16	18	21	230	0.68
		(2)	(1)	(1)	(2)	(2)	(2)	(1)	(1)	(1)	-	(1)	(1)	(1)	(1)	(1)	
11.	IRDP	185	233	354	376	379	448	403	549	602	647	649	662	620	461	6,568	3.43
	i) Other than ISB	170	181	247	235	182	227	178	282	334	388	409	409	357	237	3,836	2.44
		(24)	(20)	(23)	(20)	(14)	(15)	(14)	(17)	(18)	(19)	(17)	(15)	(12)	(8)	(15)	
	ii) ISB	15	52	107	141	197	221	225	267	268	259	240	253	263	224	2,732	6.35
		(2)	(6)	(10)	(12)	(14)	(15)	(18)	(16)	(14)	(12)	(11)	(9)	(9)	(7)	(12)	
12	Non-Farm Sector	-	-	-	-	-	-	-	62	80	104	185	329	411	460	1,631	19.19
									(3)	(4)	(5)	(8)	(12)	(14)	(15)	(7)	
13	Other purposes (Not Specified)	62	62	42	44	76	103	97	66	66	76	93	59	108	181	1,135	2.54
		(9)	(7)	(4)	(4)	(6)	(7)	(8)	(4)	(3)	(4)	(4)	(2)	(4)	(6)	(5)	
14	Total	703	892	1,061	1,192	1,334	1,482	1,270	1,702	1,902	2,054	2,359	2,745	3,011	3,064	24,771	4.68
		(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	

(Contd.)

Table 12. (Concld).

(Amount in Rs crore)

Sr.	Purpose	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	Total All years	CAGR %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Share of Different Banks in Refinance																	
1	Land Dev. Banks	235	314	314	337	433	467	381	559	565	658	885	1,113	1,207	1,451	8,919	
		(33)	(35)	(30)	(28)	(32)	(31)	(30)	(33)	(30)	(32)	(37)	(41)	(40)	(48)	(36)	
2	State Co-op Banks	45	41	37	36	65	64	75	115	114	149	168	245	270	280	1,704	
		(6)	(5)	(3)	(3)	(5)	(4)	(6)	(7)	(6)	(7)	(7)	(9)	(9)	(9)	(7)	
3	Regional Rural Banks	61	87	140	158	208	216	212	287	289	295	302	358	441	492	3,546	
		(9)	(10)	(13)	(13)	(16)	(15)	(17)	(17)	(15)	(15)	(13)	(13)	(15)	(16)	(14)	
4	Commercial Banks	362	450	570	661	628	735	602	741	934	952	1,004	1,029	1,093	841	10,602	
		(52)	(50)	(54)	(56)	(47)	(50)	(47)	(43)	(49)	(46)	(43)	(37)	(36)	(27)	(43)	

Notes: Data for 1988-89 relate to 9 months (July-March) due to a change in NABARD's accounting year from July-June to April-March. Figures in brackets are percentage to total; CAGR = Compound Annual Growth Rate.
Source: NABARD, *Annual Reports* for respective years.

Table 13. Direct Term Loans (Schematic & Non-Schematic) Issued for Agriculture by All Banks

(Rs Crore)

Sr. No.	Institution	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	Total	% share
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1.	Land Dev Banks	426	439	461	533	552	1,024	676	743	836	1,229	1,250	1,563	9,731	23
2.	Commercial Banks	660	986	1,426	1,476	1,851	1,854	2,048	2,384	2,628	2,465	2,528	2,540	22,846	54
3.	Regional Rural Banks	124	143	178	226	276	237	212	312	210	260	247	271	2,696	7
4.	Primary Agrl Credit Societies	383	341	370	394	529	567	603	690	535	634	799	1,000	6,845	16
5.	Total	1,593	1,909	2,435	2,629	3,208	3,682	3,539	4,129	4,209	4,588	4,824	5,374	42,119	100
6.	NABARD's Schematic Refinance for Agriculture [Item 14 less Item 11(ii) of Table 12	688	840	954	1,051	1,137	1,261	1,045	1,373	1,554	1,691	1,934	2,163	15,691	
7.	Per cent of Item 6 to Item 5	43	44	39	40	35	34	30	33	37	37	40	40	37	

Note: The share of LDBs in the total MT/LT loans issued by LDBs and PACS during 1991-92, 1992-93 and 1993-94 has been assumed at 61 per cent, the actual proportion for 1990-91, since separate figures are not available for these years.
Source: RBI, *Reports on Currency and Finance*, Vol I, for the years 1986-87, 1988-89, 1991-92, 1993-94 and 1994-95, Table on Direct Institutional Finance for Agriculture.

Table 14. Institutional Credit for Private Gross Fixed Capital Formation in Agriculture (PGFCFA) in Current Prices

(Rs Crore)

Year	PGFCFA Amount	Direct Term Loan for Agriculture Issued During the Year by All Banks: Amount	Direct Term Loan for Agriculture Issued During the Year by All Banks: Per cent of Col. 3 to Col. 2	NABARD's Schematic Refinance for Agriculture Disbursed During the Year Amount	Per cent of Col. 5 to Col. 3	Per cent of Col. 5 to Col. 2
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1982-83	3,598	1,593	44	688	43	19
1983-84	3,441	1,909	55	840	44	24
1984-85	3,924	2,435	62	954	39	24
1985-86	4,366	2,629	60	1,051	40	24
1986-87	4,485	3,208	72	1,137	35	25
1987-88	5,525	3,682	67	1,261	34	23
1988-89	6,384	3,539	55	1,045	30	16
1989-90	7,387	4,129	56	1,373	33	19
1990-91	8,883	4,209	47	1,554	37	17
1991-92	10,377	4,588	44	1,691	37	16
1992-93	11,475	4,824	42	1,934	40	17
Total	69,845	36,745	53	13,528	37	19

Sources: Col. 2 for the years 1982-83 to 1988-89, CSO, *National Accounts Statistics, (NAS)* 1991, Statement 20 and for subsequent years *NAS*, 1995, Statement 20.
Col. 3 and Col. 5 see Tables 13 and 12, respectively.

Table 15. Estimated Cost of Deposits with Commercial Banks Based on Interest Rates in January 1997

Sr. No.	Type of Deposit	Percentage in Total Deposits	Rate of Interest paid (per cent p.a.)	Average Annual Interest Cost of Deposits (Col. 3 X Col. 4)
(1)	(2)	(3)	(4)	(5)
1.	Current	17.3	Nil	-
2.	Saving	21.4	4.5	0.96
Term Deposits				
3.	Upto 90 days	8.0	8.0	0.64
4.	91 days - 6 months	3.2	9.0	0.29
5.	181 days - 1 year	5.1	10.0	0.51
6.	> 1 year - 2 years	13.1	11.0	1.44
7.	> 2 years - 3 years	8.8	12.0	1.06
8.	> 3 years	23.1	13.0	3.00
	Total	100.0 (Rs 2,68,572 crore)	-	7.90

Notes: 1. The structure of deposits (Col. 3) relates to March 1993 and is derived from the data in the RBI, *Report on Trend and Progress of Banking in India, 1994-95*, p. 19, as also from the data in RBI, *Report on Currency and Finance, 1994-95*, Vol. II, p. 94.
2. The rates of interest (January 1997) on deposits (Col. 4) were obtained from a Pune branch of the Bank of India.

Table 16. - Rural and Semi-Urban Deposits and Outstanding Direct Rural Credit with Different Rural Credit Institutions as in March 1994

(in Rs Crore)

Sr. No.	Institution	Population Group	Deposits	Outstanding Credit: Agriculture	All Other Purposes	Total Credit* (5+6)	Credit-Deposit Ratio % of Col. 7 to Col. 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	RRBs	Rural	7,260	2,353	2,052	4,405	61
		Semi-Urban	1,475	222	396	618	42
2.	All Other Scheduled CBs	Rural	42,071	10,138	16,320	26,458	63
		Semi-Urban	61,560	6,373	19,495	25,868	42
3.	PACS (Direct loans)	Rural	2,367	15,316	NA	15,316*	647
	Sub-total	Rural	51,698	27,807	18,372	46,179	89
	Sub-total	Semi-Urban	63,035	6,595	19,891	26,486	42
	Total	-	1,14,733	34,402	38,263	72,665	63
4.	Central Co-op Banks	Total	16,251	-	-	-	-
5.	State Co-op Banks	Total	11,305	-	-	-	-
6.	State Land Dev Banks	Total	80	-	-	5,405	-

Note: Rural/Semi-urban classification of credit is as per place of sanction and utilisation, *vide* RBI, 1994, Para 7 of Introduction.
* Including term loans of LDBs.
Sources: 1. Deposits of RRBs and CBs - RBI, *Basic Statistical Returns*, 1994, Pp. 12 and 64.
2. Deposits of Co-operatives and Credit from SLDBs - RBI, *Report on Trend and Progress of Banking in India, 1995-96*, Pp. 129-130.
3. Credit from RRBs and CBs - RBI, 1994, Pp. 74-76.
4. Credit from Co-operatives - RBI, *Report on Currency and Finance, 1995-96*, Vol. 1, Table V-12.

Table 17. Rates of Interest on RBI's Financial Accommodation, 1995-96

(per cent per annum)

Sr. No.	Borrowing Institution	Short and Medium Term Credit	Long Term Credit
(1)	(2)	(3)	(4)
1.	Small Industries Development Bank of India	-	9.5
2.	Exim Bank	-	9.0
3.	National Housing Bank	-	8.0
4.	State Finance Corporations	12.0 (Bank Rate)	-
5.	Industrial Development Bank of India	14.0	-
6.	NABARD	3.0 to 6.5 (GLC) (5.5 from July 96)	Interest-free access to NRC(LTO) Fund

Sources: (i) For Sr. Nos. 1 to 5 RBI, *Report on Trend and Progress of Banking in India, 1995-96*, p. 133.

INDUSTRIAL STAGNATION IN A REGIONAL ECONOMY
An Analysis of Kerala Industry

Sunny George

Based on efficient measures of productivity growth and capacity utilisation, this study examines the performance of the industrial sector of the regional economy of Kerala. The analysis of the productivity growth in Pulp and Paper industry vis-a-vis the four industrial groups - Basic industries, Capital Goods industries, Intermediate Goods industries, and Consumer Goods industries - and the State industrial sector as a whole, has shown a very poor performance. Tracing the causative factors, two case studies identify the input supply constraint as one of the reasons for low capacity utilisation. Looking from the point of view of the regional economy of Kerala, our analysis warns against the tendency of establishing industrial units without giving due attention to the critical input requirements and their availability.

INTRODUCTION

The pace of development of the regional economy of Kerala has been slow. In fact, lately signs of stagnation/deceleration in growth performance are also observed. The poor performance is primarily due to the disturbingly slow rate of growth of the manufacturing sector. During 1961-62 to 1988-89, the rate of growth in the secondary sector as a whole in Kerala was only 3.5 per cent as against the 6.9 per cent at the all-India level. Furthermore, the performance of the manufacturing sector was even lower: the rate of growth of the manufacturing sector in Kerala was as low as 1.7 per cent per annum as against 10.6 per cent at the all-India level.

The stagnation of Kerala economy in recent years has been well established in the burgeoning literature on the subject [Subrahamanian, 1990, Pp. 2053-58; Kannan, 1990, Pp. 1951-56; Oommen, 1991; George, 1993]. To some of them, if not all, the development experience of the regional economy is paradoxical in the sense that while the state attained a high standard in the physical quality of life, comparable even with high income characteristics, it generates only relatively low levels of per capita income [Subrahamanian, 1990, Pp. 2053-58]. As a result the regional economy has lost its qualification as a model of development.[1]

Development of an economy, either national or regional, is largely contingent upon the productive capacity it can build up over time. Historically, industrialisation is considered to be the prime mover of productive capacity [Kaldor, 1966, p. 18]. Therefore, any attempt to analyse the performance of an economy entails a closer examination of the efficiency of the industrial sector in detail. Consequently, several studies have gone into the impediments to growth of the state economy [Subrahamanian and Pillai, 1986, Pp. 577-92; Subrahamanian, 1990, Pp. 2053-58]. Alternative hypotheses such as high wage rates, unfavourable industrial structure and low investment by the central government have come up and been subjected to verification. However, these studies, appear to have neglected the question of efficiency of the industries in the utilisation of available resources. In this paper we attempt to analyse the comparative efficiency of the industrial sector of Kerala in general and the Pulp and Paper industry, one of the important industries in terms of value added and capital investment, in particular, on the basis of productivity growth and capacity utilisation.

We would compare the performance of the Pulp and Paper industry with that of other industries in the state, grouping industries into four categories - Intermediate Goods industries, Basic industries, Capital Goods industries and Consumer Goods industries. The performance of the industry under review is compared also with that of the manufacturing sector as a whole. Furthermore, in order to identify the problems of the industry, case studies of the two largest firms, one from the private sector (Grasim Industries, Mavoor) and the other from the public sector

Sunny George is Associate Professor, Kerala Institute of Local Administration, Mulamkunnathukavu, P.O. Thrissur - 680 581, Kerala.

(Hindustan Newsprint, Velloor) will be presented. The estimation of productivity and capacity utilisation is made using *Annual Survey of Industries (ASI)* data at three digit level.

PRODUCTIVITY GROWTH

Perhaps no other single measure of efficiency has been more popular in recent years, than the productivity index. Productivity growth is the important dimension of long-run economic performance. Prof. Kay of the London Business School described it as the 'jewel in the crown' of the economic policy of the 1980s [Gregg, Machin and Metcalf, 1993, Pp. 894-907]. And all over the world, studies based on productivity estimates are on the increase. The robustness of this measure in policy analysis gives it world wide acceptance [Kendrick, 1991, p. 114].

Productivity growth estimates are not, however, without criticism and limitations. The analytical framework for empirical research on productivity is based on the economic theory of production. The cornerstone of the theory is the production function which postulates a well-defined relationship between a vector of maximum producible outputs and a vector of factors of production. Historical analysis of total factor productivity (TFP) change identifies change in total factor productivity as the change in output levels controlling for input levels, i.e., the vertical shifts of the production function. Though theoretically it is a robust one, in empirical research it is constrained by the significant violation of the assumptions of the estimation.[2] The productivity estimates postulate constant level of capacity utilisation and price. Violation of one or both of these assumptions might affect the productivity estimates. Therefore, productivity estimates would not, in any way, be complete without reckoning variations in the level of capacity utilisation and price movements. It is believed, in general, that single deflation or even double deflation would leave the estimate free from the impact of price changes. Since each point of the change in price level instantly affects the estimate, single, or even double, deflation technique are not sufficient; that is to say, one needs to look into price movements as well. Our empirical analysis of productivity growth in the organised manufacturing industries sector of Kerala, both at the aggregate level and at the disaggregated industry level (Pulp and Paper industry) reveals that productivity growth analysis is affected by changes in the level of capacity utilisation and price level, particularly changes in factor prices. An examination of causative factors of capacity utilisation may shed some light on the factors behind the performance, measured in terms of productivity growth.

Productivity may be defined as a measure of the efficiency with which resources are converted into commodities and services. Generally, there are two categories of productivity measure: (1) partial productivity, and (2) total factor productivity. We analyse productivity growth in terms of both partial productivity and total factor productivity. Partial productivity may be termed as the ratio of output to a particular input [Nadiri, 1970, p. 1137]. The partial productivity estimates, however, are subjected to serious limitations. A common criticism against the use of partial productivity measure is that an increase in a measure may be due to the substitution of the factor in question by another factor of production. Therefore, for the purpose of generalisation out of the empirical study, we take total factor productivity measure as the representative measure.

Partial Productivity Growth

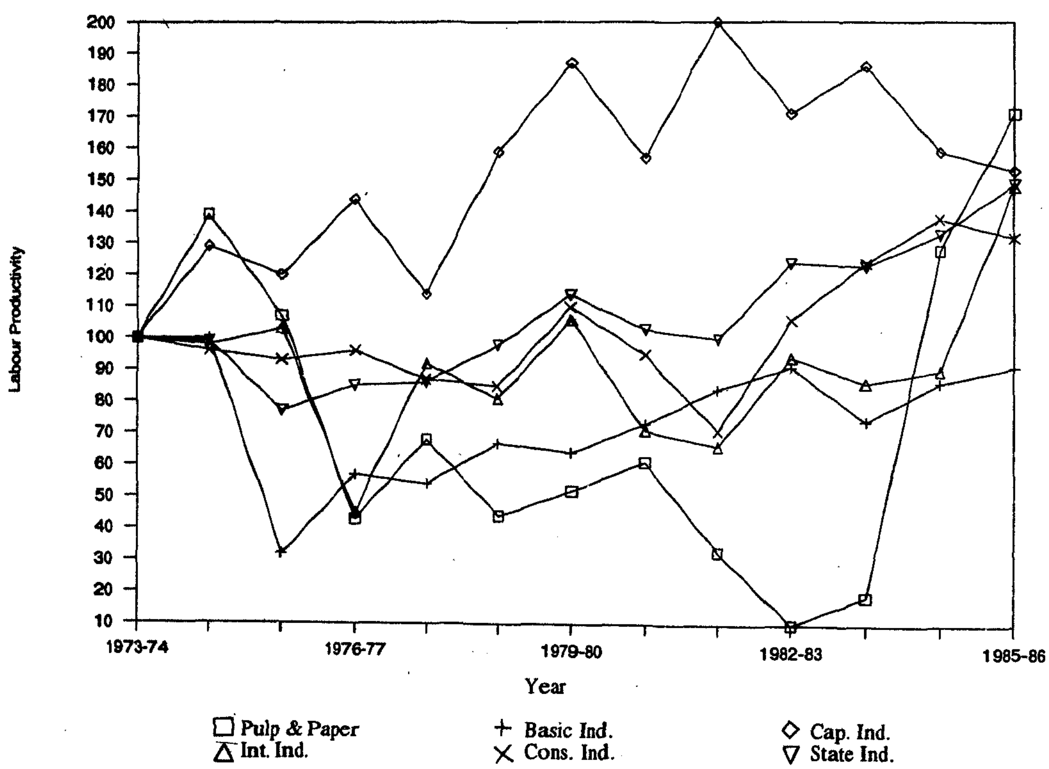
There are as many indices of partial productivity as there are factors of production. Since in our analysis we have incorporated only labour and capital as the major factors of production, the important partial productivity measures are labour productivity and capital productivity. Symbolically, these indices are:

$$AP_L = \frac{Q}{L} \qquad \text{......(1)}$$

$$AP_K = \frac{Q}{K} \qquad \text{......(2)}$$

where AP_L and AP_K are average productivity of labour and capital, Q is the total output/value added, L, labour and K, the capital. The partial productivity measures, in general, show increasing labour productivity and decreasing capital productivity. But in the case of Pulp and Paper industry, both the indices show a declining trend, which is a clear indication of inefficiency. The estimated labour productivity index presented in Table 1 shows that the index had been increasing upto 1974-75 and that since then it began to decline; the index reached a trough of 10 points in 1982-83 (see Figure 1 also). It began to increase from 1983-84 and sharply so from 1984-85, reaching the highest peak in 1985-86, with an index of 171. One possible reason for this quantum jump in the labour productivity index is the commissioning of a very big industrial unit, Hindustan Newsprint, Velloor, in that year. Therefore, the turn-around in the labour productivity could be taken to be of a transitory nature rather than a secular one.

Figure 1. Labour Productivity Index (1973-74=100)



As against the declining trend of labour productivity in the Pulp and Paper industry, the industrial sector as a whole and the four groups of industries show an increasing trend. Among the four groups of industries the highest average annual percentage growth in labour productivity is observed in Capital Goods industries (3.8) followed by Consumer Goods industries (2.55), Basic industries (2.37) and Intermediate Goods industries (1.44). The estimated growth rate for the state industrial sector as a whole is 3.97.

Table 1. Labour Productivity Index (1973-74 = 100)

Year (1)	Pulp and Paper (2)	Basic Industries (3)	Capital Goods Industries (4)	Intermediate Goods Industries (5)	Consumer Goods Industries (6)	State Industrial Sector (7)
1973-74	100	100	100	100	100	100
1974-75	139	100	129	98	96	99
1975-76	107	32	120	103	93	77
1976-77	43	57	144	45	96	85
1977-78	68	54	114	92	87	86
1978-79	44	67	159	81	85	98
1979-80	52	64	187	106	110	114
1980-81	61	73	157	71	95	103
1981-82	33	84	200	66	71	100
1982-83	10	91	171	94	106	124
1983-84	19	74	186	86	124	123
1984-85	128	86	159	90	138	133
1985-86	171	91	153	148	132	149
Growth Rate	-5.6	2.37	3.8	1.44	2.55	3.97

Note: Growth rates are estimated by estimating an exponential trend.
Source: Compiled on the basis of *Annual Survey of Industries (ASI)* data for various years.

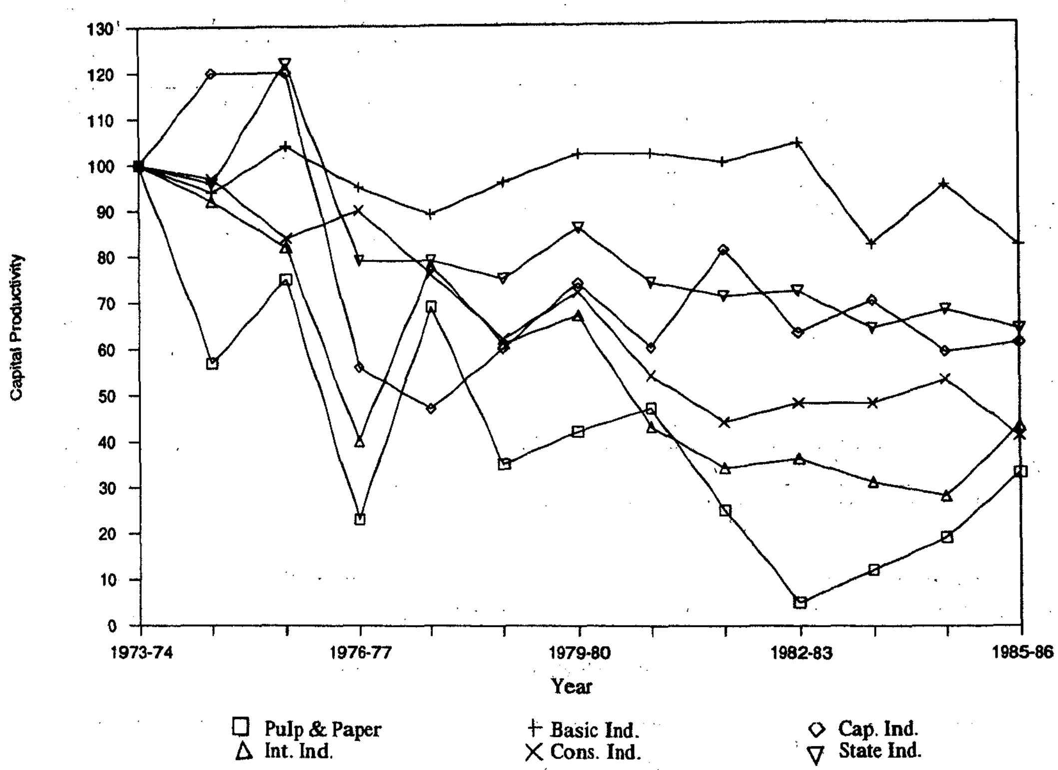
As against the increasing labour productivity, capital productivity has been declining. Table 2 and Figure 2 present the estimated capital productivity indices. It is interesting to note that the

Table 2. Capital Productivity Index (1973-74 = 100)

Year (1)	Pulp and Paper (2)	Basic Industries (3)	Capital Goods Industries (4)	Intermediate Goods Industries (5)	Consumer Goods Industries (6)	State Industrial Sector (7)
1973-74	100	100	100	100	100	100
1974-75	57	94	120	92	97	96
1975-76	75	104	120	82	84	122
1976-77	23	95	56	40	90	79
1977-78	69	89	47	78	76	79
1978-79	35	96	60	61	62	75
1979-80	42	102	74	67	72	86
1980-81	47	102	60	43	54	74
1981-82	25	100	81	34	44	71
1982-83	5	104	63	36	48	72
1983-84	12	82	70	31	48	64
1984-85	19	95	59	28	53	68
1985-86	33	82	61	43	41	64
Growth Rate	-14.17	-0.8	-3.7	-9.5	-7.5	-4.1

Note: Growth rates are estimated by estimating an exponential trend.
Source: Same as for Table 1.

Figure 2. Capital Productivity



rate of decline in Pulp and Paper industry has been the highest with -14.17 per cent per annum. Among the four groups of industries the highest decline is observed in the Intermediate Goods industries (-9.5), which includes the Pulp and Paper industry as well, followed by Consumer Goods industries (-7.5), Capital Goods industries (-3.7) and Basic industries (-0.8). The state industrial sector taken together experienced a decline of -4.1 per cent per annum over the period.

From the preceding discussion we see that the efficiency of utilising capital in the manufacturing sector has been declining over the years and that the decline in the case of Pulp and Paper industry has been discernibly higher than that in the Intermediate Goods industries and in the average for the State industrial sector as a whole.

Total Factor Productivity

Total factor productivity, often referred to as the 'residual' or index of 'technical progress', is defined as output per unit of all factors of production combined. There are various methods of measuring total factor productivity; the measures differ on account of differences in the underlying production functions. However, the three indices most often used in empirical research are Kendrick's [1961] arithmetic measure, Solow's [1957] geometric measure and Christensen, Jorgenson and Lau's [1973] Translog productivity index. In the present estimation we follow the methodology of Christensen, Jorgenson and Lau who developed total factor productivity from explicitly specified Translog Production Function. In fact, it is a discrete approximation to the continuous changes in divisia quantity index.[3] Its specification, with two inputs, is given by

$$lnY = \alpha_o + \alpha_K lnK + \alpha_L lnL + \alpha_T T$$
$$+\frac{1}{2}\beta_{KK}(lnK)^2 T\beta_{KL}(lnK lnL)$$
$$+\frac{1}{2}\beta_{LL}(lnL)^2 + \beta_{KL}(lnK)^T$$
$$+\frac{1}{2}\beta_{TT}T^2 + \beta_{LT}(lnL)T \qquad \ldots\ldots(3)$$

where Y represents output, K, capital and L labour, respectively, T denoting time trend as a proxy for technical change. When one imposes the assumptions of competitive equilibrium, Hicks' neutral technical change and differentiating equation (1) totally with respect to time and rearranging the term, one has

$$A_T = (lnY_T - lnY_{T-1}) - SL(lnL_T - lnL_{T-1})$$
$$- SK(lnK_T - lnK_{T-1}) \qquad \ldots(4)$$

where

$$A_T = \frac{lnA_T + lnA_{T-1}}{2}$$

$$SL = \frac{SL_T + SL_{T-1}}{2}$$

$$SK = \frac{SK_T + SK_{T-1}}{2}$$

In the present study, the translog measure of the total factor productivity is given by

$$\frac{\Delta A(t)}{A(t)} = g_v(t) - \frac{[SL(t) + SL(t-1)]}{2} g_L(t)$$
$$- \frac{[1 - SL(t) + 1 - SL(t-1)]}{2} g_K(t) \qquad \ldots(5)$$

where $\frac{\Delta A(t)}{A(t)}$ is total factor productivity growth, V, value added, L, total persons employed, K, gross fixed capital, SL, share of labour and 't' refers to time reference. The total factor productivity index $(\bar{g}_t)$ is derived by taking $A_0 = 1$ and employing

$$\ln\left(\frac{\Delta A(t)}{A(t)}\right) = \bar{g}_t \qquad \ldots\ldots(6)$$

The estimated total factor productivity measures are presented in Table 3 (see also Figure 3).

Table 3. Total Factor Productivity Index (1973-74 = 100)

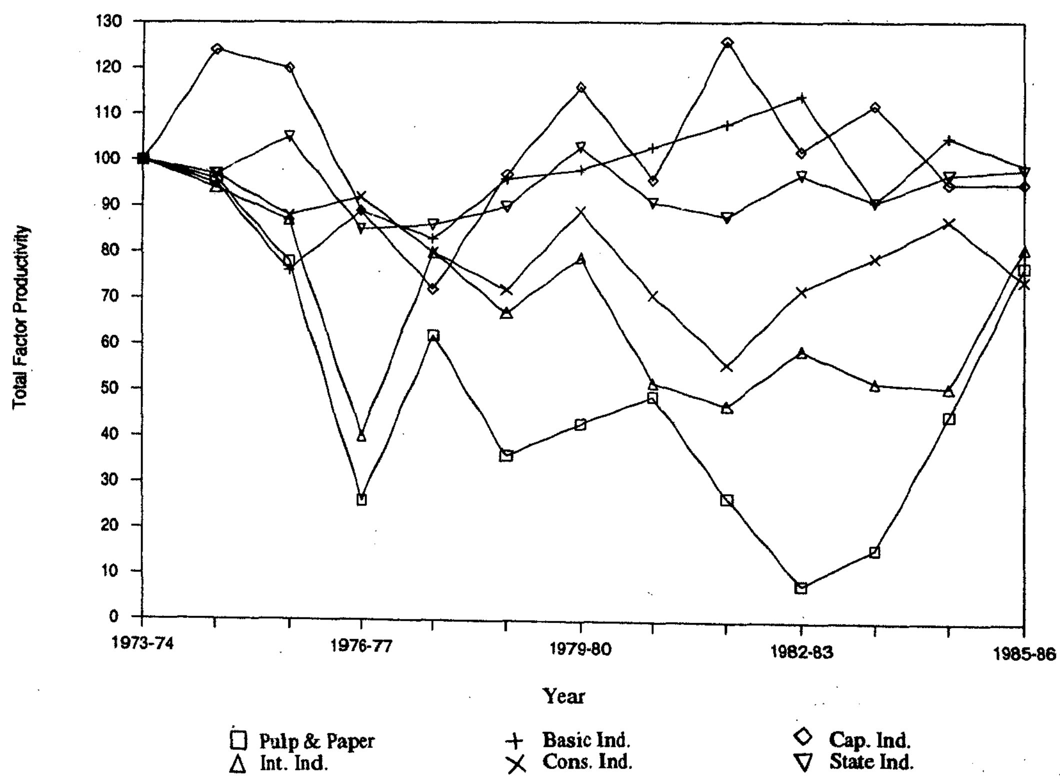
Year (1)	Pulp and Paper (2)	Basic Industries (3)	Capital Goods Industries (4)	Intermediate Goods Industries (5)	Consumer Goods Industries (6)	State Industrial Sector (7)
1973-74	100	100	100	100	100	100
1974-75	96	95	124	94	97	97
1975-76	78	76	120	87	88	105
1976-77	26	89	89	40	92	85
1977-78	62	83	72	80	80	86
1978-79	36	96	97	67	72	90
1979-80	43	98	116	79	89	103
1980-81	49	103	96	52	71	91
1981-82	27	108	126	47	56	88
1982-83	8	114	102	59	72	97
1983-84	16	91	112	52	79	91
1984-85	45	105	95	51	87	97
1985-86	77	99	95	81	74	98
Growth Rate	-8.1	1.31	-0.22	-3.6	-2.3	-0.13

Note: Growth rates are estimated by estimating an exponential trend.
Source: George, 1991, p. 100.

An important point to be noted is that the productivity index was falling in all the industrial groups except the Basic industries. The decline in productivity of the Pulp and Paper industry is found to be at the rate -8.1 per cent per annum which is significantly greater than that of the fall in Intermediate Goods industries (-3.6) and the State Industrial Sector (- 0.13). The productivity index of this industry reached a trough of 8 in 1982-83 and the improvement since then was moderate. In 1985-86 the index stood at 77. Of the four groups of industries the highest decline in total factor productivity index is observed in Intermediate Goods industries (-3.6) followed by Consumer Goods industries (-2.3), and Capital Goods industries (-0.22). The only group of industries which shows a positive growth rate is the Basic industries. Going by the magnitude of the growth rates, we see that the State Industrial Sector, Basic industries and Capital Goods industries were in a condition of near stagnation.

One of the serious limitations of the productivity estimates is that they assume away the level of capacity utilisation; that is to say, the possibility of capacity utilisation affecting the productivity measure. In this regard, we presume in our calculations, that the utilisation rate has to some extent affected the productivity measure and our presumption takes us therefore to the analysis of capacity utilisation which itself is a measure of efficiency.

Figure 3. Total Factor Productivity Index (1973-74=100)



Capacity Utilisation

Full capacity has been variously defined as a minimum point on a cost function, a full input point on an average production function, and a bottleneck point in general equilibrium system.[4] Full capacity should be defined as an attainable level of output under normal input conditions - without lengthening accepted working weeks, and allowing for usual vacations and for normal maintenance. Excess capacity indicates the extent to which the economy is failing to make the best use of the scarce resources. Therefore, in a developing economy, where resources are scarce and scanty, the need for 'full capacity' utilisation of resources can hardly be overemphasised.

In examining the question of capacity utilisation, two specific questions emerge: the first is the problem of measurement of capacity and its utilisation and the second, identification of the factors influencing capacity utilisation. Since there are various methods for measuring potential capacity, we have a number of capacity utilisation measures also. The important measures of capacity utilisation are Wharton Index, RBI Index and Minimum Capital-Output Ratio. For calculating the Minimum Capital-Output Ratio, we take the output of the industry, for which the capital-output ratio has the minimum value, as the maximum capacity. The first step in the method consists of calculating the ratio of output to capital for each year for the different industries, i.e.,

$$\left(\frac{Y}{K}\right)1, \left(\frac{Y}{K}\right)2, \ldots\ldots\ldots \left(\frac{Y}{K}\right)n \qquad \ldots\ldots(7)$$

where Y = industrial output at constant prices
K = capital stock at constant prices
n = number of annual observations in time series used.

Now to obtain an index of capacity utilisation we refer the highest (peak) point of the output-capital ratio {say $\left[\left(\frac{Y}{K}\right)_t^*\right]$ } which indicates the highest degree of capacity utilisation. From the actual and potential (peak) output-capital ratios we can work out the index of capacity utilisation corresponding to time point 't' as:

$$U_t = \frac{\left(\frac{Y}{K}\right)_t}{\left(\frac{Y}{K}\right)_t^*} \times 100 \qquad \ldots\ldots(8)$$

where $\left(\frac{Y}{K}\right)_t$ is the actual output-capital ratio and $\left(\frac{Y}{K}\right)_t^*$ the highest peak output-capital ratio, both at time point 't'.

It is clear that this type of index of utilisation cannot exceed 100. But this does not thereby imply that it would be impossible, under different circumstances, to obtain a higher output from the existing capacity. It simply means that when the index reaches 100 it should be taken merely to indicate the highest degree of capacity utilisation hitherto observed. In other words, capacity utilisation of 100 per cent refers to the highest pressure on resources recorded.

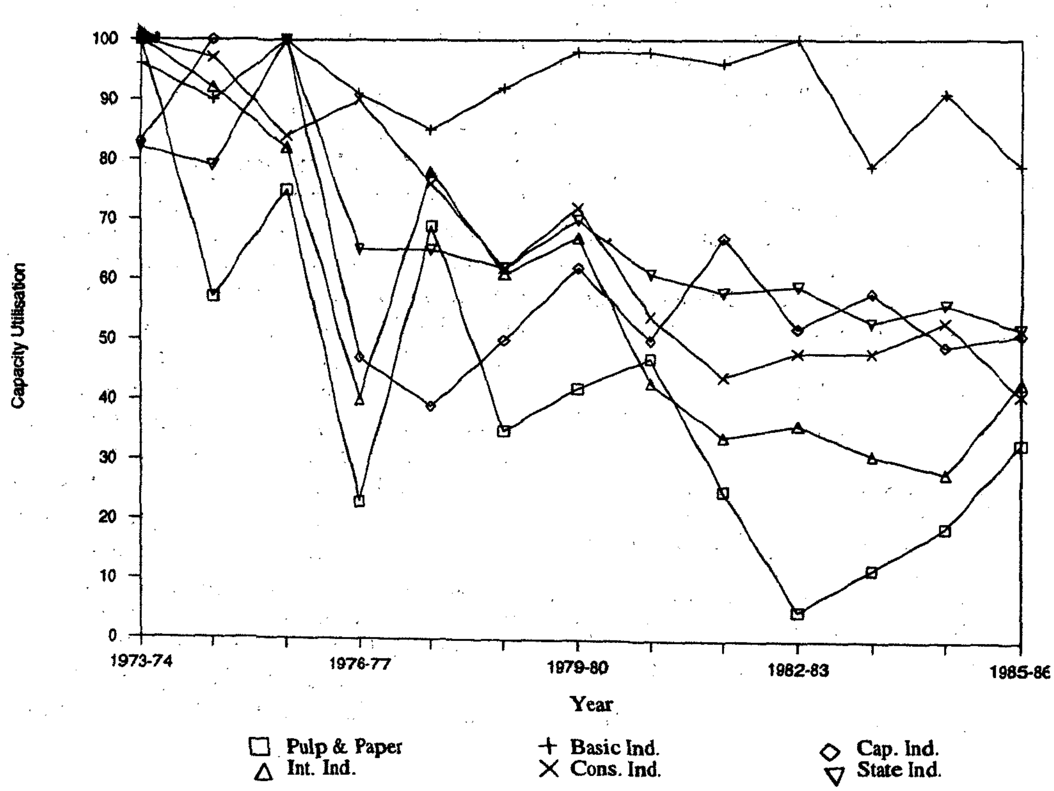
The estimated capacity utilisation indices presented in Table 4 would show that it has been declining for all the industrial groups. The utilisation rate of the existing capacity in 1985-86 is found to be lower in the Pulp and Paper Industry and the Consumer Goods industries than that of the Intermediate Goods industries (which itself is low). Further, it is important to note that of all estimates, the largest rate of decline in capacity utilisation is recorded in the Pulp and Paper industry, i.e., -14.7 per cent per annum (see Figure 4). The utilisation index for this industry declined from 100 in 1973-74 to as low as 5 in 1982-83. Since then the index has been improving; however, it could rise only upto the 33 percent level in 1985-86. Among other groups of industries, the largest rate of decline is recorded by Intermediate Goods industries (-9.47) followed by Consumer Goods industries (-7.54), Capital Goods industries (-4.00) and Basic industries

Table 4. Capacity Utilisation Index: Minimum Capital-Output Ratio Method

Year	Pulp and Paper	Basic Industries	Capital Goods Industries	Intermediate Goods Industries	Consumer Goods Industries	State Industrial Sector
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1973-74	100	96	83	100	100	82
1974-75	57	90	100	92	97	79
1975-76	75	100	100	82	84	100
1976-77	23	91	47	40	90	65
1977-78	69	85	39	78	76	65
1978-79	35	92	50	61	62	62
1979-80	42	98	62	67	72	70
1980-81	47	98	50	43	54	61
1981-82	25	96	67	34	44	58
1982-83	5	100	52	36	48	59
1983-84	12	79	58	31	48	53
1984-85	19	91	49	28	53	56
1985-86	33	79	51	43	41	52
Growth Rate	-14.7	-0.81	-4	-9.47	-7.54	-4.14

Note: Growth rates are estimated by estimating an exponential trend.
Source: George (1991) p. 125.

Figure 4. Capacity Utilisation Index (1973-74=100)



(-0.81). From the above analysis we may conclude that the level of capacity utilisation of manufacturing industries in Kerala has been declining and that the rate of decline in the Pulp and Paper industry has been discernibly higher than those for the Intermediate Goods industries and the industrial sector as a whole.

Productivity-Capacity Utilisation Nexus

There are good reasons to believe that the observed general declining trend in total factor productivity growth is due largely to inadequate supply of critical inputs. Productivity growth estimates show the maximum level of output controlling the level of inputs. Therefore, when industrial units are established with certain minimum level of capacity which is inflexible in the short-run, underutilisation of the installed capacity would certainly reflect in the estimation of productivity. This phenomenon is particularly significant in the case of such industries as pulp and paper where the initial capital investment is relatively high and the input supply is subject to wide fluctuations due to the nature of management of the forest-based raw materials.

The causality between productivity growth and capacity utilisation may be empirically examined by means of regression analysis. For this purpose, we run total factor productivity growth on capacity utilisation. The results are reported in Table 5. As has been hypothesised, the regression estimations show that capacity utilisation can explain, to a great extent, changes in productivity. Except in the case of Basic industries, the coefficient of capacity utilisation is found to be significant. In the case of Pulp and Paper industry, capacity utilisation explains 71 per cent of changes in total factor productivity growth.

Table 5. TFP-Capacity Utilisation Linkage: Regression Results

Dependent Variable: (TFP) of	Constant	Capacity Utilisation	R^2	Sample Size
(1)	(2)	(3)	(4)	(5)
Pulp and Paper	12.92 ,(1.495)	0.913** (5.21)	0.71	13
Basic Industries	64.376 (1.68)	0.351 (0.845)	0.06	13
Capital Goods Industries	67.914 (6.595)	0.57** (3.6)	0.54	13
Intermediate Goods Industries	28.61 (4.37)	0.703** (6.594)	0.79	13
Industrial Sector of the State	77.377 (9.61)	0.257* (2.16)	0.29	13

Notes: * Significant at five per cent level; ** Significant at one per cent level;
Bracketed figures are t-values.

Now it is instructive to have a look at the impact of capacity utilisation on partial productivity growth. Following the same framework for the total factor productivity-capacity utilisation causality, we estimated regression equations for labour productivity and capital productivity. Many estimations showed problems of autocorrelation and this problem has been corrected with the Cochrane-Orcutt method. The estimates presented in Tables 6 and 7 show that fluctuations in capacity utilisation account for about 99 per cent changes in capital productivity; in the case of labour productivity, their impact is marginal, except in the case of Intermediate Goods industries. This phenomenon points out the very important fact of lumpiness in capital investment which demands a minimum level of operation for efficient use of capital. Furthermore, inter-industry capital mobility is low compared to that of labour.

Table 6. Capital Productivity-Capacity Utilisation Linkage: Regression Results

Dependent Variable: (TFP) of	Constant	Capacity Utilisation	R^2	Sample Size
(1)	(2)	(3)	(4)	(5)
Pulp and Paper	-9.08	1.0	0.99	12
	(-3.06)	(1.0)		
Basic Industries	0.028	1.041**	0.99	12
	(0.981)	(97.4)		
Capital Goods Industries	0.048	1.2**	0.99	12
	(0.12)	(191.13)		
Intermediate Goods Industries				
Industrial Sector of the State	-0.67	1.218**	0.99	12
	(-0.139)	(169.02)		

Notes: * Significant at five per cent level; ** Significant at one per cent level;
Bracketed figures are t-values.

Table 7. Labour Productivity-Capacity Utilisation Linkage: Regression Results

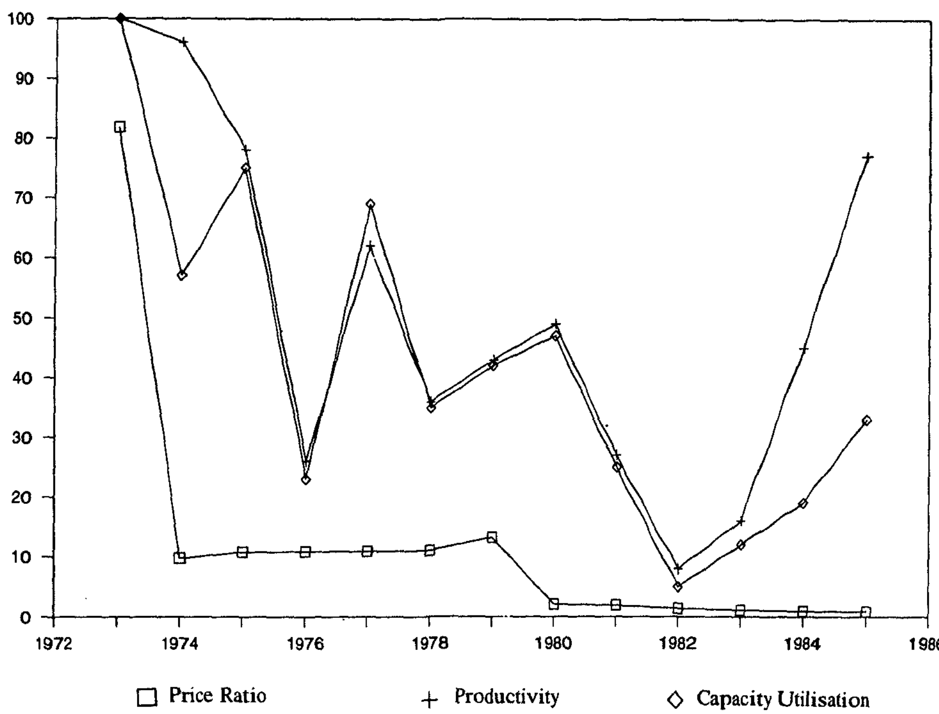
Dependent Variable: (TFP) of	Constant	Capacity Utilisation	R^2	Sample Size
(1)	(2)	(3)	(4)	(5)
Pulp and Paper	71.97	0.68	0.39	12
	(1.04)	(1.18)		
Basic Industries	123.76	-0.56	0.13	12
	(1.71)	(-0.71)		
Capital Goods Industries	138.20	0.417	0.29	12
	(4.54)	(0.88)		
Intermediate Goods Industries	-237.0	1.49	0.77	12
	(-0.29)	(7.37)**		
Industrial Sector of the State	222.2	-0.244	0.66	12
	(0.342)	(-0.733)		

Notes: * Significant at five per cent level; ** Significant at one per cent level;
Bracketed figures are t-values.

PRODUCTIVITY AND PRICE VARIATIONS

As noted at the outset, a second aspect, in addition to capacity utilisation, that affects the measure of productivity estimate is changes in prices. This relationship between price changes and capacity utilisation is evident in the case of those industries where large amount of raw material is consumed. Thus, an examination of the impact of factor price variation on productivity in the case of Pulp and Paper industry, a forest based industry, is worthwhile. As a proxy of price changes we take ratio of output price to input price. This ratio, along with productivity and capacity utilisation, is presented in Figure 5. It may be observed that the price ratio and productivity estimate have similar trends. Therefore, it would not be wrong if one conjunctures that price variation is one of the factors behind productivity growth variations.

Figure 5. Pulp and Paper Industry Price Ratio (Output/Input) (P.R.), Productivity (TFP) and Capacity Utilisation (CU)



TWO CASE STUDIES

From the analysis of productivity and capacity utilisation we have seen that the efficiency of the Pulp and Paper industry has been very poor. Now to have a micro perspective, it is appropriate to look at the features at the unit level. In view of this we have chosen two units for case studies. They are Grasim Industries, Mavoor, the largest among the private Pulp and Paper industry units in Kerala, and Hindustan Newsprint, Velloor, the largest unit under the public sector.

Grasim Industries, Mavoor

Grasim Industries, one of the oldest and largest industrial units in Kerala, was established in 1959 at Mavoor, near Kozhikode. The factory is located on the banks of the river Chaliyar. The Mill produces rayon grade pulp from bamboo, eucalyptus and other hard wood. The installed capacity of the unit is 72,000 tonnes per annum and the company employs nearly 3,000 persons. The growth performance of the unit over a period of 22 years is reflected in figures presented in Table 8 which shows that the unit performed well up to the beginning of the 1970s. During 1962-63 to 1970-71 period the output of the unit increased from 31,921 tonnes to 64,120 tonnes, a two-fold growth over a period of seven years. The year 1970-71 recorded the highest-ever-attained labour productivity index (139) and capacity utilisation index (89 per cent of the installed capacity). The period from early 1970s to the mid-seventies witnessed sharp fluctuations in output, profit, labour productivity and capacity utilisation. Since the mid-seventies volatile movements of these variables are observed. And the 1980s was a period during which the unit made huge and increasing losses. Almost all these variables nosedived from 1981-82 to 1982-83: total output declined from 45,840 tonnes to 5,890 tonnes; loss mounted from Rs 80.57 lakh to Rs 213.28 lakh; labour productivity index declined from 80 to a mere 11; and capacity utilisation declined to as low as 8 per cent of the installed capacity. Such a fall might have been due to the fact that with the commissioning of a huge Central public sector undertaking, the Hindustan Newsprint, Velloor, the chunk of supply of forest based raw materials which this unit had been getting happened to be diverted to the latter.

Table 8. Development of Grasim Industries, Mavoor 1963-64 to 1984-85

Year (1)	Employment (2)	Production (M.T.) (3)	Net Profit (Rs Lakh) (4)	Labour Productivity (1963-64=100) (5)	Capacity Utilisation (6)
1963-64	1,335	31,921	-103.62	100	44
1964-65	1,795	42,189	30.87	126	59
1965-66	1,878	49,573	173.12	113	69
1966-67	2,473	52,842	175.19	115	73
1967-68	2,573	58,118	141.01	129	81
1968-69	2,529	60,914	308.50	136	85
1969-70	2,513	60,940	331.88	134	85
1970-71	2,555	64,120	439.42	139	89
1971-72	2,587	42,493	180.76	93	59
1972-73	2,583	63,227	249.37	137	88
1973-74	2,593	34,408	312.29	75	48
1974-75	2,591	60,921	1,055.08	134	85
1975-76	2,556	46,749	697.61	103	65
1976-77	2,553	57,536	1,021.09	127	80
1977-78	2,553	38,845	489.97	87	54
1978-79	2,501	27,945	-38.08	48	39
1979-80	3,266	45,234	139.63	78	63
1980-81	3,269	45,888	-24.29	80	64
1981-82	3,239	45,840	-80.57	80	64
1982-83	3,203	5,890	-213.28	11	8
1983-84	2,927	35,425	-329.39	70	49
1984-85	2,828	22,184	-476.12	44	31

Note: M.T. = metric tonnes.
Source: Grasim Industries, Mavoor.

We have seen that the development of the unit, in terms of absolute measure of production and profit, labour productivity and capacity utilisation, is marked by slight improvement during the sixties, wide fluctuations in first half of the seventies, and steep decline since the mid-seventies. To have a clear picture of the growth trajectory, we estimate the growth rate of these variables statistically. The growth rates are estimated for two time periods: from 1963-64 to 1974-75 and from 1974-75 to 1984-85, employing a kinked exponential model. The estimated growth rates are presented in Table 9. A perusal of the table brings out the fact that the second period witnessed a steep decline. The insignificant rate of growth in production, labour productivity and capacity utilisation in the first period turned around to produce significant negative growth rates well above ten per cent per annum. In the case of employment there was a decline in the growth rate, though the growth rate in the second period was not negative.

Table 9. Growth Performance of Grasim Industries, Mavoor

Variable	Annual Percentage Growth Rate	
	1963-64 to 1974-75	1974-75 to 1984-85
(1)	(2)	(3)
Employment	3.63** (4.15)	0.96 (0.88)
Production	2.01 (0.68)	-11.14** (-3.05)
Labour Productivity	-0.25 (-0.08)	-12.36** (-3.47)
Capacity Utilisation	2.05 (0.69)	-11.21** (-3.04)

Notes: The estimated equation is lnY = A+B (D1t+D2k) + C(D2t - D2k) + e
where D_1 = 1 for 1963-64 to 1974-75
= 0 otherwise;
D_2 = 1 for 1975-76 to 1984-85
= 0 otherwise;
t = time points; and
the coefficients B and C give growth rates for the first and second period, respectively.
**: Significant at one per cent level;
Bracketed figures are t-values.

We now turn to some of the important factors which influence performance of the unit. Since there has not been any deficiency of demand for the product, the causes for the dismal performance of the unit, apparently rests with the supply side. Scarcity of forest-based raw materials constitute the most important problem that the industrial unit has been facing over the years. This point has been made by several officials in the unit. With the limited available data, the validity of this hypothesis may be tested within the framework of regression analysis. With this in view, we regressed the total raw material supply on labour productivity (LABPDTY) and capacity utilisation (CU), over a period from 1964-65 to 1985-86. The results are presented in Table 10. Coefficients of both the estimated equations are significant at one per cent level. The results point out that, whereas about 96 per cent of productivity changes are accounted for by variations in capacity utilisation, the volatility in raw material supply determines the level of capacity utilisation. Thus, going by the regression results we may note that productivity growth is influenced by capacity utilisation and capacity utilisation, in turn, is determined by raw material supply. What is noteworthy is that this observation verifies our earlier conjecture that the level of capacity utilisation affects productivity estimates. Furthermore, capacity utilisation is, in turn, determined by raw material supply.

Table 10. Causality Between Growth Performance and Input Supply, Grasim Industries, Mavoor, 1964-65 to 1985-86

LABPDTY =	0.169 (0.02)	+	1.474 CU (18.87)**	$R^2 = 0.96$ n = 21 DW = 1.98
CU =	-3.35 (-11.6)	+	0.0013 RAW (351.81)**	$R^2 = 0.99$ n = 21 DW = 1.82

Notes: ** Significant at one per cent level.
LABPDTY = Labour Productivity; CU = Capacity Utilisation; RAW = Raw Material Supply.
Bracketed figures are t-values.

Important raw materials of the Pulp and Paper industry are bamboo reed, eetta reed and eucalyptus. Information on the sources of these raw material would shed some light on the problems in their supply. There are three major sources from which industrial units collect forest-based raw materials: (1) from state government, under contracts entered into by the units; (2) private agencies; and (3) from other states. Figures of raw material supply from these sources from 1963-64 to 1985-86 are presented in Table 11. The trends in total supply are marked by marginal increase up to mid-seventies; since then they slacken over the years with a steep decline in 1982-83. Looking at the level of supply from various sources and the respective percentage shares we find that government supply constituted a major share during the initial period, with 96 per cent in 1963-64. Subsequently, however, its share in total supply has been declining with wide inter-year fluctuations. During the late sixties and seventies, raw materials were bought from private sources and from other states as well. A notable feature of supplies from private source and other states is that these involve additional costs. The price of materials from private supply would be higher than those purchased from government whereas the cost involved in the transportation of materials from other states would make them cost more. What is noteworthy, however, is that supplies from these sources also have been declining from the mid-seventies resulting in dramatic shrinkage in total supply (see Table 11).

Table 11. Sources of Raw Material Supply, Grasim Industries, Mavoor 1963-64 to 1985-86

Year (1)	Govt. Supply (M.T.) (2)	Govt. Supply(%) (3)	Private Supply (M.T.) (4)	Private Supply(%) (5)	Other States (M.T.) (6)	Other States(%) (7)	Total (M.T.) (8)
1963-64	100,720	96.51	1,714	1.64	1,928	1.85	104,362
1964-65	104,172	60.34	46,643	27.02	21,832	12.65	172,647
1965-66	98,528	44.41	44,905	20.24	78,424	35.35	221,857
1966-67	49,665	24.30	17,474	8.55	137,209	67.14	204,348
1967-68	74,011	27.71	34,286	12.84	158,828	59.46	267,125
1968-69	75,973	25.31	111,797	37.24	112,455	37.46	300,225
1969-70	46,911	14.07	197,397	59.21	89,099	26.72	333,407
1970-71	38,045	12.51	189,763	62.42	76,192	25.06	304,000
1971-72	29,270	12.19	185,022	77.05	25,832	10.76	240,124
1972-73	40,649	13.41	203,677	67.20	58,775	19.39	303,101
1973-74	24,145	14.63	82,544	50.03	58,304	35.34	164,993
1974-75	60,448	18.82	193,217	60.15	67,555	21.03	321,220
1975-76	104,667	45.87	68,981	30.23	54,530	23.90	228,178
1976-77	129,545	50.53	72,317	28.21	54,505	21.26	256,367
1977-78	78,500	42.63	75,277	40.88	30,363	16.49	184,140
1978-79	73,205	57.41	38,824	30.45	15,484	12.14	127,513
1979-80	119,668	57.69	80,116	38.62	7,662	3.69	207,446
1980-81	128,916	60.20	84,781	39.59	432	0.20	214,129
1981-82	108,592	48.10	117,168	51.90	0	0.00	225,760
1982-83	19,922	85.73	3,317	14.27	0	0.00	23,239
1983-84	88,767	63.67	47,890	34.35	2,769	1.99	139,426
1984-85	40,217	39.27	58,962	57.57	3,243	3.17	102,422
1985-86	18,441	49.77	18,545	50.05	69	0.19	37,055

Note: M.T. - Metric tonnes.
Source: Grasim Industries, Mavoor.

In order to consider these changes from the point of view of quantitative dimensions we may estimate, statistically, annual average percentage growth rates. For this purpose, assuming a trend break in 1974-75, we divided the study period into two sub-periods: the first, from 1963-64 to 1975-76 and the second, from 1974-75 to 1985-86. The growth rates are estimated with kinked exponential model and are reported in Table 12. We may note from the growth estimates that during the first period supply from private sector and from other states was increasing substantially. In stark contrast, however, the second period, i.e., from 1974-75 to 1985-86, witnessed a dramatic decline in raw material supply from these sources. Thus, the total supply declined at a rate of 15.85 per cent per annum as a result of the decline in the supply from the private sector (22.5 per cent decline per annum) and from other states (76.89 per cent decline per annum). In both the periods, supply from government sources has shown negative growth rate with a higher rate of decline in the second period, though the estimated coefficients are statistically insignificant.

Table 12. Source-Wise Growth of Raw Material Supply Grasim Industries, Mavoor

Source	Annual Percentage Growth Rate	
	1963-64 to 1974-75	1974-75 to 1985-86
(1)	(2)	(3)
Government	-0.76	-2.63
	(-0.18)	(-0.57)
Private	21.04**	-22.5**
	(3.09)	(-2.98)
Other States	8.85	-76.89**
	(0.54)	(-4.28)
Total Supply	4.99	-15.85**
	(1.55)	(-4.45)

Notes: The estimated equation is lnY = A + B(D1t + D2k) + C(D2t - D2k) + e. Meaning of terms - same as under Table 9.
**: Significant at one per cent level.
Bracketed figures are t-values.

Hindustan Newsprint, Velloor

Hindustan Newsprint, Ltd., Velloor, a wholly owned subsidiary of Hindustan Paper Corporation and a Government of India enterprise, became operational in 1983. The Mill, one of the biggest newsprint mills in Asia, has an integrated pulp and paper mill and produces newsprint of 52 grams per square metre (gsm.). The installed capacity of the Mill is 80,000 metric tonnes of newsprint per annum with a total investment of Rs 160 crore. The production process of the Mill is considered to be unique in the sense that it manufactures newsprint using eucalyptus wood and reeds. The pulp-mix of the unit consists of 70 per cent chemi-mechanical pulp from eucalyptus and 30 per cent sulphite chemical pulp from reeds.

Table 13 sheds some light on the performance of the Mill in terms of production and profit/loss from 1983-84 to 1989-90. The output of the unit increased from Rs 2,334 lakh to Rs 11,285 lakh during the period. However, we may notice that it entered into a period of profit margin only in 1988-89. Though evaluating the unit in terms of strict economic indicators is open to question since the unit is under public ownership and its output is distributed at subsidised price, a glance at some performance indicators such as productivity and capacity utilisation would be illuminating.

Table 13. Performance of Hindustan Newsprint, Velloor, 1983-84 to 1989-90

(Rs Lakh)

Year	Production	Profit/Loss
(1)	(2)	(3)
1983-84	2,334	-932.25
1984-85	5,159	-866.71
1985-86	6,527	-99.96
1986-87	6,172	-492.85
1987-88	7,482	-174.99
1988-89	7,883	199.83
1989-90	11,285	2,036.00

Source: Hindustan Newsprint, Velloor.

Partial productivities of labour and capital and capacity utilisation, measured as ratio of output to installed capacity, are presented in Table 14.

Table 14. Productivity Growth and Capacity Utilisation, Hindustan Newsprint, Velloor, 1983-84 to 1989-90

Year	Capacity Utilisation	Labour Productivity	Capital Productivity
(1)	(2)	(3)	(4)
1983-84	80.23	100	100
1984-85	80.27	226	225
1985-86	98.29	283	308
1986-87	85.70	268	320
1987-88	101.89	329	388
1988-89	98.33	353	459
1989-90	108.56	501	745

Source: Hindustan Newsprint, Velloor.

Looking at these indicators one might get the impression that the unit has been performing well. Both labour productivity and capital productivity have been increasing with capital productivity gaining an edge over labour productivity. Furthermore, the capacity utilisation level has increased from 80 per cent to 108 per cent of the installed capacity. However, this striking performance has to be viewed against the fact that even at the capacity utilisation well above its installed capacity the unit began to make a little profit only in recent years. What would be the level of loss if the capacity utilisation would fall to 50 per cent or less, as in the case of Grasim Industries, Mavoor? The officials in the unit have already expressed concern over the sustained supply of forest-based raw materials to the unit. They are of the opinion that, in the years to come, the performance of the unit would largely depend on the availability of forest-based fibrous raw materials.

A bird's eye view of the sources of supply, the level and percentage share of each, would give some indication to the future scenario of raw material position. Table 15 presents the source-wise supply of forest-based raw materials and their respective percentage shares. One may note that, on an average, more than 90 per cent of the raw material supply is from government sources. What is important to note is the wide fluctuations in supply. Even more important is the fact that supply of raw material to such a big industrial unit as Hindustan Newsprint would inevitably have reduced the supply to the already existing units such as Grasim Industries in view of the limited overall availability of forest area and the long gestation period in growing these materials. A steep decline of governmental supply of raw material to the Grasim Industries, during the first half of the eighties, corroborates this conjecture (see Table 11).

Table 15. Sources of Raw Material, Hindustan Newsprint, Velloor

Year	Government Supply		Private Supply		Total (M.T.)
	(M.T.)	Percentage Share	(M.T.)	Percentage Share	
(1)	(2)	(3)	(4)	(5)	(6)
1985-86	171,384	89	21,470	11	192,854
1986-87	218,774	98	4,430	2	223,204
1987-88	182,152	100	150	0	182,302
1988-89	219,322	90	24,088	10	243,410

Note: M.T. = Metric tonnes.
Source: Hindustan Newsprint, Velloor.

Another dimension of the raw material deficiency is that, apart from collecting fibrous raw materials from within the state, the Hindustan Newsprint, Velloor, is importing pulp from abroad. On an average, more than 30 per cent of the total fibrous raw material supply has been met by imports. The import share increased from 23 per cent in 1985-86 to 39 per cent in 1989-90. What is alarming is the rising import bill which went up from Rs 265.68 lakh in 1985-86 to Rs 772.50 lakh in 1989-90, about a two-fold increase within four years (Table 16). The unit is under severe raw material strain.

Table 16. Import Share of Fibrous Raw Material

Year	Total Cost (Rs Lakh)	Imported Pulp (Rs.Lakh)	Import Share
(1)	(2)	(3)	(4)
1985-86	1,164.82	265.68	23
1986-87	1,044.41	338.17	32
1987-88	1,551.62	683.00	44
1988-89	1,335.95	351.67	26
1989-90	1,986.08	772.50	39

Source: Hindustan Newsprint, Velloor.

Bringing together the observations based on our case studies we may note that the inadequate supply of forest-based raw materials is the most important factor which plagues the Pulp and Paper industry. New units are started after entering into contract with the state government for collecting raw materials from forests. However, the state government fails to meet the requirements of the units because of the limited forest area and the long gestation period involved in raising these materials. As a result, the raw material supply shrinks and the units enter into the stage of morbidity or even mortality.

Need for Demand Supply Management of Forest-based Raw Materials

Distorted structure of supply mechanism together with inefficient pricing policy seem to have been the twin important dominating factors that lead to the present raw material crisis. Forests and forest plantations are cultivated, maintained and controlled by the state government; the companies enter into contracts with the government for the procurement of raw materials. Many a time, however, the government fails to meet the requirements as a result of the unreliable assessment of the quantum of these materials that the forests are in a position to supply on a sustained basis, on the one hand, and unscientific management of forests and forest plantations, on the other. Further, absence of long term raw material planning and lack of co-ordination among various departments relating to forest and forest plantations are the other dimension of the problem.

Apart from the lopsided management of forests and forest plantations, the pricing policy appears to have been a constricting factor. Interestingly, it seems as if it was the responsibility of the state government to meet the entire demand for inputs. What is important to note in this regard is that the companies are paying a 'royalty', not a 'price', for the procurement of the raw materials. Royalty, by definition, is a payment for collecting a free gift of nature. The idea of royalty might have been mooted when these materials were available in plenty in the forests which, it must have appeared then, require practically no maintenance. Inevitably, the pricing policy might have come in the way of smooth supply of the raw materials when the supply became a costly affair.[5] The problem comes into sharp focus when the royalty and the open market price of these materials are compared. In 1963, the royalty for bamboo was as low as Re 1 per tonne; at present the payment for the eucalyptus per tonne is Rs 250 and Rs 110 for the private and public sector, respectively, while the cost of cultivation of the eucalyptus per tonne is more than Rs 900 per tonne. Any attempt to raise the rate of royalty, the companies feel, would adversely affect their profitability. The point to note is that the Pulp and Paper industry has been enjoying an indirect subsidy in procuring/purchasing raw materials even after the lapse of a long period of time since commencement of its production. The consequence of this subsidy has two important aspects: on the one hand, the industry, particularly units in the private sector, lost ingenuity and competi- tiveness in making use of the available alternative raw materials in the state such as rubber wood, bagasse, waste paper, etc., and on the other, the state government has been losing huge amount of income.

If there is any permanent solution to this raw material problem, that would lie in scientific management of demand and supply of these materials. This inevitably involves proper understanding of the capability of forests and forest plantations in supplying these materials, taking the ecological and environmental problems and the demand from various industrial units into account. In this venture the entire responsibility should not rest with the government; the industrial units should come forward to raise their own required plantations so that the balance between demand and supply could be adequately met with. However, strict monitoring on the part of government is required to maintain the minimum conditions for environmental preservation. Apart from the management aspects, more important is the fact that under the present scenario of declining forest area as a result of the pressure from extensive agricultural cultivatior, the research and development to find alternatives for forest-based fibrous raw materials requires revitalisation.

Conclusions and Policy Implications

Industrial stagnation in the regional economy of Kerala has been attracting attention of many scholars and it has been well documented in the literature. However, analysis based on productivity which is considered all over the world to be the robust index in efficiency measurement, is seldom found. We examined the productivity growth in Pulp and Paper industry, one of the major industries in Kerala, *vis-a-vis* the four industrial groups and the state industrial sector as a whole. The productivity estimates include partial as well as total factor productivity. The estimates show that, on an average, total factor productivity growth has been declining over the years. In the case of partial productivity estimates, while there are some signs of improvement in labour productivity, capital productivity has been on the decline. In the case of the Pulp and Paper industry, both labour and capital productivity have shown significant declining trends.

The fact that the measure of productivity growth does not give any hint about the plausible forces underlying the declining productivity, we examined the implicit assumptions behind the estimation of productivity. Productivity estimates presume constancy in capacity utilisation and price level. We estimated capacity utilisation, based on minimum capital-output ratio, and measured its influence on the productivity measure within the framework of a regression analysis. It has been found that capacity utilisation influences the productivity measure significantly. For a deeper understanding of the problems at hand, two case studies have been made (one each from the private and the public sectors). Our explorative attempt has shown that productivity estimates are influenced by level of capacity utilisation and changes in price level. At low levels of capacity utilisation, input supply of forest-based materials is found to be critical. The scarcity of material supply is traceable to lack of co-ordination and management, absence of a planning process and inefficient pricing policy. The prospective supply of these raw materials could be ensured by making the respective industrial units, at least in part, responsible for raising their own plantations.

The conclusions that emerge from the study have important policy implications for the Pulp and Paper industry, both at the investment decision level and at the level of individual industry-specific improvements. The performance of the Pulp and Paper industry is well below that of other industries. Therefore, any attempt towards increasing the number of units would result in further suboptimal use of the available scarce resources in the state. On the other hand, increasing the utilisation level of available capacity by making available enough supply of raw materials together with technological improvements would be a prudent policy alternative.

Looking from the point of view of the regional economy of Kerala, our analysis points towards some of the inherent impediments to planning for industrialisation of the state. Kerala has concentrated, over the years, on establishing industrial units without giving due attention to the critical input requirements and their availability in the regional economy. An important lesson from the experience of the Pulp and Paper industry is that industrial policies in the past have confused support for modern industries with increase in the population of industries: this seems to us to be a sure road to disaster. The experience of the recently established unit - Hindustan Newsprint, Velloor - facing severe raw material problem even before it could stabilise its operation, is a case in point. Establishment of new industries should be selective, judged in terms of their suitability given the resource base of the state and advantage for the development of the region. It would not be prudent for Kerala, where land is scarce and highly fertile, to establish industries which require large areas of land to be devoted for their raw material requirement. What we need is therefore industries which could absorb the educated unemployed, demand low amounts of capital per unit output and do little damage to the environment.

Another message of the paper is that, seen from the point of view of approaches to productivity analysis, the implicit assumptions of the productivity estimations - constant output-input price ratio and capacity utilisation - very often distort estimates of productivity growth and that examination of the variations of factors assumed away may shed useful light on the plausible causes for such distortions.

NOTES

1. Kerala and Sri Lanka, hitherto held as models for developing countries for their high quality of life in terms of expectation of life, educational facilities, infant mortality and health care and so on, have been losing the qualification on account of stagnation in income levels, particularly among the poor.

2. Another limitation of the conventional productivity estimate is that it does not permit the distinction between technological change and technical efficiency with which known technology is applied to production. More often than not, in fact, the concept of total factor productivity change is used in the productivity literature synonymously with technological change.

3. For derivation see Goldar, 1986, Pp. 15-20.

4. See for details Klein and Long, 1973, p. 746.

5. For a discussion on pricing of forest based cellulosic materials for the pulp and paper industry, see Gupta, 1988.

REFERENCES

Christensen, L.R., D.W. Jorgenson and L.J. Lau, 1973; 'Transcendental Logarithmic Production Frontiers', *Review of Economics and Statistics*, Vol. 55, No. 1.

George, K.K., 1993; *Limits to Kerala Model of Development: An Analysis of Fiscal Crisis and Its Implications*, Centre for Development Studies, Thiruvananthapuram.

George, Sunny, 1991; *Paper Industry in Kerala: An Evaluation of Labour Absorption, Capacity Utilisation and Environmental Pollution*, Unpublished Ph.D. Thesis, Department of Applied Economics, Cochin University of Science and Technology, Cochin.

Goldar, B.N., 1986; *Productivity Growth in Indian Industry*, Allied Publishers, New Delhi.

Gregg, Paul, Stephen Machin and David Metcalf, 1993; 'Signals and Cycles? Productivity Growth and Changes in Union Status in British Companies, 1984-9', *The Economic Journal*, Vol. 103.

Gupta, Tirath, 1988; *Forest-based Cellulosic Materials for the Paper Industry in India: Demand-Supply Management and Pricing Policy*, Oxford and IBH, New Delhi.

Kaldor, Nicholas, 1966; *Causes of Slow Rate of Economic Growth of United Kingdom*, Cambridge University Press, London.

Kannan, K.P., 1990; 'Kerala Economy at the Crossroads', *Economic and Political Weekly*, Vol. XXV, Nos. 35 and 36, Pp. 1951-56.

Kendrick, John W., 1961; *Productivity Trends in the United States*, NBER, No. 71, Princeton University Press, Princeton.

Kendrick, John W., 1991; 'Appraising the U.S. Output and Productivity Estimates for Government - Where do We Go from Here', *Review of Income and Wealth*, Series. 37, No. 2.

Klein, Lawrence R. and Virginia Long, 1973; 'Capacity Utilisation -Concept, Measurement and Recent Estimates', *Brooking Papers on Economic Activity*, Vol. 3.

Nadiri, Ishaq M., 1970; 'Some Approaches to the Theory and Measurement of Total Factor Productivity: A Survey', *Journal of Economic Literature*, Vol. VIII, No. 4.

Oommen, M.A., 1991; 'Development Experience, Development Priorities and Fiscal Resources of Kerala', *People and Development* (Supplement), April-May, 1991.

Solow, R.M., 1957; 'Technical Change and Aggregate Production Function', *Review of Economics and Statistics*, Vol. 33, No. 3.

Subrahamanian, K.K., 1990; 'Development Paradox in Kerala: Analysis of Industrial Stagnation', *Economic and Political Weekly*, Vol. XXV, No. 37.

Subrahamanian, K.K. and P. Mohanan Pillai, 1986; 'Kerala's Industrial Backwardness: Exploration of Alternative Hypotheses', *Economic and Political Weekly*, Vol. XXI, No. 14.

PROGRESS OF AGRICULTURAL EDUCATION IN INDIA

F.K. Wadia

The importance of agricultural education, for improvement of agriculture, was stressed even as early as in the 1890s. In the hundred years that have passed since then, a number of educational centres from the farmers' levels to agricultural universities and research organisations have been set up in different parts of the country.

The need for agricultural education in the country was felt as early as in the middle of the nineteenth century. In 1889, the Home Department of the Government of Great Britain, in their Resolution on Technical Education, imposed upon both the Agriculture and Education Departments of the Government of India, 'the obligation to take positive measures for the education of the rural classes in the direction of agriculture... Consequently, the Agricultural Departments, both Imperial and Provincial had before them the positive duty of promoting both Agricultural Improvement and Agricultural Education' [Macdonnel, 1906, Pp. 2-5].

In the same year, the Secretary of State sent out to India Dr. J.A. Voelcker, the Consultant Chemist to the Royal Agricultural Society in England, to 'advise upon the best course to be adopted in order to apply the teachings of Agricultural Chemistry to and in order to effect improvements in Indian agriculture'. Voelcker submitted his report in 1893. In his chapter on Agricultural Education, Voelcker opined that: 'It is not enough that improvements in agriculture should be effected by direct Government agency, and that measures, the result of enquiry and experiment, should be taken in the people's benefit, but it is necessary also that the people themselves should be brought to in intelligent understanding of what is being done, and that the endeavour be made to teach them how they may help themselves. This is the work of Education' [Voelcker, 1893, p. 378]. Voelcker pointed out the influence which general education, and more specially agricultural education would exert upon the improvement of agriculture. He recommended a more agricultural turn to education starting from the University level downward; he maintained that universities should recognise the importance of agricultural science by making it an optional subject in the final course for a degree in science. It was not advisable, for the time being, to set up Agricultural Universities. The importance of combining practical work with theoretical instruction at colleges was set forth, and the establishment of Demonstration Farms, and of areas where students could themselves work was advocated. At the High School level, agricultural classes, should be taken in association with illustration farms. In the Middle Schools it was held that the elements of physical science should be taught, that agriculture should be taught by means of text-books, and that illustration *plots* rather than *farms* should be attached to the schools. In primary schools, a beginning might be made by the introduction of readers and of object lessons on familiar agricultural topics. Voelcker summarised his recommendations as '(1) the spread of general education; (2) the extended introduction of agricultural education into the general educational system; (3) the preparation of agricultural text-books, suitable to the different parts of the country; and (4) the recognition of the claims of passed students in agriculture to appointments in Land Revenue and cognate Departments' [Voelcker, 1893, p. xxii].

During the 1890s, Agricultural Colleges were represented principally by 'institutions at Saidapet (Madras), the College of Science at Poona (Bombay)' and one established in the 'Native State of Baroda' [Voelcker, 1893, p. 327]. In addition, the University of Bombay imparted a diploma course in agricultural science. There were also a number of High Schools, such as in Nagpur, Nadiad and Belgaum, visited by Voelcker, which conducted agricultural classes and maintained demonstration farms.

Agricultural Conference, 1893

Following Voelcker's report, the Department of Revenue and Agriculture held a Conference of Agricultural Officers of the different provinces during October 2-7, 1893 to examine the report

Miss F.K. Wadia is former Research Fellow of the Indian School of Political Economy, Pune.

and take decisions. The Agricultural Conference passed a number of Resolutions. As regards Agricultural Education, the Conference resolved that '(iii) it is most desirable to extend primary education among the agricultural classes - instruction in agriculture should be combined with the existing course of education, and not depend exclusively on separate special institutions -, Universities should recognise the Science of Agriculture as an optional subject in the course for a degree - elementary principles of agriculture should form a prominent subject in the education which is given to village schools, with the view of creating more interest in agricultural improvement amongst the cultivating classes - early steps to be taken to provide suitable teaching, the best books and readers'. .... '(v) In any province in which it may be determined to introduce a scheme for higher agricultural education, no arrangements will be satisfactory which do not provide (1) for a thoroughly practical training of the students in the field and laboratory as distinct from theory or practice as taught in the lecture room, and (2) for examination tests of a special and searching character in the above branches of work-education in the lower schools should be of such a practical character as to fit the pupils for technical pursuits including agriculture .... ' [Department of Revenue and Agriculture, 1893, Pp. 1-3]. The Agricultural Conference of 1893 had also insisted on the necessity of providing teachers competent to give instruction in the elementary principles of agriculture.

Government of India Resolution, March 1897

In March 1897, the Government of India passed a number of Resolutions, based on Voelcker's Report, the Agricultural Conference of 1893 and a number of conferences held in the Provinces. The Resolution on Agricultural Education traced the history of the discussions over the years and in the provinces. It referred to the dispatches received from the Secretary of State in England in 1854 and 1859 'that a distinction should be made in the educational courses prescribed for the rich, middle and poorer classes, respectively'. It also referred to the views of the Education Commission of 1886 'that by the system under which the three courses were kept entirely distinct, the main object sought was to keep down the standard to the requirements of the masses and not to raise it by considering the wants of the well - to - do classes who are not, properly speaking, the masses'. The Resolution considered 'it expedient to point out that the reforms suggested in the primary education of the vernacular schools were in no way connected with the special wants of the well-to-do classes; that they were founded on general considerations equally applicable to every class; and that if they conduced to the better development of the intelligence of all children, of whatever condition in life, it would seem to be a question whether this advantage should be withheld from the well-to-do classes'.

As regards the position which agriculture should take in the school courses the Resolution 'generally agreed that in the earlier training of boys in the lower primary schools, the interests of agriculture would be sufficiently served by the compulsory instruction in elementary science. .... almost all instructions conveyed in rural schools through the medium of object lessons must acquire an agricultural colouring, because the surrounding objects used for illustration were themselves connected with agriculture'. The Resolution further remarked that 'as in most provinces it was considered that agriculture and sciences ancillary to agriculture should be at least made optional subjects at a later stage in the school curriculum, a distinction would have to be made between instructions designed for general educational purposes and course of study leading to an agricultural diploma or degree'. Uniformity of readers and text books in India was impossible - the difference in language, of climate and physical conditions, of the natural objects used for agricultural lessons, or as illustrations of school books or of local customs and practices, would make insurmountable obstacles to uniformity of text in readers and primers required for educational purposes.

As regards higher agricultural education, the Resolution concluded as follows: (1) agricultural degrees, diplomas or certificates should be placed on the same footing as corresponding literary or science degrees, etc., in qualifying for admission to government appointments; (2) there should not be more than four institutions giving a high-class diploma, namely, at Madras, Calcutta and Bombay, and some place in North-Western provinces and these should be utilised by other provinces; (3) the diploma should eventually be compulsory in the case of certain appointments, e.g. agricultural teachers at training schools, assistants to the director of agriculture, etc.; (4) practical instruction of candidates for certain subordinate appointments at a school class or an experimental farm should be further considered; (5) that a special school course leading up to the agricultural diploma, degree or certificate was required; and (6) the practice of allowing school masters either before or after appointment to pass through a course of a few months on a government farm deserved consideration [Voelcker, 1897, Pp. 492-506].

In June 1903, the Government submitted to the Secretary of State, a scheme for the establishment of an agricultural research institute, an experimental farm and an agricultural college at Pusa in the Darbhanga district of Bihar, where a large government estate had been placed at their disposal by the Government of West Bengal for the purpose. Accordingly, a research station with fully equipped laboratories, an experimental farm, an agricultural college, subsequently called the Imperial Agricultural College, and a cattle farm was established on Pusa estate. The experimental farm was to be utilised for the practical training of students at the Imperial Agricultural College and provide experimental field areas for scientific purposes. The College itself was to serve as a model for agricultural colleges in, other provinces and to provide for a more complete and efficient agricultural education than was then possible in any of the existing institutions.

Lord Curzon's Government fully realised that a central institution under the direct control of the Government of India could only be the apex of their scheme, and that such an institution would be valueless unless there were at the same time a real development of agriculture in the provinces. In 1905, therefore, in addition to the institute set up at Pusa, the Government of India announced their intention to promote the establishment of agricultural colleges with a course of three years' duration in all the provinces and the provision of an expert staff for these institutions for purposes of research as well as for instruction. The link between the colleges and the districts was to be provided by an experimental farm to be established in each large tract in which the agricultural conditions were approximately homogeneous and by numerous small demonstration farms which were to carry the work on experimental farms a stage further [Linlithgow, 1928, Pp. 29-33].

Between 1905 and 1925-26, Agricultural Colleges were set up at Poona, Coimbatore, Lyallpur (now in Pakistan), Cawnpore, Nagpur, Mandalay (now in Myanmar), Pusa and Bangalore. Agricultural education in village and middle schools was introduced in most of the provinces; agricultural schools for rural boys in the age-group of 11-16 were also set up. In addition, short duration courses were undertaken at Pusa and other research institutions.

Royal Commission on Agriculture, 1928

The Royal Commission on Agriculture (RCA) with Lord Linlithgow as Chairman, was appointed in April 1926 to investigate among other matters 'the measures now being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education; for the compilation of agricultural statistics; for introduction of new and better crops and for improvement of agricultural practice, dairy farming and breeding of stock' [Linlithgow 1928, Pp. i-ii]. The Commission submitted its report in 1928. It recommended the setting up of an Imperial Council of Agricultural Research

(ICAR) to promote, guide and coordinate agricultural research throughout India. One of the most important functions to be taken up by the ICAR was to be in regard to the training of research workers. Part of its funds were to be utilised in the provision of research scholarships tenable by students who had given evidence that they were capable of taking full advantage of an opportunity for intensive training in scientific research in agriculture.

According to the RCA, it was essential that India should become self-contained in the matter of higher agricultural training at an early date. For this purpose, the organisation of Pusa as a centre for such education should be proceeded with. It was unnecessary to affiliate Pusa to a university.

The RCA stressed the need for the spread of primary education in the rural areas, if necessary through an element of compulsion. No attempt was however to be made to teach agriculture to boys in primary schools, either theoretically as nature study or practically in school gardens. The RCA visited the 'Loni' type schools in Bombay Province wherein vocational training was given to boys in the age group fourteen to seventeen who belonged either to cultivating or land holding classes. It recommended that no more such schools should be opened, as there was little demand for such middle schools, and they were unduly expensive. Instead, vernacular schools on the lines of the Punjab experiment which included agriculture as an optional subject in the curriculum were preferable. School farms were preferred to school gardens in such institutions, provided teachers competent to manage them were obtained. Teachers for primary and middle schools should be recruited to the utmost practical extent from men of rural origin and upbringing. The preparation of suitable text-books for use in primary schools in rural areas should be undertaken by text-book committees specially appointed for the purpose. The addition to the curriculum of high schools in rural areas of a course in agriculture, on the lines of that given in vernacular middle schools of the Punjab type but of more advanced character, was also necessary.

As regards university education, the RCA recommended the affiliation of agricultural colleges to universities. The agricultural colleges should make their influence felt on all branches of rural education. The intermediate examination in science of the provincial university or/an equivalent examination should be made an essential qualification for admission to the graduate course in all agricultural colleges. Greater prominence should be given to the teaching of agricultural economics and farm management in the college course, and fully qualified teachers should be appointed to give instructions in these subjects. Miscellaneous short duration courses conducted by the agricultural colleges should be continued but should ordinarily terminate in an examination of a practical character [Linlithgow, 1928, Pp. 513-63].

Based on the RCA's recommendation, the Imperial Council of Agricultural Research (ICAR) was set up in 1928. Various provincial governments also constituted Provincial Research Committees during the period 1929 and 1931. In 1934, the Central Agricultural Research Institute which was set up at Pusa, got practically destroyed in the Bihar earthquake. In view of the logistic problems entailed in reaching Pusa, the Government of India decided to shift the institute to Delhi, where it was set up in 1936. In 1944, the Advisory Board of the ICAR decided that a memorandum on the development of agriculture and animal husbandry in India should be prepared by a committee for the consideration of the Board. A memorandum was submitted by the Committee to the Board, which among other matters, recommended the strengthening of the provincial organisations for research, education and extension activities, so that the cultivators in all villages were able to avail themselves of the results of research. Training to the staff and employment of demobilised soldiers was also recommended [ICAR, 1944, Pp. 6-7]. In 1944 itself, the Agricultural Education Committee of the Central Advisory Board of Education suggested that agricultural schools, colleges and university departments should be opened so that agricultural education could be imparted with general education.

Independence and After

The Imperial Council of Agricultural Research changed its name in March 1947 to the Indian Council of Agricultural Research (ICAR). One of the responsibilities of the ICAR is the promotion and coordination of agricultural education in India. Accordingly, the Indian Council of Agricultural Education (ICAE) was established under the overall control of the ICAR and charged 'with the responsibility of bringing about greater standards of uniformity in the agricultural curricula and serve as a forum for discussion of problems and issues concerning, agricultural education within a national perspective' [NAARM, 1988, p. 204]. Besides, the ICAR had directly involved itself in higher education, by offering post-graduate degree and diploma programmes in various disciplines of agriculture through its own institutes.

Report of the University Education Commission, December 1948 - August 1949

In November 1948, the Government of India appointed the University Education Commission with Dr Radhakrishnan as chairman 'to report on Indian University Education and suggest improvements and extensions that may be desirable to suit present and future requirements of the country' [Radhakrishnan, 1949, Vol. I, p. 1]. The Commission submitted its report in August 1949. With regard to agricultural education, the Commission stated that 'Only a very large expansion of facilities for agricultural education will meet the national need...... Education in a rural setting, with part-time rural work for students, will tend to adjust the students to rural life and to correct the present condition in which not one agricultural graduate in twenty returns to the village and to agriculture. The system of agricultural education in the country will have to keep three definite objectives in view:

'(1) The training of farmers' sons who will go back to their farms and work on them more efficiently.

'(2) The training of a variety of persons for the important task of carrying the results of modern agricultural research to the peasant, persons who will be engaged in the work of agricultural education, extension and demonstration in different capacities and may be employed for this purpose by the state or by private agencies.

'It has been estimated that the Central Government and the provincial governments will, in the course of the next decade, require for their programmes of agricultural development about 20,000 field assistants for agriculture; 20,000 stockmen for animal husbandry; 10,000 non-graduate assistants for agriculture; 4,000 inspectors for animal husbandry (graduates of the rank of veterinary hospital surgeons); 300 gazetted officers for agriculture; and 550 gazetted officers for animal husbandry.

'(3) The training of persons for the important task of carrying on the work of research, developmental and fundamental, relating to problems of agriculture and animal husbandry. The first of these tasks will be taken up mainly by our basic and post-basic schools. Schools with agriculture as the basic craft should be established in large numbers. The training of the field assistants can be undertaken by the Farm Institutes situated on model farms, and perhaps associated with resident rural high schools. They should require completed basic education as the minimum qualification for admission to a one-year course' [Radhakrishnan, 1949, Vol. I, p. 198].

'The non-graduate assistants should be trained at agricultural schools (of which there are only nineteen in the country), and at resident rural high schools (agricultural high schools) which may be established according to the proposals of the Central Advisory Board of Education in their scheme of post-war educational development. They should involve a total schooling of twelve years as we have recommended for all higher secondary education.

'The graduate assistants should get their education and training at the agricultural colleges and rural and other universities. The course of study should be of three years duration in the case of agriculture, and four years in the case of animal husbandry, after the completion of twelve years of schooling, and should lead to the degree of B.Sc.(Ag.).

'Many more such colleges and university departments and faculties of agriculture should be established if our pressing needs for trained personnel are to be met. Provision should be made at these colleges and universities for a two-year course after the B.Ag. leading to the master's degree as well as for the doctorate which should be awarded on research in some special field of work not less than two years after the M.Ag.

'Especially in agriculture, the highest capacity for usefulness may not coincide with the longest period of academic training. In the past, bookishness has greatly limited the value of agricultural education. There should be no hierarchy of advancement based on degrees. Actual ability should be recognized and given opportunity regardless of how the ability has been achieved' [Radhakrishnan, 1949, Vol. I, p. 199].

The Commission recommended the setting up of rural universities in the country. 'A rural university should include a ring of small resident undergraduate colleges with specialised and university facilities in the centre. The suggested number of students for each of the undergraduate, resident colleges is about three hundred and maximum over-all enrolment for colleges and university combined about twenty five hundred' [Radhakrishnan, 1949, Vol. I, p. 575].

The First Five Year Plan 1951-56

The next to comment on the unsatisfactory state of agricultural education in the country was the Planning Commission in the First Five Year Plan. The Plan pointed out that 'The ability of the extension service to appreciate the difficulties of the farmers and to render effective assistance in resolving them are factors which will largely contribute to the success of the agricultural programme. The extension staff, particularly at the village and tahsil level, has to be properly trained and equipped for this work. Provision of adequate teaching and training facilities for this staff is an important aspect of agricultural education. Another equally important but broader aspect is the education of the cultivators, so that they may practice scientific agriculture'.

'The main defect of the extension work carried on hitherto has been its relatively greater reliance on propaganda rather than on actual demonstration to the cultivator under his field conditions. This is largely due to insufficient stress being laid in agricultural institutions on practical work and on correlation of practice with theory. The complaint that students from agricultural institutions prefer jobs to private agriculture largely arises from this drawback. A trainee must be moulded physically and mentally into the practice of the "dirty hands" method, before he can be expected to demonstrate it successfully in the field, or practise it himself in his own cultivation. We commend the Manjri pattern of two year schools in the Bombay state as the best for ensuring that this background is sufficiently emphasised. These are boarding schools, and every item of work on the farm where the school is located has to be done by the students; servants are allowed on the farm only during the vacation period. The schools have the additional advantage of being less costly and of enabling the student to supplement his income during the school period. They supply village-level workers, and also offer agricultural training to sons of cultivators. Their drawback is that a student passing out from such a school is not able to prosecute his studies further in an agricultural college. This handicap should be removed by extending the course by one year for those who want to prosecute their studies further. This may necessitate a special admission examination for them by the agricultural college' [Planning Commission, 1953, p. 267].

'All village-level workers are trained either at agricultural schools or in special training centres. The total number of schools in the country is 38 and ten more will be started during the Plan period. The training period in the schools generally extends from two to three years. We recommend that all existing schools should be converted into the Bombay type of school as early as possible. As the full requirements of the village-level staff cannot be met by the existing schools and a large number of village-level workers are immediately required for manning the Community Projects, 30 special centres have been organised through the help of the Ford Foundation. The training period at these centres is only six months, as ordinarily the trainees have a previous training in an agricultural school or a knowledge of practical agriculture'.

'There are 22 agricultural colleges turning out annually about 1,000 graduates, a large proportion of whom are employed by the Agricultural Departments for extension, research and educational work. These colleges, even in a greater measure than the schools, suffer from the same complaint of insufficient stress on practical work. Recognising this drawback, the Indian Council of Agricultural Education, recently set up by the Indian Council of Agricultural Research, has suggested that the course should include supervised intensive practical training under rural conditions for a period of two months every year. Another drawback of college education is the absence of facilities for specialisation in extension and farm management. Post-graduate education in research only is available. The result is that the responsibility for extension work or management of farms falls on a person, who has only received a general education in agriculture. A person would be better qualified for service either in the extension or farm management branch, or in the research and teaching branch after he has intensively studied these subjects. If the agricultural college course after graduation is considered too long for these qualifications, facilities should be provided for a bias in the field of special interest in the final year' [Planning Commission, 1953, p. 268].

The Plan further recommended that 'short practical courses for farmers of a general nature in different fields of agriculture such as compost making, pre-sowing treatment of seed crop protection, cattle feeding, etc.', could be held on 'Demonstration Farms at short periods' [Planning Commission, 1953, p. 268].

Progress During the First Five Year Plan

The decision to organise community projects and to spread the national extension service to the entire country during the period 1951 to 1956, served as a new factor in the development of training facilities. The most important of the new types of personnel required were village level workers (VLWs) who had to receive both basic agricultural training and training in extension, cooperation and other activities. As a result 44 extension training centres were established and these turned out 14,426 village-level workers during the first Plan period. In all, 54 basic agricultural schools and wings were set up and, of these, 14 came into existence in the last year of the Plan. In 1955-56, 7 group level workers' training centres were established and these turned out 1,843 supervisory personnel. Also, in the same year, 19 home science centres were set up and programmes for the training of *gram sevikas* expanded.

'The training facilities available for different kinds of personnel required for agricultural and allied programmes were reviewed from the point of view of the requirements during the second five year plan. As a result of this review, steps were taken to expand training facilities at the existing agricultural colleges in Assam, Hyderabad, Madras, and Madhya Bharat, to develop further and rehabilitate the Punjab Agricultural College at Ludhiana, and to establish new agricultural colleges in Rajasthan, Bihar and Travancore-Cochin. These measures led to the addition of training facilities for 390 agricultural graduates. The annual admission of agricultural graduates increased from 1,292 in 1953-54 to 1,894 in 1955-56' [Planning Commission, 1957, p. 102].

First Joint Indo-American Team on Agricultural Education, Extension and Research, 1956

'A joint team of Indian and American specialists was appointed by the Central Government in 1954 to make a comparative study of the organisation, functions and working of Indian and American institutions engaged in agricultural education and research and to recommend steps for removing critical deficiencies in the present methods and facilities in the field of agricultural research and education' [Planning Commission, 1957, p. 102].

'The Team endorsed the recommendation of the University Education Commission that wherever possible, each state should develop a rural university. Particular places that the Team felt were fit to be considered for establishing a rural university included Uttar Pradesh (*Tarai*), West Bengal (Haringhatta), Bihar (Patna), Orissa (Bhubaneswar), Travancore-Cochin and Bombay State (Anand). Second, the Team suggested that post-graduate colleges be established by the Government of India at the Indian Agricultural Research Institute and the Indian Veterinary Research Institute, among other places' [Randhawa, 1986, Vol. IV, p. 184).

The Team further 'recommended that the agricultural colleges introduce training courses for extension workers and that necessary additions to the curricula be developed to promote undergraduate specialisation in extension. The Team also pointed out the need to provide research opportunities to the teaching staff, particularly in the veterinary colleges, as a preliminary to upgrading of the institutions to postgraduate training centres. The Team envisaged that one faculty member should be able to deal with 15 to 20 students, and that the curricula of the veterinary colleges should be overhauled by a suitable agency to be set up by the Indian Council of Agricultural Education. Similarly, measures should be taken to scrutinise syllabi, text books and teaching methods. The Team also recommended that the current system of university examination should be overhauled. They suggested that education in animal husbandry should be strengthened. The library facilities available in the veterinary colleges were also found to be inadequate, and the Team recommended that the State Governments should provide sufficient funds to meet the needs of the colleges for books, buildings and equipment. The Team also emphasised the need for increasing the number of home-science colleges and locating them alongside agricultural colleges with central subsidy, if necessary. The Team was strongly of the opinion that the ICAR should play an increasingly important part in the development of higher education in agriculture, veterinary science and related fields, and that it should constitute a forum, partly through a journal of Agricultural Education for the discussion of problems relating to education at all levels' [ICAR, 1960, Pp. 7-8]. The recommendations of the Team were accepted by the Government in principle and some of them were implemented.

Second Five Year Plan, 1956-61

Considerable attention was to be given during the Second Five Year Plan for stepping up training facilities in the agricultural sector. 'As regards agricultural graduates, requirements during the second plan are estimated at roughly 6,500. On the basis of the existing training facilities, a deficit of about 1,000 graduates is expected and to make good this shortage, States have framed schemes for strengthening existing colleges, in order to increase their capacity, ... in some cases new colleges have been planned. ...... the demand for village level workers is of the order of 38,000 persons. To meet this demand the number of institutions, imparting basic agricultural and extension training will be increased to 158 during the operation of the second plan. In order to meet the estimated demand of 11,400 group level workers it is proposed to set up 21 group level workers training wings at the extension training centres, in addition to the 17 wings already in operation.

'The requirements of veterinary personnel estimated at about 6,000 veterinary graduates will be met through schemes involving: (a) commencement of the double shift in some of the existing colleges; (b) expanding the capacity in other colleges; (c) establishment of four new colleges; and (d) setting up of 10 schools providing short-term emergency courses in veterinary science' [Planning Commission, 1956, p. 171].

'With the decision to introduce the national extension service over the entire country, proposals to expand the available facilities for agricultural education were also considered. Bihar, Rajasthan and Travancore-Cochin were assisted in establishing new agricultural colleges. In Assam, Hyderabad, Madras, Madhya Pradesh and Punjab, the existing agricultural colleges have been strengthened. Two new colleges are being established in Madhya Pradesh. The number of agricultural colleges has now risen to 28 and these institutions will be able to meet the total requirements of agricultural graduates during the second five year plan ..... For the training of village level workers, in addition to the existing 54 basic agricultural schools and 44 extension centres, it is proposed to establish 25 new basic agricultural schools, 21 extension centres, and 16 basic agricultural wings attached to extension training centres' [Planning Commission, 1956, p. 276].

Report of the Agricultural Personnel Committee, March 1958

In March 1957, the Planning Commission felt it necessary to make a fresh assessment of requirements for trained personnel in the agricultural sector during the Second and Third Plan periods, as well as of training for such personnel. The Commission therefore set up the Agricultural Personnel Committee '(i) to examine the present position in regard to the supply of trained technical, scientific and administrative personnel, with special reference to existing or expected shortage; (ii) to make a fresh assessment of requirements for trained personnel during the Second and Third Five Year Plans, keeping in view the increased targets of agricultural production and the long-term proposals of development in different fields; (iii) to review the present programmes for the expansion of training facilities and progress made in their implementation; (iv) to recommend measures for augmenting training facilities and to formulate a phased programme for giving effect to them; and (v) to make such other proposals as may be necessary' [Planning Commission, 1958, Pp. 1-2]. The Committee submitted its report in March 1958.

The Committee estimated that, in the agricultural sector, there would be need for 8,900 agricultural graduates, during the period June 1957 - March 1961. The requirements of agricultural graduates in the entire agriculture sector during the Third Plan period was estimated at 27,500, resulting in an annual demand for agricultural graduates of 5,500. For such an annual output, it would be necessary to provide facilities for admission of 6,000 students yearly as against the admission of 2,600 in 1957-58. For meeting the additional requirements of the Third Plan, the Committee felt that 'the quickest way would perhaps be to expand, wherever possible, the existing institutions, to the desired level without lowering the efficiency of training. On the assumption that the admission potential in the existing institutions would be increased to 4,500 annually and that the new Agricultural University proposed to be established at Rudrapur (Uttar Pradesh) would take about 200 students per year, there would still be need for the establishment of eight new institutions with a total of 1,300 seats' [Planning Commission, 1958, p. 90]. The Committee recommended that new institutions could be set up in States or zones where the gap between the output and prospective demand was the greatest. The work on these institutions should commence during the Second Plan period itself.

The Committee found the training given to village level workers very inadequate. It seemed desirable that the village level workers should possess a degree in agriculture or a level of training roughly equivalent to that of an agricultural graduate.

Second Joint Indo-American Team on Agricultural Education, Research and Extension, July 1960

In September 1959, the Government of India appointed a Second Joint Indo-American Team to evaluate the progress of work pertaining to Agricultural Education, Research and Extension during the past five years, review the arrangements concluded in 1955 with the five Land Grant Universities of the USA under the Indo-US Technical Co-operation Programme, and make recommendations with regard to Agricultural Education, Research and Extension with special reference to the Third Five year Plan. The Study Team submitted its Report in July 1960.

The Study Team recommended that the arrangements with the five Land Grant Universities of the USA should continue at least through the Third Five Year Plan, and that the post-graduate programmes and the examination system should be developed after the pattern of the Indian Agricultural Research Institute. Assistance to establish an agricultural university should not be granted unless there was adherence to basic principles such as (a) autonomous status, (b) location of Agricultural, Veterinary/Animal Husbandry, Home Science, Technological and Science Colleges on the same campus, (c) integration of teaching by offering courses in any of these colleges to provide a composite course, and (d) integration of education, research and extension. The technical staff of the Indian Council of Agricultural Education should be strengthened and an agricultural education pattern should be developed covering the vocational schools, the multipurpose high schools, agricultural colleges and universities.

Progress in the Second Plan

The state governments were provided with financial assistance during the second plan period for the establishment of new agricultural and veterinary colleges and expansion of training facilities in existing institutions at the under graduate and postgraduate levels. The number of persons admitted to these institutions increased from 1,454 in 1954-55 to above 5,500 in 1960-61 in agricultural colleges and from 910 to about 1,300 in veterinary colleges during the same period. The Agriculture University at Pantnagar (Rudrapur) in Uttar Pradesh started functioning from July 1960, with the constituent colleges, namely, the College of Agriculture and the College of Veterinary Medicine with a capacity to provide training facilities to 150 and 100 students, respectively. Under the inter-institutional arrangements concluded with the Technical Cooperation Mission of the U.S. Government (TCM), five American Land Grants colleges continued to provide during the year, assistance to 45 Indian agricultural and veterinary colleges by way of inter-change of staff, items of laboratory equipment and books [Ministry of Food and Agriculture, 1961, Pp. 47-48].

Third Five Year Plan, 1961-66

The Third Plan envisaged an increase in the number of agricultural colleges from 53 to 57 and the annual intake of students from 5,600 to 6,200 during the period 1961-66. The total requirement of agricultural graduates for the Plan period was estimated at 20,000 and these were expected to be met with the increase in the number of colleges and students. Proposals for setting up new agricultural universities during the Plan period were under examination [Planning Commission, 1962, p. 322].

Report of the Education Commission, 1964-66

'The Education Commission was appointed by the Government of India by Resolution dated 14 July, 1964 to advise Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects' [Kothari, 1966, p. (i)]. The Commission submitted its Report in June 1966.

According to the Commission, 'the programme of education for agriculture' should 'be based on three main elements - *research* or the development of the appropriate technology, *extension* or the communication of the technology to practising farmers, and *training*, of the needed personnel' [Kothari, 1966, p. 348].

A summary of the recommendations for agricultural education made by the Commission, are given below:

'**Agricultural Universities:** At least one agricultural university should be established in each State: (1) Beginning with traditional agricultural specialities, these universities should gradually extend their scope of studies to cover a wide range of specialised courses to suit the needs of the day. (2) A clear delineation of responsibilities between Agricultural Universities and the State Departments of Agriculture is necessary. The former should take over all research, education and extension programmes. (3) Post-graduate work should become a distinctive feature of the Agricultural Universities which should be staffed with adequately trained personnel....... [N]o institution should be allowed to undertake post-graduate instruction unless it has adequate, integrated facilities for education and research. (4) Central Research Institutes like the Indian Agricultural Research Institute (IARI), the Indian Veterinary Research Institute (IVRI), the National Dairy Research Institute (NDRI) and the Agricultural Universities should constitute suitable centres for strong post-graduate schools in agriculture. Close coordination among these institutions on the one hand and with ICAR on the other should be established. (5) Admission to postgraduate courses should not be restricted to agricultural graduates only. Talent from as many fields as possible should be harnessed to the betterment of agricultural research and education. (6) To enable the students to undertake independent study and to ensure their introduction to research as early as possible, each university should have a well-equipped library with adequate staff. (7) Coordinated problem-and-production oriented research projects recently evolved by the ICAR should be developed further. (8) Duration of first degree course should ordinarily be five years after ten years of schooling. (9) *Teachers:* For as many of the staff members as possible, there should be integrated assignments between classroom teaching and laboratory research, experimental research and work in the field with rural people. (10) The University Grants Commission (UGC) scales of pay should be extended to Agricultural Universities also..... (11) The strength of any faculty should be determined by needs and quality of staff and not by any rigid hierarchy. Merit should be the main consideration for promotion within a faculty. (12) The faculties should have reasonable academic freedom. (13) External examinations should be reduced in importance and abolished as early as possible. (14) A large scale programme of teacher training should be undertaken immediately in 5 or 6 existing high quality centres, offering attractive scholarships to graduates in science and agriculture. (15) *Students:* Scholarships awarded should cover not less than 25 per cent of the students in Agricultural Universities. (16) To attract talented students the present scales of pay offered to agricultural graduates should be improved. (17) *Farm:* Well-managed farms, about 1,000 acres in size and with not less than 500 acres of cultivated area, should be attached to every agricultural university. (18) *Internship:* Possibilities of providing one year internship on a well-managed State university demonstration farm before awarding the degree to the students should be explored. (19) *Number, Size and Organization:* In the process of establishing one agricultural university in each State, the possibilities of converting existing universities into agricultural universities should also be studied. (20) While some experimentation should be allowed, it is essential that all agricultural universities should conform to some important principles such as, being single campus universities without any affiliated colleges......' [Kothari, 1966, Pp. 656-657].

Contribution of Other Universities for the Development of Agriculture: (1) Other universities wishing to introduce agricultural studies should be given all assistance. (2) An academic relationship between some of the agricultural universities and the Indian Institutes of Technology (IITs) should be developed. This can take the form, among other things, of an exchange of students and staff, and arranging common programmes of study and research. (3) The possibility of organizing agricultural faculties in one or two of the IITs and in some leading universities should be examined [Kothari, 1966, p. 657].

Agricultural Colleges: (1) New agricultural colleges should not be established and the training of undergraduates and postgraduates in agriculture should be done in agricultural universities. (2) Where agricultural colleges are constituent colleges of a university, it should be assisted to develop strong agricultural faculties. (3) Every agricultural college should have a well-managed farm of at least 200 acres. (4) Quinquennial inspections of agricultural colleges jointly by ICAR and UGC should be undertaken and such colleges as do not come up to the requisite standards should be disaffiliated. Some of the colleges may be converted to offer courses at a higher technician level instead of a degree [Kothari, 1966, p. 657].

Agricultural Polytechnics: (1) Agricultural polytechnics at post-matriculation level should be organized on a priority basis. These should be attached to agricultural universities and be large institutions with enrolments around 1,000 students. To meet immediate needs, courses may also be added to existing polytechnics located in predominantly rural surroundings. (2) The polytechnics should be multipurpose institutions providing training for imparting the wide range of skills needed in agriculture and allied fields. ..... Courses offered should be predominantly terminal in character leading to specific employment, with adequate provision for the exceptionally brilliant students to take up courses in higher education through further study. ..... (3) Attractive scales of pay and adequate qualifications should be prescribed for the staff of these polytechnics [Kothari, 1966, p. 657].

Agricultural Education in Schools: (1) Attempts to train for vocational competence in farming through formal schooling in agriculture at primary and lower secondary levels have failed and further efforts should be held in abeyance. (2) Instead of any narrow vocational training, the school should impart a sound general education with particular emphasis on mathematics and science, as the best preparation for coping with the inevitable rapid changes characterizing our future agriculture. (3) The proposal for setting up a large number of junior agricultural schools is beset with several difficulties and may fail to serve its objectives. It should be abandoned [Kothari, 1966, p. 657].

Agricultural Education as Part of General Education: (1) In all primary schools including those in urban areas, some orientation to agriculture should form an integral part of general education. (2) Agriculture should also be made an important part of the work experience at the school stage. (3) Undergraduate and postgraduate courses in the colleges and universities should give prominence to orientation to rural and agricultural problems. UGC and other authorities should take suitable steps in this regard. (4) Similar orientation in agriculture and rural problems should be introduced in all teacher training programmes [Kothari, 1966, Pp. 657-658].

Extension Programmes: (1) In raising the professional and technical competence of the VLWs and of the specialists who support them, the agricultural university and polytechnics should tender all necessary assistance by making available the specialist staff and by organizing special courses. (2) When the proposed separation of supply services from the extension work takes place, the extension part of it should be transferred to the agricultural university maintaining, at the same time, closest liaison between the extension work, supply and other programme services of the department of agriculture. (3) The target should be to set up at least one primary extension centre in every community development block for purposes of extension work within cycling distance of the area served. It is essential that these centres are manned by staff with a practical knowledge superior to that of the farmers whom they are educating and also that they receive the strongest support and guidance from the extension services of the agricultural university. (4) Greater use should be made of successful farmers in the carrying out of extension work in education about agriculture generally. (5) The individual village farmers attending courses at primary extension centres should be encouraged to start Farmers' Study Circles in their villages. (6) Fullest use should also be made of radio, films and other audio-visual aids in educating farmers and the rural community [Kothari, 1966, p. 658].

Manpower Needs: Steps should be taken for preparing more accurate estimates of the requirements of manpower in the agricultural development. In the meantime, vigorous efforts should be made at least to double the output of graduates and to produce an equal number of diploma holders, in the next ten years [Kothari, 1966, p. 658].

The Role of ICAR and UGC: (1) Responsibility for ensuring that agricultural education is launched on the basis of an integrated approach to teaching, research and extension can best be carried out by ICAR. (2) To enable the ICAR to fulfil its responsibility in this regard, a special Standing Committee of the Council should be set up with a scholar or scientist of national repute at its head. (3) There should be some overlap in the membership of the UGC and the above Standing Committee and they should evolve common programmes for the development of higher education in agriculture [Kothari, 1966, p. 658].

The Report of the Education Commission was examined by a Committee of Members of Parliament constituted by the Ministry of Education in April 1967. The Committee with Shri Triguna Sen as chairman was expected to (a) consider the Report of the Education Commission, (b) prepare the draft of the Statement on the National Policy on Education for the consideration of Parliament, and (c) identify a programme for immediate action. For agricultural education, the Committee stated that the basic purpose of education for agriculture was to increase agricultural production by improving the competence of farmers and, to that end, to promote agricultural research and to train personnel needed for research, training and extension. In each State there should be at least one agricultural university which should develop integrated programmes of research extension and training; where necessary, strong agricultural faculties should be established in other universities. Agricultural polytechnics providing different courses needed for agricultural or agro-industrial development should be established. There was urgent need, in rural areas, for suitable centres or institutions providing extension services to farmers and giving part-time intensive courses to young persons who had left school and taken to agriculture [Sen, 1967].

Progress during the Period 1961-69

The Third Plan expired in 1965-66 and was followed by three years of Annual Plans until 1968-69. There was a steep fall in the production of foodgrains during 1965-66 and 1966-67. It was during this period that the high yielding varieties of wheat and rice were introduced in the country for the first time. Also, the period 1961-69 saw the commencement of the new strategy for agricultural development. With the evolution of the new agricultural strategy, major policy changes were made in the working of the ICAR. The ICAR was reconstituted into a fully autonomous organization bringing under its control all the research institutions hitherto under the control of the Departments of Food and Agriculture, including those under the Central Commodity Committees. The basic intention behind these decisions was to make the ICAR a truly functional, technically competent and fully autonomous organization for promoting, guiding, coordinating, and directing agricultural and animal husbandry research and education in the country [ICAR, 1966, Pp. 1-7].

Farmers' training programmes, both of long-term and short-term courses were organised; schemes for demonstration-cum-training were taken up, using radio and audio-visual aids, to spread the knowledge of the new techniques. Two important elements in the farmers training programmes were (a) peripatetic teams of specialists for helping in the demonstration-cum-training camps, and (b) farmers' own discussion groups at the village level, as a continuing institution and as a nucleus of a farmers' lobby. Two other important features were the organization of (a) demonstration by high level researches operating among farmers, and (b) field problems' units in areas selected for high yielding and other intensive area programmes [Department of Agriculture, 1967, Pp. 81-88]. The Farmers' Training Scheme was introduced on a pilot basis in 1966-67 in five districts. Later on, the scheme was extended, so as to increase the number of farmers' training centres to 25 in 1967-68 and 50 in 1968-69 [Planning Commission, 1970, p. 127].

There had been a rapid expansion of facilities for the training of agricultural and veterinary graduates to meet the requirements of trained manpower for agricultural development (Table 1).

Table 1. Training Facilities for Agricultural and Veterinary Graduates

(numbers)

Year	Colleges	Annual Admission	Annual Outturn
(1)	(2)	(3)	(4)
Agricultural Graduates			
1960-61	51	5,634	2,090
1965-66	70	10,049	5,259
1966-67	70	8,883	4,734
1967-68	71	8,400*	5,900*
Veterinary Graduates			
1960-61	17	1,301	831
1965-66	20	1,599	1,070
1966-67	20	1,425	1,086
1967-68	20	1,425*	1,000*

Note: * Provisional.
Source: *Fourth Five Year Plan*, Planning Commission, 1970, p. 368.

The stock of agricultural and veterinary graduates increased from about 14,000 and 5,000 in 1960-61 to 32,000 and 9,300, respectively, in 1965-66. By 1968-69, nine agricultural universities had also been set up. Some of these universities had started making notable contributions to agricultural education and research. A number of them, however, continued to suffer from inadequate facilities [Planning Commission, 1970, Pp. 126-127].

Fourth Five Year Plan, 1969-74

In the Fourth Plan period it was proposed to strengthen the nine agricultural universities which had already been set up. In addition, six new universities were to be established. It was stressed that while funds had been allocated to agricultural universities as also for strengthening postgraduate and undergraduate colleges, it would be necessary to ensure that educational planning broadly conformed to the likely demand for trained agricultural manpower. -------- The Plan had anticipated that the stock of agricultural and veterinary graduates would have to increase to 65,000 and 15,500, respectively, by 1973-74.

The Plan provided for a sum of Rs 85 crore in the Central sector for the ICAR for agricultural research and education. Action was also contemplated to enable the ICAR to have additional funds under the Agricultural Produce Cess Act. The principal agencies involved in the research programmes were to be the central research institutes, the agricultural universities and to a limited extent, research stations run by agricultural departments in some states. Care was also to be taken that there was no overlapping of effort or proliferation of institutions. Existing research sub-stations should, as far as possible, be tied up with agricultural universities where these had been established. No new central research institute should be set up in the jurisdiction of agricultural universities. Similarly, States should ensure that, where agricultural universities have been set up, apart from teaching, research was also transferred to the university [Planning Commission, 1970, Pp. 124-125].

In the Fourth Plan, farmers' education and training were sought to be given new orientation, consistent with the requirements of a complex and technology based production programme. The principal element was a programme of national demonstration. Demonstrations were envisaged to be organised in 100 selected High Yielding Varieties Programme districts, at the rate of 15 per district. The demonstrations were to be carried out in each district under a team of four subject-matter specialists in soils, agronomy, plant protection and agricultural engineering. The demonstrations were to attempt to establish the production potentiality of each unit area of land per year through multiple cropping, supported by a package of improved practices. The state agricultural extension personnel were to conduct a supporting second line of demonstrations. Other components of the farmers' education programme in the Fourth Plan related to dissemination of agricultural information through audio-visual aids and formation of farmers' discussion groups [Planning Commission, 1970, Pp. 127-128].

Reports of the National Commission on Agriculture, 1976

In August 1970, The Government of India set up the National Commission on Agriculture (NCA) to enquire into the progress, problems and potentials of Indian agriculture. Among the aspects of agriculture which the Commission was called upon to report was 'Research, Education and Training'. The Commission submitted an Interim Report in November 1971 on *Some Aspects of Agricultural Research, Extension and Training*. It presented its main Report in January 1976. In its Interim Report, the Commission 'delineated the role of agricultural universities and State departments in regard to research, extension and training. It recommended strengthening of fundamental and applied research and made suggestions for funding of such research. ..... Agricultural universities should be responsible for fundamental and applied research while the responsibility for adaptive research should be that of the State Department. Similarly, responsibility for extension should be with the State Departments, while the role of the universities should be limited to extension education. The set up in the universities should be reorganised by forming divisions having teaching, research and extension components in each one of them'.

'In the sphere of training of farmers as well as senior and junior staff members of the departments, the respective roles of State departments and, agricultural universities' was specified. 'Setting up of training centres at the rate of one in each district to provide long and short duration training facilities in various subjects to farmers and their sons' was also recommended [NCA, 1976, p. 744].

In its final Report, the NCA referred to the training facilities in the research institutes with the ICAR: 'The ICAR institutes are all engaged in some kind of teaching/training and most of them are recognised as centres of research for doctoral work by one university or the other. A good number of them propose to introduce post-graduate courses and are eager to convert themselves into degree awarding academic bodies. Now that universities have been established in good number, the training courses in research should be centred in the universities only. The present tendency of research institutes to compete with the universities in awarding degrees will defeat the very purpose of the institutes, and should be done away with' [NCA, 1976, Pp. 533-534].

'Research management requires specialised training which every Head of an institution should require. Facilities should, therefore, be created for management training of personnel engaged in agricultural research and technology' [NCA, 1976, p. 535].

With regard to agricultural universities, the NCA mentioned that 'the emphasis is largely on applied research, the dearth of schemes on fundamental research pertaining to agriculture being conspicuous. This situation has arisen because of the indifferent attitude of the agricultural universities to basic sciences where the teaching of basic sciences is already poor. The problem of teaching basic sciences may be solved, though not satisfactorily, either by encouraging basic science teachers to undertake research on subjects bordering on agriculture or by giving special training to agricultural graduates showing proficiency in basic sciences. Even then, basic research would still go by default unless some radical changes are brought about in the entire research structure of agricultural universities and the research institutes. Centres of fundamental research must be set up in agricultural universities. They should take up more and more of basic research related to agriculture and formulate such projects as part of their own research programme. The universities should not dissipate their resources and talents in undertaking extension work but leave adaptive research followed by extension on a large scale in charge of the State Departments of Agriculture' [NCA, 1976, Pp. 535-536].

The NCA noted that 'stress had been more on the development of higher education than on primary, secondary and non-degree programmes of education. Modern agriculture needs properly educated and trained technicians and skilled workers at the lower level. In addition there was urgent need to educate farmers to understand and practise the new agricultural techniques..... To accelerate the process of agricultural modernisation, the primary producers must be made literate and aware of the tremendous potentialities for increasing agricultural production through the application of science and technology to agriculture' [NCA, 1976, p. 541].

The NCA endorsed the Education Commission (1964-66) recommendation that all primary and secondary schools should give an agricultural orientation to their programme of general education by suitably orienting the existing courses. 'Such an orientation towards agriculture would help create awareness of the problems, to appreciate the skills needed in farming and the possibilities opened up by science and technology, including those of self-employment' [NCA, 1976, p. 542]. For students who complete general education but do not find opportunities for higher education, the NCA recommended the organisation, on a massive scale, of vocational training and non-degree and non-formal education in agriculture.

'The role of technicians, such as field level advisers, field assistants, farm managers, etc., ... was becoming more and more important in the changing agricultural system. They may preferably be trained in the agricultural schools, which could not endow the trainees with the desired levels of vocational competence. The agricultural polytechnic or Krishi Vigyan Kendra (KVK), the idea of which was given by the Education Commission and preferred by the ICAR, is meant to provide non-formal education and bring about transfer of technology through work experience, but not intended to train job seekers. The KVKs initially being developed at five selected centres' were 'planned to be trainers' training centres at which teachers of 50 other KVKs to be set up thereafter, would be trained'. The NCA recommended that 'with a view to meeting the needs of development in agriculture and related activities, it is essential to have at least one KVK in each district by 1985 and at least three per district by 2000 A.D.' [NCA, 1976, Pp. 543-544].

As regards university level education in agriculture, the NCA mentioned that since 1960, when the first agricultural university was established in Uttar Pradesh there has been a rapid growth of agricultural universities in the country, the number increasing to 21 by 1975.'In spite of the fact that the agricultural universities were set up on a Model Act of the ICAR and with similar financial assistance, the rates of development varied a great deal. In addition to agricultural universities, a number of research institutes under the control of the ICAR including the IARI, IVRI, and NDRI imparted university level education' [NCA, 1976, p. 545]. The NCA indicated the minimum agricultural programmes that agricultural universities should undertake in the degree and post-graduate classes, as also for agriculture, animal husbandry and fisheries. Further, it recommended that the 'ICAR should insist on the creation of an inter-university task group which would study the employment opportunities of agricultural graduates and formulate necessary action programmes. The agricultural universities should act as a link between their graduates and the prospective employers' [NCA, 1976, p. 18].

Fifth Five Year Plan (1974-79)

At the beginning of the Fifth Plan (1974-79), there were 72 agricultural colleges, 22 veterinary colleges, 2 dairy colleges and 8 agricultural engineering colleges. During the Fifth Plan period, the number of agricultural, veterinary, and agricultural engineering graduates was estimated at 25,500, 4,200 and 1,400, respectively. It was expected that these would be sufficient to meet the agricultural manpower requirements of the Fifth Plan. Hence, the main emphasis in the Fifth Plan was to be on improvement of standard and quality of education, orientation of curricula and courses to suit the changing needs of agricultural development, strengthening of inter-institutional collaboration, and development of centres of excellence.

There were 19 agricultural universities. While some of them were well developed, a number of them were still at a nascent stage. During the Fifth Plan period, while older universities were to aim at further development in selected fields, the new universities were to build up requisite facilities. Each agricultural university was expected to draw up a plan for its academic and campus development. It was also contemplated that agricultural universities would give particular attention to development programmes involving work experience and practical training so as to make the students not only more employable but also capable of learning through self-employment. The avowed objective of establishing agricultural universities was to facilitate integration of research, teaching, and extension education. However, in practice, significant deviations had taken place. The Fifth Plan document called upon the ICAR to formulate requisite criteria and make financial assistance to the agricultural universities conditional upon their meeting such criteria.

Considerable regional imbalance in the agricultural educational structure had developed. Three States, namely, Uttar Pradesh, Maharashtra and Rajasthan accounted for nearly two-thirds of the annual intake for higher agricultural education. About one-third of the total agricultural colleges in the country were located in Uttar Pradesh. A number of them were sub-standard. The Plan document stressed the need for upgrading some of these colleges and reorganising others as farmers' training centres. There was also abnormal student wastage.

In the Fifth Plan, a number of agricultural polytechnics, called Krishi Vigyan Kendras, were proposed to be set up. They were to be run by either agricultural universities or ICAR institutions and provide in-service training to the extension staff of the departments of agriculture, animal husbandry and fisheries, and public/private sector corporations, and to impart technical skills to selected farmers. They were to cater to the needs of those who were either already in employment or were self-employed. No diplomas were to be awarded by the Kendras. The emphasis was to be on imparting practical training in techniques which were of immediate relevance to the region concerned.

Farmers' Training

In the Fourth Plan, a centrally sponsored programme of farmers' training was contemplated in 100 districts. At the beginning of the Fifth Plan, the programme was operational in about 80 districts. The main shortcomings were: Out of the 80 centres, full complement of staff was not present in 21 districts; programme coverage was too thin, so that a farmer could attend one of the training courses only once in three or four years; and involvement of district level functionaries was inadequate. In the Fifth Plan, the first task was to rectify these shortcomings. It was also contemplated to extend the programme to another 100 districts. In this, districts covered by important programmes for development of commercial crops and pulses were to be given priority.

The programme of national demonstrations covered about 100 districts by the beginning of the Fifth Plan, but the quality and effectiveness of demonstrations had been rather uneven. In the Fifth Plan, the number of districts was proposed to be reduced to 50. The idea was to locate the demonstrations in the vicinity of agricultural universities/institutes which could give the necessary guidance. Suitable provisions were also made in the State Plans for farmers' training programmes and also for local verification of trials and demonstrations.

During the period 1974-80, the Indian Council of Agricultural Research continued to remain the apex body at the national level with the principal mandate to promote, aid and coordinate research in the areas of agricultural and animal sciences, fisheries and agricultural engineering. The Council also had the unique feature of promoting higher agricultural education including extension education. The triple function of research, education and extension education was implemented through 34 Central Research Institutes, the National Academy of Agricultural Research Management, five Project Directorates, and 54 All India Coordinated Research Projects under the Council and 21 Agricultural Universities located in the State sector [Planning Commission, 1981, p. 101].

To improve the training component of agricultural extension system in the country, the ICAR had introduced an innovative vocational training institute called the Krishi Vigyan Kendra, or Farm Science Centre, including Trainers' Training Centres. The first Krishi Vigyan Kendra was set up in 1974. By the end of the Fifth Plan there were 19 Krishi Vigyan Kendras and seven Trainers' Training Centres set up in the country. 'The Kendras impart skill-training to practising farmers, farm women, school drop-outs, rural youth (boys and girls) and field level extension functionaries. The training courses, both institutional and non-institutional are organised on the principles of "Teaching by Doing" and "Learning by Doing". No certificate/diploma is provided even for long duration courses with a view to attracting only the practising farmers and fishermen or those who wish to be self-employed' [Ministry of Agriculture, 1984, p. 223].

Sixth Five Year Plan, 1980-85

The Plan referred to the striking progress in agricultural development in North West India in comparison to the near stagnation in rice yields in Eastern India. It therefore '(a) proposed to strengthen further the research net work in relatively less developed areas and to promote location specific research. In addition to the 21 existing Agricultural Universities, 2 new Agricultural Universities - one in Jammu and Kashmir and one in the South Bihar region will be established. A national grid of coordinated projects will cover tribal and all relatively less developed regions. The ICAR Research Complex in the North-Eastern Himalayan region and the agricultural colleges in Nagaland and Manipur will be greatly strengthened. (b) The "Training and Visit System" of extension will be introduced in all the less developed areas in appropriate form so that farming families are given adequate extension support. Mobile training teams will be organised where necessary. Additional Krishi Vigyan Kendras will be established in tribal, hilly and backward areas' [Planning Commission, 1981, p. 99].

As regards the role of the ICAR, the Sixth Plan referred to the national grid of cooperative research which had been established by the ICAR with the Central Institute and State Agricultural Universities as equal partners. 'The system aims to achieve maximum complementarity of resource use. With a view to strengthening mission oriented research, National Research Centres with eminent scientists are to be established during the Sixth Plan period on the one hand and, on the other, a National Agricultural Research Project has been started to enhance capabilities of Agricultural Universities to do location-specific research in each of the agro-climatic zones'. Further, 'during the Sixth Plan period, linkages between development departments and Agricultural Universities will be strengthened and Agricultural Universities will play a leading role in organising farmers' fairs, extension training and other "lab to land" programmes' [Planning Commission, 1981, p. 101].

'The Agricultural Universities' would 'have to act as catalysts and play a crucial role in plan implementation by providing appropriate R&D support for increasing and stabilising production and achieving the desired growth in agriculture. Universities' research would be oriented to develop the needed technology for agriculture, animal husbandry and fisheries programmes. The education and training programmes would also' have 'to be reorganised to train the required number and high quality of students in different disciplines' [Planning Commission, 1981, p. 101].

The Sixth Plan pointed out that 'with the increased need for field-oriented and problem-solving research it has become increasingly difficult to implement many of the research projects/programmes due to lack of competent technical manpower and specialists. The ICAR is therefore promoting advanced Centres of Studies in selected areas relevant to our agricultural development to train competent scientists. The Agricultural Universities and ICAR institutes have a special responsibility to shoulder in this regard. The problem is particularly acute in tribal and backward areas. A Comprehensive Project of additional compensatory benefits has, therefore, been sanctioned for scientists of the Council to attract them to such neglected areas. A Programme of Human Resource Development has also been started to provide financial assistance to deserving students from tribal and backward districts for higher studies up to postgraduate level, so that they may go back to their areas and help develop them. The educational programmes in the agricultural universities are being strengthened to improve their quality and to make them increasingly relevant to the development needs of the country. Higher educational programmes to train the required manpower for research in different branches will receive special attention during the Sixth Plan period. The Krishi Vigyan Kendra Programme (KVKs) started towards the end of the Fourth Five Year Plan has developed into an important means of filling the gap in the technical training programmes for transfer of technology in different branches of agriculture. The KVKs will be further strengthened during the Sixth Plan period. The need for imparting better managerial skill to research scientists was recognised when the National Academy for Agricultural Research Management (NAARM) was set up at Hyderabad during the Sixth Plan period. This Academy will be fully developed during the Sixth Plan period to train the new entrants and in-service personnel at various levels in ICAR institutes, Agricultural Universities and in States and Central Government development departments' [Planning Commission, 1981, Pp. 101-102].

Progress during the Sixth Plan, 1980-85

By the end of the Sixth plan period, the ICAR's net work of research, education and extension had expanded from 34 to 41 central research institutes, from 54 to 68 all-India coordinated research projects, from 21 to 23 agricultural universities and from 5 project directorates to four project directorates, four national research bureaux and seven national research centres. 530 *ad hoc* research schemes were also undertaken. All the major states had at least one agricultural university (with the exception of Maharashtra which had four, Uttar Pradesh three, Himachal Pradesh and Bihar two each). These universities acted at the state level, performing the triple functions of research, education and extension. The Indian Agricultural Research Institute (IARI), New Delhi, and the Indian Veterinary Research Institute (IVRI) Izatnagar, had the deemed university status and imparted post-graduate level education and conferred Master's and Doctorate degrees in various disciplines for study of agriculture and allied subjects. The ICAR also awarded fellowships and scholarships to deserving students.

The ICAR extension system devoted first-line extension activities by scientists with a view to (i) promptly demonstrating the latest technologies to farmers and extension workers and (ii) getting first hand feed-back experiences on the performance of these technologies. The first-line transfer of technology projects consisted of 48 national demonstrations, 152 operational research projects/centres, 89 Krishi Vigyan Kendras (KVKs), eight trainers' training centres (TTCs) and 100 lab-to-land centres, by the end of the Sixth Plan [Ministry of Information and Broadcasting, 1986, Pp. 340-341].

Report of the Working Group on Agricultural Research and Education, 1984

The Ministry of Agriculture appointed in September 1983, the Working Group on Agriculture Research and Education to review the status of agricultural research and education in the country, identify national problems in agricultural production *per se* requiring strong research support for meeting the long term objectives and identify priorities in various sectors, for consideration in the Seventh Five Year Plan. The Working Group submitted its Report in September 1984.

In the field of agricultural education, the Working Group mentioned that the major emphasis given during the Sixth Plan period was to '(a) development of Agricultural Universities; (b) development of selected affiliated colleges of general universities; (c) development of Agricultural Faculties of Central Universities; (d) development of post-graduate education in selected research institutes of the ICAR; (e) rural orientation of Home Science education; (f) incentive to students from rural and backward areas and underpriveleged sections of the population; (g) establishment of Centres of Advanced Studies; and (h) promotion of good education through faculty upgradation, teachers awards and book writing awards, etc.'. All these schemes could be divided into three categories: '(i) infrastructural development; (ii) manpower development; and (iii) promotion of quality in agricultural education' [Ministry of Agriculture, 1984, p. 199].

As a result of these measures, the admission capacity developed for undergraduate and post-graduate programmes, was as follows (Table 2).

Table 2. Admission Capacity Developed for Agricultural Education

(Numbers)

Discipline	Number of Colleges	Admission Capacity	
		Under-Graduate	Post-Graduate
(1)	(2)	(3)	(4)
Agriculture (Including Horticulture)	49	5,490	2,506
Veterinary Science	22	1,600	450
Agricultural Engineering	10	530	200
Home Science	11	670	115
Fisheries	5	150	55
Dairy Technology	6	160	200
Agricultural Marketing and Cooperation	2	75	-
Forestry	1	50	12
Sericulture	1	30	-
Food Technology	1	50	-

Source: *Report of the Working Group on Agricultural Research and Education for the Seventh Five Year Plan*, Ministry of Agriculture, 1984, p. 200.

The Working Group opined that the major thrusts of educational effort during the Seventh Plan should be as follows: '(1) To further expand, strengthen and upgrade the institutional framework for agricultural education so that it can adequately meet the manpower requirement of the country for sustained development of its agricultural economy. (2) To promote quality and relevance in education through the application of educational science and technology to the development of curricula and teaching methods, improvement of teaching facilities, production of relevant instructional materials and aids, upgradation of faculty capability and providing incentives for good teaching and learning. (3) To promote higher agricultural education in rural areas of the ecologically and economically backward regions and among the women and underpriveleged sections of the population in the country. (4) To provide better facilities for education of students from developing countries in Indian Agricultural Universities/Institutes' [Ministry of Agriculture, 1984, p. 203]. With these thrusts in educational effort, the Working Group recommended expansion of facilities at undergraduate level for veterinary sciences, agricultural engineering, fisheries, forestry and home science.

With regard to extension training, the Working Group recommended 'that the ICAR may not go beyond establishing 100 KVKs/TTCs as first line training institutions. Additional KVKs should be established by the State Governments. In fact the first step should be to remodel the Farmers Training Centres (140) into KVKs, for they are not serving the farmers effectively in the present form. In the light of this, it is proposed to continue 100 KVKs/TTCs in the Seventh Plan of the ICAR. This will involve converting A.P. Cess (Agricultural Produce Cess) funded KVKs into regular plan programmes. A mobile training unit and an exhibition van may be provided in each KVK for multiplication of training programmes in the district. In addition, three Trainers Training Centres, one in plantation crops, another in veterinary sciences and the third in water management may also be established. The norms of financing KVK programme fixed in 1978 need to be revised to provide for high cost of inputs, travel, contingencies, etc. Adequate financial support will be required for developing infrastructural facilities. The staffing structure would also need revision' [Ministry of Agriculture, 1984, p. 226].

Seventh Five Year Plan, 1985-90

At the beginning of the Seventh Plan, the ICAR was operating 18 schemes under the agricultural education programme covering three major aspects, namely, (i) institutional development, (ii) qualitative improvement of agricultural education and research, and (iii) manpower development. All these programmes were proposed to be continued during the Seventh Plan period with necessary modifications in the light of experience. New advanced centres for post-graduate agricultural research and education were to be set up to cover more disciplines. Courses in agricultural management were to be introduced in NAARM to develop appropriate understanding of the emerging disciplines. Human Resources Development was to receive additional emphasis [Planning Commission, 1985, Vol. II, p. 24].

Eighth Five Year Plan, 1992-97

For the Eighth Plan period too, emphasis was to be on improving the quality of agricultural education without adding to the number of agricultural colleges. 'Institutional capacity already established is quite adequate to meet the scientific/technical manpower requirements in various areas of agriculture and allied activities' [Planning Commission, 1992, Vol. II, p. 24].

Until the Seventh Plan period, 109 Krishi Vigyan Kendras had been established in 107 districts in the country. It was proposed that for the Eighth Plan period, greater emphasis would be given on the implementation of KVKs by non-government voluntary organisations for better people's participation [Planning Commission, 1992, Vol. II, p. 24].

Thus, by 1994 there were 27 state agricultural universities in the country which had with them, 61 agricultural colleges, 30 veterinary colleges, 16 agricultural engineering colleges, 18 home science colleges, nine fisheries colleges, eight dairy technology colleges, 13 colleges of forestry, eight colleges of horticulture and one college each in sericulture, and food science and technology. The admission capacity at the undergraduate and postgraduate levels in these institutions stood at 9,715 and 4,500, respectively [Ministry of Information and Broadcasting, 1994, Pp. 429-430].

As mentioned above, the Krishi Vigyan Kendras had also expanded into 107 districts in the country. Their mandate included the following: '(i) (to) collaborate with subject matter specialists of the state agricultural universities and scientists of the regional research stations in "on-farm testing", refining and documenting technologies for developing region-specific sustainable land use systems; (ii) (to) organise training to update the extension personnel within the area of operation with emerging advances in agricultural research on a regular basis; (iii) (to) organise long-term vocational training courses in agriculture and allied vocations for the rural youth with emphasis on "learning by doing" for generating self-employment through institutional financing; and (iv) (to) organise frontline demonstrations in various crops to generate production data and feedback information'. Four major functions were identified for the KVKs under this mandate, namely, Farm Advisory Service, Vocational Training in Agriculture, In-service Training for Extension Functionaries and On-farming Testing [Ministry of Information and Broadcasting, 1994, Pp. 429-430].

To repeat, what was mentioned at the beginning of this paper, it was as early as in 1893 that Voelcker had mentioned: 'It is not enough that improvements in agriculture should be effected by direct Government agency, and that measures, the result of enquiry and experiment, should be taken in the people's benefit, but it is necessary also that the people themselves should be brought to an intelligent understanding of what is being done, and that the endeavour be made to teach them how they may help themselves. This is the work of Education' [Voelcker, 1893, p. 378]. A century later, the concept of integration of teaching, research and agricultural extension has proved its worth in the development of agriculture in the country.

REFERENCES

Department of Agriculture, 1967; *Annual Report, 1966-67*, Ministry of Food, Agriculture, Community Development and Cooperation, Government of India, New Delhi.

Department of Revenue and Agriculture, 1893; *Proceedings of the Agricultural Conference held in the Department of Revenue and Agriculture at Simla on 2nd, 3rd, 4th, 5th, 6th and 7th October 1893, with Appendices*, Simla, Government Central Printing Office, 1894.

ICAR, 1944; *Memorandum on the Development of Agriculture and Animal Husbandry in India of the Advisory Board of the Imperial Council of Agricultural Research*, Government of India, Delhi.

ICAR, 1960; *Report of the Second Joint Indo-American Team on Agricultural Education, Research and Extension*, (Chairman: M.S. Randhawa), Indian Council of Agricultural Research, New Delhi.

ICAR, 1966; *Annual Report, 1965-66*, Indian Council of Agricultural Research, New Delhi.

Kothari Commission, 1966; *Report of the Education Commission, 1964-66 - Education and National Development*, Chairman: D.S. Kothari, Ministry of Education, Government of India, New Delhi.

Linlithgow Commission, 1928; *Report of the Royal Commission on Agriculture*, Chairman: Lord Linlithgow, Government of India, New Delhi.

Macdonnel, A.P., 1901; *Report of the Indian Famine Commission*, Government of India, New Delhi.

Ministry of Agriculture, 1984; *Report of the Working Group on Agricultural Research and Education for the Seventh Five Year Plan (1985-90)*, (Chairman: O.P. Gautum), Department of Agricultural Research and Education, Ministry of Agriculture, Government of India, New Delhi.

Ministry of Food and Agriculture, 1961; *Annual Report, 1960-61*, Department of Agriculture, Government of India, New Delhi.

Ministry of Information and Broadcasting, 1986; *India, A Reference Manual, 1986*, Government of India, New Delhi.

Ministry of Information and Broadcasting, 1994; *India, A Reference Manual, 1994*, Government of India, New Delhi.

NAARM, 1988; *National Agricultural Research, Education and Extension Education System in India*, National Academy of Agricultural Research Management, Rajendranagar, Hyderabad.

NCA, 1971; *Interim Report on Some Aspects of Agriculture Research, Extension and Training*, National Commission on Agriculture, Government of India, New Delhi.

NCA, 1976; *Abridged Report*, National Commission on Agriculture, Government of India, New Delhi.

Planning Commission, 1953; *The First Five Year Plan, 1951-56*, Government of India, New Delhi.

Planning Commission, 1956; *Second Five Year Plan, 1956-61*, Government of India, New Delhi.

Planning Commission, 1957; *Review of The First Five Year Plan*, Government of India, New Delhi.

Planning Commission, 1958; *Report of the Agricultural Personnel Committee of the Planning Commission, March 1958*, (Chairman: P.N. Thapar), Government of India, New Delhi.

Planning Commission, 1962; *Third Five Year Plan, 1961-66*, Government of India, New Delhi.

Planning Commission, 1970; *Fourth Five Year Plan, 1969-74*, Government of India, New Delhi.

Planning Commission, 1976; *Fifth Five Year Plan, 1974-79,* Government of India, New Delhi.

Planning Commission, 1981; *Sixth Five Year Plan, 1980-85,* Government of India, New Delhi.

Planning Commission, 1985; *Seventh Five Year Plan, 1985-90,* Government of India, New Delhi.

Planning Commission, 1992; *Eighth Five Year Plan, 1992-97,* Government of India, New Delhi.

Radhakrishnan Commission, 1949; *Report of the University Education Commission,* December 1948 - August 1949, Chairman: S. Radhakrishnan, Government of India, New Delhi.

Randhawa, M.S., 1986; *A History of Agriculture in India,* Vol. IV, 1947-1981, Indian Council of Agricultural Research, New Delhi.

Sen Committee, 1967; *Report of the Committee of Members of Parliament on National Policy on Education,* Chairman Triguna Sen, Ministry of Education, Government of India, New Delhi.

Voelcker, J.A., 1893; *Report of the Improvement of Indian Agriculture,* Agricole Reprints Corporation, New Delhi.

Voelcker, J.A., 1897; *Report of the Improvement of Indian Agriculture,* Second Edition, (with Appendices on the Decisions taken on the Report), printed by Eyre and Spottiswoode, London.

DOCUMENTATION

The purpose of this section is to make available to the readers official documents such as reports of committees, commissions, working groups, task forces, etc., appointed by various ministries, departments, and agencies of central and state governments which are not readily accessible either because they are old, or because of the usual problems of acquiring governmental publications, or because they were printed but not published, or because they were not printed and remained in mimeographed form. It will be difficult and probably not worthwhile to publish the documents entirely. We shall publish only such parts of them as we think will interest our readers. The readers are requested to send their suggestions regarding official documents or parts thereof for inclusion in this section.

[In the preceding issue of this Journal (January-March 1997) we included in the Documentation section a portion from the *Report of the Finance Commission, 1957* (Chairman: K. Santhanam). All the same, it was incorrectly mentioned that a portion from the *Report of the Finance Commission, 1951* was being included. The error is regretted.]

In the present section we publish:

Report of the Banking Commission, 1972 (Chairman: R.G. Saraiya) Ministry of Finance, Government of India, New Delhi, Chapters 8, 9 and 10.

Chapter 8

CO-ORDINATION BETWEEN COMMERCIAL AND CO-OPERATIVE BANKS I: GEOGRAPHICAL COVERAGE AT THE PRIMARY LEVEL

INTRODUCTION

8.1 In the sphere of co-operative banking, the task entrusted to the Commission is 'to review the working of co-operative banks and to make recommendations with a view to ensuring a co-ordinated development of commercial and co-operative banks, having regard, in particular, to the extension of the 'geographical and functional coverage of the commercial banking system'. This task would have been quite difficult but for the fact that over the past thirty years or so the problems of co-operative banking and rural credit have been examined by a number of expert committees. The problems of credit to agriculture were examined in 1944-45 by the Agricultural Finance Sub-Committee headed by D.R. Gadgil which emphasised the need for a planned approach to the provision of credit for raising crops. The Co-operative Planning Committee of 1945 emphasised the role of the Co-operative Movement in this connection. In 1954 the Report of the Committee of Direction of the All-India Rural Credit Survey recommended the integrated scheme of rural credit. To mention some of the recent works in this field, the All-India Rural Credit Review Committee,[1] set up by the Reserve Bank of India in 1966, made a very comprehensive review of their working. The Expert Report on Intensive Agricultural District Programme (1960-68) published by the Ministry of Food and Agriculture, examined the performance of co-operative credit institutions in the IADP districts. The Fertiliser Credit Committee (1968) of the Fertiliser Association of India, reviewed the availability of credit for fertiliser and other inputs from the co-operative credit system. Finally, the Working Group on Industrial Financing through Co-operative Banks (1968) set up by the Reserve Bank of India examined the question of availability of resources from co-operative banks to industrial co-operatives.

8.2 The Commission's task is, however, somewhat different in as much as its recommendations have to be made so as to ensure the co-ordinated development of commercial and co-operative banks. This required ascertaining the viewpoints of the various organisations involved and collecting certain data not already available in the reports mentioned. Accordingly, the Commission issued questionnaires to the State Governments, the State co-operative banks and central co-operative banks and urban and industrial co-operative banks. Separate questionnaires were also issued to agricultural universities and co-operative training colleges and institutions. The central co-operative banks were selected so as to represent the different regions and also to represent those with a relatively high level of performance as well as those with a relatively low level of performance. Similarly the urban and industrial co-operative banks were so selected as to represent a cross section of different types of banks.

8.3 In addition, the Commission requested the Reserve Bank of India to conduct surveys in 12 selected districts, the State Bank of India in 2 districts, the Vaikunth Mehta National Institute of Co-operative Management in two districts, the Professor in Agricultural Economics of the Andhra University and the Principal, Co-operative Training College, Vallabh Vidyanagar, Gujarat, in two districts to ascertain the performance and problems faced by co-operative banks and primary credit societies in deposit mobilisation and provision of credit facilities and other banking services.

8.4 The Vaikunth Mehta National Institute of Co-operative Management also prepared studies on certain other aspects of co-operative banking such as Executive Development in Co-operative Banks and Overdues. The National Institute of Bank Management analysed for us the available material on organisational aspects of co-operative banks and gave its suggestions.

8.5 The Commission has also had the benefit of discussions on a wide range of questions, with the

1. *Report of the All-India Rural Credit Review Committee*, Reserve Bank of India, 1969.

representatives of State Governments, commercial banks, co-operative banks, economists, officials of the Reserve Bank of India and others.

APPROACH

8.6 Since the predominant part of the co-operative banking system caters to the needs of the agricultural sector of the economy, the problems of co-ordination between the co-operative and the commercial banking systems have to be viewed principally in the context of meeting the credit needs of this sector. The existence of a very large number of small production units in agriculture working under a wide variety of conditions creates certain special problems from the point of view of adequate supply of credit to agriculture. It is necessary in the first place that the outlets through which credit is supplied to the units should be widely spread over the country in such a way that they are within convenient distance of the production units which they serve. The co-operative credit system attempts to do this through the medium of the primary credit societies. The commercial banking system which has entered only recently into this field has no such widespread organisation. Thus, as against 1.63 lakh primary agricultural credit societies in existence at the end of June 1970, the offices of commercial banks in 91,000 villages with a population of between 1,000 and 4,999 were only 596 by the end of 1969 and in 3,420 villages with a population between 5,000 and 9,999 were 1,005.[1] Another important feature of the co-operative credit system is the intimate knowledge of the local conditions and problems which those in charge of these institutions have. The commercial banking system does not possess such knowledge at present and will require some time before it can build it up to an adequate level. The main problem with the co-operative credit institutions is their organisational and financial weakness which means that although the institutions are better spread from the geographical point of view and have better knowledge of local conditions and problems than the commercial banks to supply credit to the agricultural sector, in actual practice, their ability to do so is considerably limited. On the other hand, while the majority of the commercial banks are strong in both these respects not only do they have to go a long way in order to provide the necessary spread in rural areas and to build up the knowledge about problems of financing agriculture in all its diversity but, more important, they have to do all this in addition to meeting the calls on their resources from production units in the various types of industry, trade and services. The problem of co-ordination between the commercial banks and co-operative banks has to be examined against this background. It is a problem of making the most of the advantages of the two systems. At the same time it is necessary to strengthen the co-operative credit system so that the inherent advantages it possesses are made full use of.

CREDIT REQUIREMENTS OF THE AGRICULTURAL SECTOR

8.7 It has been estimated by the All-India Rural Credit Review Committee[2] that the short-term agricultural credit needs in the last year of the Fourth Five Year Plan, *i.e.*, 1973-74 were likely to be of the order of Rs 2,000 crore while the medium-term credit needs for the Plan period were put at Rs 500 crore. For the last year of the Fourth Plan, a target of Rs 750 crore has been fixed for the co-operatives in respect of short and medium-term agricultural advances. Comparing these figures against the outstanding short and medium-term loans by the co-operatives of Rs 711 crore at the end of June 1970 and the outstandings of Rs 235 crore as on March 31, 1971 in respect of direct finance of agriculture by commercial banks gives some idea of the magnitude of the task that lies ahead. But in view of the problems mentioned earlier, it is doubtful if the commercial banks will be able to handle the whole of it. The position is not much different in the case of long-term credit. It is also important to note that the Review Committee's estimates do not include the credit needs for other rural economic activities either related or unrelated to farming.

1. Population according to 1961 Census.
2. *Ibid*, Pp. 87 and 96.

8.8 Credit gaps are very large in areas where neither co-operative nor commercial banks have virtually any organisation at the grass roots level. Even in areas where the organisation exists, it is not at present capable of satisfying all the needs of those who are eligible for credit and need it. In particular, there is a significant gap in institutional arrangements in respect of small, marginal and sub-marginal farmers and other rural producers of this category which calls for a different approach. Besides, it is not enough to concentrate merely on providing adequate credit; emphasis has also to be given on the supervision of the application of the credit and guidance to the borrower in his operations.

8.9 Viewed in this light, the objectives of co-ordination between the co-operative and commercial banks should be (*a*) creation of a widespread and progressive institutional base at the primary level in direct touch with rural producers which can provide adequate and timely credit at reasonable rates and also attract local savings into the system; (*b*) consolidation, strengthening and expansion of the framework of co-operative banking at higher levels for mobilisation of resources; and (*c*) programmes of training and equipping the personnel in the co-operative banks to carry out their tasks in an efficient manner.

8.10 In the present chapter, we shall discuss the position of geographical coverage by commercial and co-operative banks at the primary level and present the possible lines of approach for ensuring adequate coverage at this level.

PERFORMANCE OF PRIMARY AGRICULTURAL CREDIT SOCIETIES

8.11 The performance of the 1.63 lakh primary agricultural credit societies which operated at the village level as at the end of June 1970 as regards coverage of villages as well as of rural population, provision of loans, etc., may be seen from Table 8.1 (not inserted here). The loans outstanding from members as at the end of June 1970 amounted to Rs 711 crore. Though no precise estimates are available, the credit provided by them is estimated to be around 25 per cent of the total credit needs for agriculture as compared with 3 per cent in 1951-52. Progress has been more marked in areas where agreed policies of reorganisation of primary credit societies have been carried out systematically.

8.12 The active primary credit societies covered as at the end of June 1970 over 85 per cent of the villages and their membership of over 29 million accounted for 34 per cent of rural population. There has been considerable progress particularly over the past decade in the coverage of rural population by societies, notably in States such as the Punjab, Tamil Nadu and Himachal Pradesh, where it exceeds 50 per cent. In most of the remaining States, it is much less than 30 per cent. However, 'effective' coverage expressed as a proportion of borrowing rural households to total rural households is as high as 50 per cent in the Punjab, followed by Himachal Pradesh; it is less than 20 per cent in all but four States, in some of them the proportion being less than 10 per cent; these include Assam, Bihar, Orissa, Uttar Pradesh and West Bengal. Generally low coverage is associated in most areas with a weak financial position and organisation of the societies. It is understood that almost 85 per cent of the societies (1.29 lakh) are classified under 'C', 'D' or 'E' under audit while 19,000 societies are considered defunct or dormant.

8.13 Table 8.2 (not inserted here) brings out the disparity between the different States as regards the financial position of the primary societies. It is only in a few States that the position reveals a generally satisfactory performance. In 10 States, the average share capital per society is Rs 10,000 or less while in 9 States the average loan business per society is less than Rs 30,000. In most cases the loan business is not large enough to bring in adequate income to maintain the minimum establishment such as a regular office and paid Secretary. Appointment of a full-time paid Secretary which may be regarded as one of the indices of potential viability, is reported by about 51,000 societies.

8.14 While deposits reflect the ability of the primary society to attract local savings, its overdues reflect its difficulties in making sound loans. Overdues pose a serious problem in many States. For the country as a whole, they amounted to

Rs 268 crore forming 39 per cent of the demand, as at the end of June 1970. In 11 States, they range from 30 per cent to 47 per cent and in three they amount to 50 per cent or more of demand. The average position of overdues per society indicates the extent to which they constitute a serious road-block to the flow of credit since many central co-operative banks do not provide fresh loans to societies with overdues exceeding a given proportion. Moreover, the high overdues of the societies seriously affect the ability of central banks to raise resources from higher financing agencies.

PERFORMANCE IN THE SPHERE OF MOBILISING SAVINGS

8.15 Available evidence shows that barring the agricultural banks, and the large-sized credit societies set up in pursuance of the recommendations of the All-India Rural Credit Survey Committee (1954), most societies have not been able to raise much by way of voluntary deposits from the rural people. The average deposits per member amounted to Rs 21 for the country as a whole as on June 30, 1970, though in some States the performance is much better than this. One basic handicap is that most societies deal only with members who constitute, in many cases, a minority of the total rural population in the villages covered by them. Increased prosperity in rural areas witnessed in recent years has not resulted in growth of deposits with societies to any significant extent. The surveys conducted for us by the Reserve Bank of India and other bodies in 16 districts revealed that the performance of the primary structure is poor despite the existence of deposit potential. They show that most of the agriculturists preferred to invest their savings, in the absence of a branch of a bank nearby, either with the Post Office or with businessmen and traders with whom they had dealings; they did not like to keep them with the primary credit societies.

8.16 The studies also revealed the low level of development of banking in rural areas. Even in developed districts like South Kanara and Tirunelveli, hardly 20 per cent of the residents ever visited a bank, and those that had used the cheque system, were negligible.

PRIMARY SOCIETY THE WEAKER LINK IN THE STRUCTURE

8.17 Perhaps few questions affecting rural areas have received as much attention during the past few decades as the one of building the primary agricultural credit societies into strong institutions. Though over this period the societies grew in number, the primary credit society continued to remain the weakest link in the entire co-operative credit structure. In their replies to the Commission's questionnaires, the State Governments, apex as well as central co-operative banks have also expressed a similar view.

8.18 Recognising the weakness of the primary credit societies, the expert Committees which went into the question from time to time emphasised, among other things, (*a*) setting up of limited liability societies for a group of villages by amalgamation of existing societies so as to make them economically viable, (*b*) enabling societies to undertake such functions as would provide comprehensive services to cultivators, and (*c*) developing the potentialities of primary units for tapping rural savings. The Rural Banking Enquiry Committee (1950) in particular, recognised that the weakness of the co-operative structure lay mainly with institutions which were in direct touch with the rural people and stressed that more efforts should be devoted to strengthening and developing of institutions at the level - particularly from the point of view of mobilising rural savings. This view was endorsed by the All-India Rural Credit Survey when it recommended, as part of its Integrated Credit Scheme, that the primary credit societies might accept fixed deposits and in selected instances operate savings accounts also on behalf of the bank to which they were affiliated.

8.19 The most recent review of the subject was done by the All-India Rural Credit Review Committee[1] which summed up its observations on the performance of the primary credit societies as follows:

1. *Ibid*, Pp. 201, 202.

(*a*) The proportion of co-operative credit to the total borrowings of the cultivators appears to have continued to be small in absolute standards in most parts of the country;
(*b*) The orientation of co-operative credit to production needs has been, by and large, inadequate;
(*c*) Though some of the restrictive features of the co-operative credit have been relaxed, tenants and small cultivators remained generally handicapped in obtaining their credit needs;
(*d*) A large number of primary societies are not potentially viable and must be regarded as inadequate and unsatisfactory agencies for dispensing production-oriented credit;
(*e*) Co-operative credit has frequently fallen short of standards of timeliness, adequacy and dependability and overdues have been heavy and increasing from year to year in many States including those which are co-operatively advanced; and finally,
(*f*) The co-operative credit institutions have not successfully demonstrated that they are in a position to deal expeditiously with the problems arising from crop failures and ensuring adequate and timely credit for the borrowing farmers.

8.20 Having identified the deficiencies, the Committee, emphasised the necessity for having strong and viable units at the primary level from the point of view of sound working of the entire co-operative credit structure and suggested that the programme of reorganization should be completed before the end of 1970-71. The Committee also called for a flexible approach to the determination of the area of operation of the society and the standards of viability. In particular, it emphasized that the co-operative department should enforce compulsory amalgamation of weak and small societies wherever other measures failed and towards this end, the State Co-operative Societies Acts should be amended; that, increasingly, the unlimited liability societies should be converted into limited liability societies to facilitate reorganization into viable units; and further that the viable societies should be given Government share capital contribution upto Rs 10,000 per society for credit and another Rs 10,000 for non-credit business. They should also get managerial subsidy at Rs 1,500 per year per society for three years.

Certain Limitations on Primary Societies

8.21 While the primary credit societies, by and large, have not been designed or equipped to mobilise rural savings by attracting deposits, there were other serious limitations which came in the way of their providing credit facilities effectively in rural areas. As mentioned earlier, the borrowing membership of the societies was around 39 per cent of the total membership of the system as a whole as on June 30, 1970 which meant that it was no more than 15 per cent of the rural families in the country. It is possible that the proportion of borrowing members is low on account of some members not being in need of credit facilities. There is also evidence to the effect that there is multiple membership from the same families. Even so, the available material reveals that in most cases borrowing membership is low on account, especially, of one or more of the following reasons:

(*i*) defaults of members in loan repayment and inability of societies to raise resources, (*ii*) inability of members to provide the prescribed security, (*iii*) lack of up-to-date land records or inalienable rights to land or inability to produce sureties, (*iv*) ineligibility of certain purposes for loans, (*v*) inadequacy of credit limits prescribed, and (*vi*) onerous conditions prescribed such as share capital contribution at 10 to 20 per cent of loans outstanding and compulsory thrift deposits.

8.22 Co-operative finance distributed through the primary societies is mainly confined to crop finance and medium-term loans for identifiable purposes such as digging of wells, installation of pump sets, etc. These amount to about 94 per cent of total loans made to members by societies. Most of the societies do not provide credit for all the productive activities undertaken by the agriculturists nor do they provide to the full extent of their credit needs. In most cases, non-agricultural credit needs even for productive purposes are not met at all.

8.23 In improving the institutional arrangement at the primary level, it is as important to make the structure broad-based as to widen the range of eligible purposes for which credit and other facilities are available. In particular where the effective coverage of the primary society extends over only small proportion of the rural households, its usefulness as an instrument of bridging credit gaps in the areas is limited. In such areas other approaches might be necessary, for achieving the desired results.

8.24 An important feature of the present arrangement is that while the bye-laws of the primary society insist on an individual becoming a member as a pre-condition for making its facilities available to him howsoever creditworthy he may be otherwise, the society does not at the same time assume a corresponding obligation to satisfy his entire credit needs. Even the limited credit facilities that the society gives to a member become unavailable if the proportion of overdues reaches a high level on account of even a few defaulters and the society itself is denied credit facilities by the central bank to which it is affiliated. Similarly, while the central bank is its only source of funds, the bank has no corresponding obligation to satisfy its entire credit needs. The societies based on unlimited liability numbering about 42,000 would be at a greater disadvantage than the limited liability societies in the matter of increasing membership and raising resources.

8.25 The information furnished to us by the States and co-operative banks goes to show that the progress in the matter of reorganization of societies into viable units has been slow and halting in many States. This has been attributed, among other reasons to: (*i*) unwillingness of some societies to amalgamate, (*ii*) administrative delays, (*iii*) absence of legal provisions to enforce compulsory amalgamation, and, (*iv*) reluctance on the part of the States to enforce compulsory amalgamation. It, therefore, appears unlikely that reorganization of more than a lakh of agricultural credit societies into viable units on the lines recommended by the All-India Rural Credit Review Committee[1] could be completed in the foreseeable future. This means that the ability of a large majority of them to function as effective instruments of tapping rural savings and providing comprehensive credit and banking facilities to all sections of rural people would remain very limited. It is, therefore, necessary to examine what other agencies are available for this purpose.

COVERAGE OF RURAL AREAS BY CO-OPERATIVE BANKS

8.26 In the co-operative sector, it is mainly the central co-operative banks that are, under the present policies, expected to provide banking facilities in the rural area. The performance of central banks in respect of functional coverage is examined in another chapter. In this section, their performance in extension of branches in rural areas is examined.

8.27 Table 8.3 (not inserted here) shows that there has been considerable increase in the number of their offices during the period 1961-70. As at the end of June 1970, the 340 central co-operative banks in 17 major States had offices including head offices numbering 3,438, of which over 50 per cent are located in centres with a population of 10,000 and less each. However, it is significant that only three States *viz.*, Gujarat, Maharashtra and Madhya Pradesh account for over 50 per cent of their total number of offices and 65 per cent of offices at centres with population of less than 10,000 each. In these centres, central co-operative banks had 1,773 offices as against 1,601 of commercial banks (as at the end of 1969). Such wide net-work of branches of these

1. *Ibid*, Pp. 455-458.

banks indicates that with organizational competence and good leadership, co-operative banks find it easier than the commercial banks to spread out into rural areas.

POLICIES RELATING TO BRANCH EXTENSION

Central Co-operative Banks

8.28 Though certain provision of the Banking Regulation Act, 1949, have been extended to the co-operative banks since 1966, they are not required to seek prior permission of the Reserve Bank of India for opening new branches in their respective areas of operation. Further in pursuance of certain assurances given by the Government of India to co-operative banks at the time when the Banking Companies Act, 1949, was extended to them, preferential treatment was being shown to co-operative banks *vis-a-vis* commercial banks, in the matter of opening of branches in rural areas and small towns, 'to the point of discouraging commercial banks from opening branches in places already served or likely to be served by co-operative banks'.[1] Central co-operative banks are also eligible for subsidies from State Governments on a tapering scale.

8.29 The Reserve Bank of India (Agricultural Credit Department) urged the central co-operative banks from time to time to take advantage of those concessions and undertake vigorous branch expansion. As a result, as against 854 new offices programmed to be opened by central co-operative banks during the period August 1967 to September 1969, they opened as many as 627 offices, of which 312 were as per the programmes and 315 outside the programmes. The progress has been impressive in Maharashtra, Gujarat, Mysore, Madhya Pradesh, Tamil Nadu and Jammu and Kashmir, while in others it has lagged.

8.30 Following a review of the policy, the Reserve Bank discontinued the preferential treatment extended to co-operative banks with effect from April 1969. Even so, it alerted the State Governments and co-operative banks to the new situation and emphasised the importance of co-operative banks occupying their legitimate place in small towns and rural areas by speeding up their branch expansion programmes. In particular, it called upon the State Governments to help co-operative banks in all possible ways, including undertaking surveys of unbanked and under-banked centres, assessing their deposit and loan potential and ascertaining the availability of infra-structure, making arrangements for recruitment and training of staff, helping banks in acquiring suitable premises and providing subsidies to promote branch expansion programmes vigorously.

8.31 The All-India Rural Credit Review Committee which examined the question at length underlined the need for the Reserve Bank of India helping co-operative banks in drawing up a master plan for branch expansion, in order that they would be in a position to mobilise local savings and provide banking services in rural areas. The Committee recommended that each central co-operative bank should review from time to time the performance of branches already opened from the point of view of deposits, loan business and profitability and also formulate a 5-year programme for opening new branches.[2]

8.32 One of the main difficulties in extending banking facilities to the rural areas by increasing the branch net-work of the central co-operative banks is that a large number are not strong enough. Thus out of 340 banks, 121 had not reached as on June 30, 1970 the stage of viability prescribed by the Reserve Bank of India. As many as 147 of them were classified under 'C' or 'D' in audit which reflects, among other things, poor management, high level of overdues, etc. What is

1. Banking Laws (Application to Co-operative Societies) Act, 1965, *Reserve Bank of India Bulletin*, October 1965, p. 1577.

2. *ibid*, p. 677.

more important, about 100 banks are understood to be requiring rehabilitation - some of them have already been included in the programmes drawn up for the purpose - on account of their high overdues, leading to a general deterioration in their financial position.

State Co-operative Banks

8.33 The policy in respect of branch extension by the State co-operative banks and primary co-operative banks has been, however, different. In terms of the Banking Regulation Act, they are required to seek the prior approval of the Reserve bank of India for opening offices. In this regard, the Reserve Bank's policy generally has been not to permit State co-operative banks to open offices in the districts where there are central co-operative banks and to make them close down their offices in the districts, if opened earlier, wherever reorganisation programmes have been drawn up for the central banks. However, the apex co-operative banks generally have been allowed to open offices at the State headquarters where, in each case, its head office is located.

8.34 Nevertheless, a State co-operative bank is allowed to open offices in the districts under certain circumstances. These are when: (*a*) the central bank is 'weak', (*b*) there is a large deposit potential and the central bank is not able to tap the same, (*c*) the central bank has no objection to the apex bank opening an office in the district, and (*d*) in the case of Union Territories, where the apex bank is the sole financing agency. Instances in which apex banks have taken the initiative to open offices in the districts where one or more of the above conditions are satisfied are few and far between.

Coverage of Rural Areas by Commercial Banks

8.35 As has been pointed out in Chapter 5 the branch net-work of commercial banks is uneven as between the different States and also as between urban and rural areas. In particular as against 91,000 villages[1] in the country with a population ranging from 1,000 to 4,999 each and 3,420 villages with a population ranging 5,000 to 9,999 the commercial bank offices opened in these centres upto 1969 numbered 596 and 1,005, respectively (Table 8.4) (not inserted here). The village with a population of less than 999 each numbered around 4.60 lakh.[1]

8.36 The district-wise position of the coverage of population by commercial bank offices as at the end of September 1970 shows that out of 337 districts covered by their offices, the average population per office was less than 50,000 in 100 districts; it exceeded 50,000 but was less than 1 lakh in 106 districts; it was more than 1 lakh but less than 2 lakh in 85 districts and it exceeded 2 lakh in 33 districts. In seven districts there was no commercial bank office. It should also be noted in this connection that there is considerable concentration of offices in a few centres in each district. Available data[2] show that such concentration of commercial bank offices occurs at important commercial centres in the districts with the result that banking facilities from such offices are by and large limited to those villages which lie within a limited radius from them.

8.37 Since their nationalisation, the major commercial banks have been expanding their network of branches at a rapid rate. However, the gap between the number of commercial banks' branches in rural areas and the number required is so wide that it is unlikely to be filled up in the foreseeable future, through branch expansion. Moreover in the matter of branch expansion in the rural areas commercial banks face considerable problems in regard to personnel. It will also take some time for them to develop appropriate systems of branch control and decentralisation as also work out procedures, etc., relevant for rural areas.

1. According to 1961 Census.
2. The studies undertaken for the Commission by the Reserve Bank and other bodies in certain districts, Lead bank Surveys, Supplement to the *Reserve Bank of India Bulletin*, November 1970.

VIEWS OF STATE GOVERNMENTS AND CO-OPERATIVE BANKS

8.38 The State Governments and co-operative banks were asked to indicate whether they would prefer branch expansion or setting up of rural banks either independently or as subsidiaries of commercial banks or co-operative banks or jointly of both, to provide banking and credit facilities in rural areas. While conceding that branches of co-operative banks might be extended to cover potential centres, a number of them stressed the need for strengthening the primary institutions financially and making them organisationally competent to undertake various functions including mobilisation of deposits. In this context, a large number of them expressed themselves in favour of setting up of some kind of rural banks. One definite suggestion for example was that the primary tier should be dispensed with and there should be strong rural banks for every group of say, 10 villages which would mobilise deposits and provide adequate production-oriented credit. Subsidiary banks jointly sponsored by commercial banks and co-operative banks are favoured by co-operative banks on various grounds, *viz.*, (*a*) they would help combine the knowledge of agricultural financing and rural orientation available with the co-operative banks with the resources, managerial competence and knowledge of improved methods of working available with commercial banks; (*b*) they would help eliminate unhealthy competition between commercial and co-operative banks in the best interests of rural areas and for increasing agricultural production; (*c*) agro-industrial development in the areas can be encouraged; and (*d*) the dependence on the Reserve Bank can be reduced gradually as these subsidiary banks mobilise larger resources from rural areas. It has been emphasised that such banks should undertake all types of credit and banking business.

ORAL EVIDENCE

8.39 In their oral evidence, representatives of certain co-operative organisations including the National Co-operative Union of India and a few others suggested the setting up of rural banks at the primary level to deal directly with rural people in order to make it less difficult and less costly for commercial banks to extend banking to rural areas. In particular, there was a suggestion that the margin maintained by the co-operative structure in making loans to the ultimate borrowers could be reduced by enlarging the scope of operations of co-operative banks and by converting primary societies into full-fledged rural banks. Long-term loans also could be channelled through such rural banks so that farmers need not run around to many agencies to satisfy their credit needs.

FINDINGS OF DISTRICT STUDIES

8.40 The district studies undertaken for us by the various bodies like the Reserve Bank, Universities and the Vaikunth Mehta National Institute of Co-operative Management have also found that there is need for having strong primary institutions like rural banks in the place of existing primary credit societies to undertake comprehensive credit and banking services and collection of deposits. The report on Sangli District,[1] for example, underlined the need for the primary societies appointing their own agricultural extension officers to improve supervision and utilisation of credit and in this connection suggested that some societies might be converted into rural banks on an experimental basis. The report[2] on Guntur district observed thus:

> 'The question relating to the relative role of co-operatives and commercial banks in relation to short-term loans is a difficult one. In spite of all their inadequacies, the co-operatives are the only institutional agencies which cater to the largest number of rural households. The commercial banks will find themselves in a difficult position to cater to the needy small cultivators. Judging by the present trends, supplanting the activities of the co-operatives by commercial banks in the near future is inconceivable. But co-operatives as they are currently situated are

1. The study was undertaken for the Commission by the Vaikunth Mehta National Institute of Co-operative Management.
2. The study was undertaken by the Department of Applied Economics and Co-operation, Andhra University, Waltair.

ill-equipped as agencies of deposit mobilisation. Future, there is widespread resentment against groupism and discrimination in issue of loans by the board of management of co-operatives. The role that is to be assigned to the co-operatives in relation to credit expansion and deposit mobilisation will essentially depend upon the quickness with which they could transform themselves into viable rural banks, manned by trained cadre. The commercial banks could help the transformation of co-operatives into rural banks. If co-operative leadership at grass roots does not display the imagination and foresight in promoting the formation of viable co-operative banks, the nationalised commercial banks will be under strong pressure to promote direct financing of agriculture on a much larger scale even if it means further weakening of the co-operative credit structure'.

SCHEME OF COMMERCIAL BANKS FINANCING PRIMARY AGRICULTURAL CREDIT SOCIETIES

8.41 Recognising that the primary credit societies working satisfactorily in areas served by weak central co-operative banks were not in a position to get adequate credit facilities, the Reserve Bank launched a scheme[1] under which commercial banks could take up financing of certain number of societies in selected districts. During 1970-71, the scheme was introduced in 49 districts in 5 States.[2] The scheme was intended to provide a means by which commercial banks' resources would become available to the co-operative system. We recognise, it is too early to make an assessment of the working of the scheme. However, it would be useful to note some of the problems thrown up by it during the experimental stage. A study conducted for us in Andhra Pradesh and Mysore has brought out the following features:

(*i*) The commercial banks have to undertake rather heavy responsibilities when they finance primary credit societies, such as preparation of credit limit statements by the societies, getting resolutions passed by them, execution of documents, ensuring proper use of funds and their recovery, taking legal action in the case of defaults, maintenance of books of accounts, etc. Where paid secretaries are appointed by the societies, the banks' task is somewhat reduced.

(*ii*) While in several cases the membership of the societies taken up by the banks was low, their efforts to increase membership received modest or no support from the managing committees which were, it would appear, reluctant to release their hold on the societies. For the same reason, they also seemed to be reluctant to appoint paid secretaries.

(*iii*) Though generally larger volume of finance flowed through the societies than in the past, particularly for financing large farmers, there was no significant increase in the finance reaching the small borrowers.

(*iv*) As the membership of the societies remained low, the benefit of commercial bank finance reached a relatively small proportion of local producers. Those who were engaged in other than agricultural occupations had, as in the past, no way of satisfying their credit needs. As the society was not in a position to satisfy all the credit needs, the borrowers were not willing to create charge on their assets; instead they preferred to go without credit from the society.

1. The scheme was suggested by the National Credit Council Study Group on Area/Project Approach in Implementing Schemes for Extending Commercial Bank Credit to Agriculture (1969) and was recommended by a Working Group of the Nationalised Banks.

2. Andhra Pradesh, Haryana, Madhya Pradesh, Mysore and Uttar Pradesh.

(*v*) The high ratio (10 to 20 per cent of the loan) at which share capital was collected from borrowers discouraged some farmers from becoming members.

(*vi*) Even though the credit limits were fixed as per scales of finance as under the crop loan system, loaning was essentially security-oriented, and those who owned larger holdings were able to get large sums of money without any obligation to actually use such resources for the purpose intended.

(*vii*) The banks found that recovery of dues was by no means easy because they had to depend on local office-bearers who would not always co-operate.

(*viii*) Hardly any commercial bank had succeeded in mobilising savings through the societies taken up by them.

RECOMMENDATIONS FOR THE FIELD LEVEL ORGANISATION

8.42 We shall now discuss the steps that need to be taken to improve the structure of banking institutions at what might be called the field level. It is obvious that the starting point for these improvements is the strengthening of the primary credit societies in such a way that they are able to provide not only adequate credit but develop the banking habit in the rural sector by providing it with a wide range of banking services as well as certain closely allied non-banking services. In short, they have to become rural banks. Under certain conditions the primary credit societies can do this. These conditions are, first, the society itself must be a well managed efficiently run unit. Second, the society should have an assurance of the kind of technical assistance that is required to enable it to provide the credit and the banking services necessary. Where the central co-operative bank of the district in which the primary society is located is itself a strong unit, it should be possible for the primary to get most of the assistance from the central bank. Where the central bank of the district is weak, the apex bank could be the agency to give such assistance. In both these types of cases, establishment of rural banks in the co-operative sector or rural co-operative banks will obviate the need for opening of branches by central or the State co-operative banks merely for the purpose of providing banking facilities like deposit accounts, remittances, etc., to the rural areas. The central and State co-operative banks can concentrate their attention on meeting the needs of other productive and of distributive activities in the co-operative sector. Since, however, in many States both the district and the State level co-operative banks need to strengthen themselves, it will be necessary to think in terms of commercial banks providing such assistance. Third, certain legal steps are necessary to enable the primaries to function as rural banks. These have been dealt with in Chapter 19.

8.43 It was mentioned earlier that out of the 1.63 lakh societies, around 51,000 satisfy one of the indices of potential viability, *viz.*, appointment of a full-time paid Secretary. However, upto March 1971 only about 30,000 societies had received Government share capital contribution which is another index of potential viability. A number of such societies which satisfy both these indices can be converted into rural banks provided they are able to get the requisite technical assistance from the central or the State co-operative banks. In view, however, of the relatively small number of such higher level co-operative institutions which can do so, it is necessary to think of other solutions to the problem of extending the geographical coverage of banks. Three methods are being tried out at present for this purpose. Two of them, namely, opening of branches by commercial banks and financing of a group of primary agricultural credit societies by commercial banks have already been mentioned. The third method which has been tried out by the State Bank Group is the Village Adoption Scheme. The object of this scheme is to make intensive efforts to reach all economically viable farmers, irrespective of the size of their holdings. Even small farmers who are potential producers for the market are covered and for determining their repaying capacity, their income from all productive activities is taken into account. The scheme also provides for the system of 'group guarantee'. By the end of June 1971, as many as 1,145 villages are reported to have been covered under the scheme. The number of farmers assisted directly stood at 2.56 lakh, 76 per cent of whom had holdings of 4 hectares and less and those having holdings of 2 hectares and less formed 51 per cent.

8.44 Of these three methods, opening of branches by commercial banks or village adoption can develop the banking habit and provide the full range of banking services to the rural sectors. At the same time, they can result in the extinction of the co-operative endeavour in the field of credit institutions. The method of financing primary societies by commercial banks can strengthen the co-operative institutions provided satisfactory solutions can be obtained to the various difficulties mentioned in paragraph 8.41. In due course many primary societies in this group can become rural banks.

8.45 It is doubtful whether all these three methods will suffice to give adequate geographical coverage of the rural sector in the foreseeable future. It is, therefore, necessary to consider whether in areas where the co-operative credit structure is generally weak an institution like a rural bank cannot be established either by making a good primary agricultural credit society to work as a subsidiary of a commercial bank or by the commercial bank setting up its own subsidiary. Such a rural bank which may be called a rural subsidiary bank to distinguish it from the rural co-operative bank mentioned earlier (paragraph 8.42) should be an organisation which retains the useful features of co-operative credit institutions such as local participation, flexibility as regards increasing share capital, arrangements for selling shares to local people, and so on. At the same time, the parent bank will provide it with full technical and financial support and exercise control over its management. Thus, of the total capital of a rural subsidiary bank, the sponsoring bank will hold 51 per cent and the remainder will be available for the people in the area of operation of the rural subsidiary bank. In such an arrangement, the rights of the individual share holder in respect of the balance of the capital should be of the same kind as those of a primary credit society. In those cases where no local participation is forthcoming, the sponsoring bank has to provide the whole of the capital for the rural bank. It should however, be the endeavour of the sponsoring bank to sell a part of its holding to the people residing in the area of the rural subsidiary bank.

8.46 Since the object of setting up a rural bank whether as a co-operative or a subsidiary is to extend credit and other banking facilities to all members of the public in its area, it would be necessary for those primary societies which are converted into rural banks to make some departure from their practice of not lending to non-members by creating a new class of members called 'associate' members who can avail themselves of the facilities of the bank but will not be entitled to any rights of voting or to patronage dividend. However, in order that the rural co-operative bank retains its essential co-operative character, the loan business with 'associate' members may be restricted to a reasonable limit, say 25 per cent of its total loan business. There is nothing new in admitting non-members as 'associate' members of co-operatives. Indeed, the International Co-operative Alliance Report on Co-operative Principles finds it a desirable way of inducing the smaller proportion of rural residents in the area of a co-operative, who may have remained outside the co-operative fold for some reasons, to eventually become full-fledged members.

8.47 In order to encourage local participation in the rural banks, these banks should give in their dealings some preference to the members over 'associate' members in the case of 'rural co-operative banks', and shareholders over non-shareholders in the case of 'rural subsidiary banks'. Thus the interest rate charged to a member/shareholder for his borrowings would be somewhat lower than that charged to an associate member/non-shareholder.

FUNCTIONS OF RURAL BANKS

8.48 While the rural banks are basically banks and will perform all the banking functions, it will be desirable to enable them to perform certain non-banking functions, such as constructing and maintaining godowns on their own, supplying, as agents, agricultural inputs and acquiring of agricultural and other equipment for leasing it out, providing assistance in the marketing of agricultural and other products and generally helping in the overall development of the villages in their area. Thus the various functions which a rural bank may be expected to assume in due course may be listed as below:

(1) Mobilise local savings by means of the various types of deposits;
(2) Provide short-term and medium-term credit for agriculture and other purposes to rural producers and provide long-term loans to agriculturists as agent of the land development bank;
(3) Implement programmes of supervised credit tailored to the needs of individual farmers;
(4) Provide various ancillary banking services to local people, such as remittance of funds, acceptance of insurance premia, safe deposit lockers, etc.;
(5) Set up and maintain godowns;
(6) Undertake supply of inputs and agricultural and related equipments to farmers as agents and in appropriate cases equipment leasing;
(7) Provide assistance in the marketing of agricultural and other products through marketing organisations; and
(8) Generally help in the overall development of the villages in its area.

OUTLINE OF THE SCHEME OF RURAL BANKS

Location and Area of Operation

8.49 A rural bank may be described as a primary banking institution set up to serve a compact group of villages generally, working as a co-operative bank or as a subsidiary of a commercial bank. Its object is to provide at one place the special type of credit and banking facilities and other related services needed by agriculturists and other rural producers. Generally, it should be possible to organise a rural bank for a compact group of villages covering a population ranging from say, 5,000 to 20,000. However, in sparsely populated areas, it may be necessary to organise a rural bank for as big an area as a development block to start with.

8.50 It is intended that a rural bank should cater to the full credit needs of all medium and small cultivators. There may be in its area some cultivators and other rural producers who may be in need of a different type of technical help and of a much larger volume of loans than a rural bank would be in a position to provide. Such producers should have access to a branch of a commercial bank. Further, it is possible that some of the uneconomic primary agricultural credit societies which have been operating in its area for some time may continue to do so till they are wound up. Considering that the setting up of rural banks by either commercial or co-operative banks will be in pursuance of a national policy designed to bridge the credit gaps adequately, the Reserve Bank should ensure through appropriate directives that the commercial or co-operative banks should not continue to finance such uneconomic and weak credit societies while at the same time financing rural banks in the same area. The members of such societies should be eligible for finance from the rural banks. We recommend that the provision empowering the Registrar of Co-operative Societies to order winding up of societies which are uneconomic and poorly managed, may be invoked in the public interest, wherever there is such a provision. Where it does not exist, it may be provided for.

Share Capital and Borrowing Power

8.51 Where a rural bank is set up as a subsidiary of a commercial bank (the rural subsidiary bank) its minimum authorised capital should be Rs 1 lakh of which Rs 50,000 should be paid-up. At least 51 per cent of the paid-up share capital should be held by the sponsoring bank, the other 49 per cent being offered to the local people for subscription. Where a primary society becomes a rural bank (the rural co-operative bank) it should also have Rs 50,000 as its minimum share capital. The special law we have recommended provides for the share capital of a rural subsidiary bank being increased suitably as and when necessary in a simple manner.

8.52 In areas where local participation is not readily forthcoming, the sponsoring bank should be in a position to put up the entire minimum capital prescribed under the law. However, the bank should offer for public subscription an appropriate part of its share capital as and when there is possibility of attracting local participation in share capital.

8.53 Irrespective of the amount of share capital held by any member of the public, the voting power of the shareholders other than the sponsoring bank should be regulated by the principle of 'one-man-one-vote' as prescribed in the special law. The sponsoring bank will have the right to nominate the majority of directors on the Board which should consist of between 5 and 9 members.

8.54 We do not consider that there is need for fixing any maximum borrowing power in the case of rural banks. Maximum borrowing power fixed as a multiple of owned funds of an institution is a device of rather limited utility. Where the institution is well managed, it becomes necessary to increase the maximum borrowing power and where it is badly managed the ceiling is not required because the institution is unable to borrow upto the limit. Moreover, since rural banks under the scheme will be either subsidiaries of commercial banks or will be supported by strong co-operative banks and in either case they are likely to be under the effective control and supervision of the parent bank apart from that of the Reserve Bank, we do not consider it necessary to fix any maximum borrowing power.

8.55 Nevertheless, it is important to emphasize the need for building up the financial strength of the rural bank and this should be done, in our view, more by way of ploughing back the profits into the reserves than by increasing the proportion of share capital to be held by a member to the maximum amount he can borrow. This can be done by placing a ceiling on the rate of dividend.

8.56 The co-operative principle of distribution of patronage dividend to the borrowers is a healthy principle and should be applied to rural banks proposed under the scheme. The surpluses arising from the business after providing for statutory reserves and other funds in the normal course may be distributed by the rural bank to borrowers as well as to depositors in the shape of patronage dividend in order to encourage the patronage of the local people, when the financial position of the rural bank is adequately built up.

Contribution to Share Capital

8.57 The amount of resources that the commercial and co-operative banks might need every year for the purpose of enabling them to subscribe to the share capital of rural banks depends on the number of rural banks proposed to be sponsored. This is discussed later. It is important to ensure that lack of resources for the purpose of making share capital contribution to the rural banks does not stand in the way of sponsoring rural banks wherever it is considered necessary. Accordingly, we recommend that resources for the purpose may be made available from the National Agricultural Credit (Long Term Operations) Fund set up by the Reserve Bank of India which is being used for the purpose of, among other things, making long-term loans to State Governments for enabling them to participate in the share capital of co-operative banks and primary credit societies. The resources of the Fund should also be available for the purpose of making contributions to the share capital of the rural co-operative banks. The Reserve Bank of India Act may be amended for enabling it to make loans from the Fund to commercial banks directly for facilitating their sponsoring of such banks.

Other Resources

(*a*) *Deposits*

8.58 As the rural banks develop their business in the rural areas, they should be in a position to mobilise, through deposits from the local people, an increasing part of their requirements for loaning. We recommend that the rural bank should be allowed to offer a somewhat higher rate of interest on deposits than that offered by the parent commercial bank or co-operative bank, as the case may be. The extent to which the rate can be higher on different deposits may be fixed by the Reserve Bank from time to time. In terms of the special legislation recommended, the Deposit Insurance scheme will also be extended to the rural banks.

8.59 We also expect that rural banks, as in the case of the sponsoring banks, would be increasingly involved in making payments to the agriculturists on behalf of the Food Corporation of India and its authorised agents who make purchases of foodgrains and other commodities from them. There are definite advantages in the long run if the Food Corporation of India makes payments to the producers through the rural banks. We recommended that the Food Corporation of India may do this, on an experimental basis, wherever rural banks are set up. Similarly, where the system of compulsory procurement exists the State Governments can utilise the rural banks for their payments to farmers.

(*b*) *Borrowings*

8.60 A good part of the resources of the rural banks, however, would come from the higher level banks whether co-operative or commercial. Those set up by co-operatives may, however, supplement their resources by borrowing from a commercial bank as and when necessary. It is important, however, that the rural banks get some concessional credit facilities in order to off-set to an extent the relatively high interest cost on the deposits they collect locally. These concessional credit facilities should be the same as are available to the co-operative credit system. That is to say, there should be a uniform policy regarding concessional credit facilities from the Reserve Bank, irrespective of the channel through which they are made available. The rural borrower should pay the same interest whether he borrows from a primary co-operative or from a rural bank.

8.61 For practical considerations, we do not consider it desirable for the rural banks to seek refinance from the Reserve Bank of India. The higher level institution, *viz.*, the central co-operative bank or the sponsoring commercial bank will be the link with the Reserve Bank. It is, however, necessary to ensure that the borrowings of the commercial bank for financing its rural subsidiary do not result in penalising the commercial bank in obtaining refinance for its own purposes. The Reserve Bank will have to make appropriate changes in its policy in this regard.

Requirements Regarding Liquid Assets

8.62 In view of the fact that the rural banks will operate in areas where current deposits of a significant order are not likely to be collected, we recommend that the norms for maintenance of liquid assets by rural banks should be lower than those for other banks. Further for both types of rural banks, the balances maintained by them with the higher level banks should be regarded as liquid assets.

Other Facilities

8.63 These banks should be given by parent banks, remittance facilities free of cost and training facilities for personnel including technical personnel and personnel on a loan basis at subsidised costs in the initial years.

8.64 We also recommend that the rural banks should be eligible for participating in the guarantee schemes designed for ensuring adequacy of credit facilities to small and neglected sectors and that the dividends on shares held in rural banks by individuals should receive the same exemptions as are available to the dividends paid on units of the Unit Trust of India.

Personnel

8.65 We should like to emphasise here that the success of a rural bank depends on the type of men put in charge of it. The staff of the rural banks should have the requisite background and training consistent with its functions. It is important that either the manager or the official next in line should have proper training in farm management and agricultural credit.

IMPLEMENTATION

8.66 The first priority in establishing rural banks should be given to the well-run primary agricultural credit societies. Each central co-operative bank which has the necessary organisational strength should select a few such primary societies every year for conversion into rural banks. Where such societies exist in the area of operation of a weak central co-operative bank, the concerned State co-operative bank can take such action if it can provide the necessary technical support. Where it is not practicable for the higher level co-operative banks to undertake such responsibility the primary credit society may be allowed to become a subsidiary of a commercial bank. Where the whole co-operative structure is weak, the commercial banks should set up rural subsidiary banks on their own. The establishment of the rural subsidiary banks will necessarily be somewhat slower than those of the rural co-operative banks as it will take time to sort out the various practical problems of running such banks. We recommend, therefore, that commercial banks should take up this work on an experimental basis for a period of five years and establish rural subsidiaries in some of their lead districts. The experience gained during this period will decide the future of the scheme.

8.67 In particular, we consider that there are two types of districts where this type of organisation in our view can be tried out first. First, there are the agriculturally advanced districts with a rich deposit potential as well as scope for further agricultural development. What are known as 'package' districts, the cash crop districts and parts of those where high yielding varieties programmes have been introduced in a big way come under this category. Secondly, there are areas which have been identified as having considerable potential for development of agriculture, agro-industries and related rural activities but much development has not taken place on account of lack of banking and credit facilities.

8.68 Since the Reserve Bank will have to license the rural banks, it should also have the responsibility for ensuring that the Scheme of rural banks is implemented properly. It will have to co-ordinate the rural bank programmes of the commercial and co-operative banks and formulate suitable guidelines for their working.[1]

NEED FOR SPECIAL LEGISLATION

8.69 Under the existing laws, co-operative banks are registered under the Co-operative Law, and others under the Company Law. In either case a new 'bank' requires a licence before it can start its business. While rural banks can be established both in the co-operative sector and outside it, the present legislation needs to be changed to facilitate speedy establishment and smooth functioning of these banks. In particular, for the rural banks which will be subsidiaries of the commercial banks, the Company Law is very cumbersome and costly. There are also disadvantages in registering rural banks sponsored by them under the Co-operative Law. For one thing, such rural banks would have to confine their operations only to members of co-operatives. This means that in areas where the membership of co-operatives is low such rural banks will not be able to bridge the credit gaps and thus the whole purpose of setting them up would be defeated.

1. The detailed procedure is given in Chapter 19, paragraph 19.71.

8.70 Secondly, the commercial banks will find it hard to implement the programmes, if they are required to deal with several State Governments at the same time, not only for the setting up of rural banks but also in the process of running them. Besides, the co-operative principle of democratic management would come in conflict with the controlling interest of the sponsoring bank in a co-operative rural bank.

8.71 Thirdly, registration of rural bank sponsored by either the commercial or co-operative banks under the Co-operative Societies Act of States imposes heavy burdens on the co-operative department in several States both for registering the banks as well as for the administration of the provisions of Co-operative Laws in relation to such banks. Under the existing laws, the Registrar of Co-operatives has wide-ranging powers over co-operative banks particularly relating to compulsory amalgamation, financing of non-members, borrowings, loans, investments, etc. Since under the proposed scheme, the Reserve Bank has the responsibility to ensure that the scheme is implemented properly, it is necessary that all such powers should also be vested in the Reserve Bank.

8.72 In view of the above, the Commission recommends that separate legislation should be enacted by the Parliament in order to enable rural banks being set up quickly and in a fairly simple way without straining too much the organisation and resources of either co-operative or commercial banks. The lines along which such legislation should be framed are given in Chapter 19.

8.73 Pending the enactment of the new legislation, we recommend that appropriate amendments may be made to Co-operative Laws in different States to enable the setting up of rural co-operative banks expeditiously along the lines recommended by us.

GENERAL OBSERVATIONS CONCERNING RURAL BANKS

8.74 Under the scheme outlined in the preceding paragraphs, rural banks will in most cases represent the logical development of the well-run primary agricultural credit societies. Where the primaries though strong are not able to get assistance from the higher level co-operative institutions they may have to become subsidiaries of commercial banks in order to get the necessary technical and financial support. But they can still retain the advantages of being a co-operatively organised institution. Even where both the primaries and the higher level co-operative institutions are weak and a rural bank is to be established as a subsidiary of a commercial bank the scheme envisages such a rural bank to incorporate the advantages of a co-operatively organised institution. This emphasis on co-operation is essential in our view because the co-operative credit institutions have played an important role in many areas of the country, have built an organisation at the grass root level and have acquired insight into the rural problems. Properly managed and operated co-operative banking and credit structure can be a source of strength to the whole credit structure of the economy. Under certain conditions, the local participation, democratic management and responsiveness to local needs and urges that co-operative organisations characterise, make them the ideal type of institutions to be sought after.

8.75 In recommending the establishment of rural banks, we are not unaware of the difficulties and problems that such banks, especially those to be sponsored by commercial banks, will face. The right type of local participation, which is an essential feature of the scheme, may not be forthcoming. The problem of management and staffing may prove to be difficult in many areas. The sponsoring banks may find the supervision and control of their subsidiaries more difficult and even more costly than control of branches. Some of these difficulties may, however, be expected to fade out after the initial stage. What is more important is that in the large and complex situation in the field of rural credit in India, there will remain a large gap even after the maximum possible branch expansion has been tried by the commercial banks. There cannot be any one solution to this extensive residual problem and all possible alternatives should be tried. Rural banks established by transforming good co-operatives into all-purpose credit institutions will be the logical culmination of the process of evolution of the co-operative system. Here the rate of conversion should proceed as rapidly as practicable. We have recommended for the subsidiaries of commercial banks, an initial experimental phase of five years, during which only a limited number of such banks should established. The experiment will indicate the strong points as well as the weak points of the new institutions. It is not unlikely that the experiment will have different degrees of success and create different types of problems in different areas. The emergence of the problems during the experimental period should not be taken as a reason for the abandonment of the scheme. The objective should be to discover how these problems can be solved, so that the scheme can be expanded to cover all the rural areas which remain without banking facilities.

8.76 The rural banks will succeed in discharging the wider responsibilities they are required to assume only if they get adequate technical and financial support so that they can be run on sound banking lines. The initial selection of the primary society or the area in which the rural bank is to operate, the training its staff gets, the managerial support it can get from the central co-operative or the commercial bank, the kind of discipline these banks are able to maintain, all such factors count. The early years of the operation of the scheme are crucial from this point because they will throw up the various practical problems these banks are likely to face. But we have no doubt that once such problems are successfully handled the rural banks will go a long way in providing the kind of banking facilities Indian agriculture needs over the coming years. At the same time the emphasis on rural banks does not imply that other methods of providing banking facilities are ruled out. In the present Indian context the need is to try out various alternatives with a view to finding out which particular method is suited to an area of a given type. What is essential is that the banking and credit arrangements in any area are capable of making a significant impact on the development of the agriculture and the local industry in that area.

CHAPTER 9

CO-OPERATION BETWEEN COMMERCIAL AND CO-OPERATIVE BANKS II: LOAN POLICIES AND PROCEDURES

INTRODUCTION

9.1 In this chapter, we propose to examine the question of co-ordination between commercial and co-operative banks in the matter of their loan operations. Reference may be made in this connection to Chapter 4 which gives a brief account of some of the important schemes introduced by commercial banks for lending to agriculture. An examination of these schemes as well as the comparison of the commercial banking system with the co-operative banking system made in Chapter 3 brings out prominently the fact that because of their inherent strength, commercial banks are in a position to adopt flexible policies in their lending operations to agriculture. The major part of the problem of co-ordination between these two types of banks in lending to agriculture centres round this fact. Ways have to be found to take advantage of the possibilities of innovation in this field in order that both types of banks are able to adopt lending policies which suit the requirements of the various types of agriculturists. It will be useful in this connection to describe briefly the views of the State Governments, the banks and others as to the manner in which such co-ordination should be brought about.

9.2 At the outset it may be stated that fears have been expressed by some State Governments and co-operative banks that the entry of commercial banks into the sphere of agriculture finance would result in a loss to the co-operatives of their 'good' business and they would, therefore, become weaker still. At the same time, there are State Governments and co-operative banks which expect improvement in the efficiency and better management of co-operatives as a result of the entry of commercial banks. The view that a healthy competition between the two sectors would benefit co-operatives in the long run in terms of efficiency and reduction of cost of services to borrowers has been expressed generally by the States and the co-operative banks where co-operatives have progressed well. They point out that unless the co-operatives improve their services, their future is not assured and, therefore, everything should be done to remove the handicaps and rigidities which adversely affect their performance, while at the same time, taking measures to improve their resources and management.

9.3 A number of suggestions have been made by Governments and co-operative banks on how best to evolve complementarity between co-operative and commercial banks in agricultural credit. These range from demarcation of areas between the two, to requiring commercial banks to finance large farmers, non-members, for purposes not covered by co-operatives, and for amounts beyond the limits provided by the co-operatives, leaving the rest, particularly the needs of the small farmers to be met by co-operatives. There was even a suggestion that healthy competition between the two should be promoted by enabling commercial banks to open branches in the rural areas. Some of the banks reporting from areas where co-operative coverage is high suggested that the entire finance should be channelled through co-operatives and where commercial banks finance rural production, their rate of interest should be slightly higher than that charged by the co-operatives.

9.4 Generally, however, most of them agreed that the scope for expanding agricultural finance is so large that there would be no danger of the growth of co-operatives being hampered in any way. The growth of co-operatives depends on how soon the various handicaps under which they operate at present are removed, and how best co-ordination arrangements can be evolved. It has been also pointed out, in particular, that there should be no attempt on the part of commercial banks to finance defaulter-members of co-operatives or to finance the same persons on the same security, over once again.

9.5 Like the co-operative banks, national banks also suggested that suitable co-ordination arrangements should be made between the two sectors of banks. However, they were averse to any reservation of areas or preferential treatment being given either to co-operative or commercial banks. In their view there is no question of commercial banks supplanting co-operatives and, from a long-range point of view, healthy competition would be in the best interests of both. This is possible only when they operate under similar conditions without either of them being subjected to handicaps - legal or otherwise. Some of them expressed a view that commercial banks are perhaps in a better position to provide development loans than co-operative banks on account of their better position in terms of resources and expertise. Reservation of areas as such is considered undesirable by many of the banks because in the ultimate analysis it would result in inefficiency and defeat the purpose of nationalisation of banks. Besides, it would come in the way of co-operatives developing a competitive spirit and improving their efficiency. Some banks, however, have not altogether ruled out the desirability of reservation of business on a functional basis in the areas where the co-operatives have been able to satisfy agricultural credit needs to a very great extent.

9.6 In the light of the foregoing, the main objectives of co-ordination between the two types of banks in regard to agricultural credit may be stated as follows: (*a*) no area is starved of adequate credit facilities for agriculture and other developmental purposes; (*b*) while a person should be able as far as practicable, to borrow from a bank of his choice, multiple lending for the same purpose should be avoided; (*c*) the borrower from the co-operative society or a co-operative rural bank should not be at a disadvantage *vis-a-vis* a borrower from a commercial bank or its subsidiary rural bank and *vice versa* in terms of either the quantum of credit or type of credit, or other terms and conditions relating to it; (*d*) neither type of banks should adopt practices which operate to the disadvantage of the other in the matter of borrowing facilities; and (*e*) both types of banks should benefit from each other's experience so that their range and standard of services improve.

SOME FEATURES OF CO-OPERATIVE AND COMMERCIAL BANK AGRICULTURAL CREDIT

9.7 We have earlier made a reference to the reasons for the uneven growth of co-operatives. Similar unevenness is in evidence in the case of commercial banks also (Table 9.1) (not inserted here). Four States account for 49 per cent total loans of co-operatives. Five States account for 65 per cent of commercial banks' credit. Co-operative credit is mainly for agriculture whereas in the case of commercial banks credit for agriculture has so far remained a small proportion of their total credit. Agricultural loans by co-operatives account for nearly 80 per cent of the total loans at the apex level, 74 per cent at the central bank level (see Table 9.2) (not inserted here) and 94 per cent at primary level for the country as a whole as at the end of June 1970. Commercial banks' credit for agriculture amounted to just 5 per cent of their total advances as on March 31, 1971. Medium-term credit forms a rather low proportion of the credit given by the co-operatives. On the other hand, commercial banks have made sizeable medium-term loans since they launched the scheme of agricultural finance.

9.8 One of the major difficulties faced by the co-operatives is overdues which have increased steadily. At the end of 1969-70 they amounted to 37.7 per cent of the outstanding loans at the primary level. For the country as a whole, 141 central banks showed overdues exceeding 25 to 50 per cent of outstanding loans in 1969-70, as against 95 banks in 1964. Similarly, the number of banks showing overdues exceeding 50 per cent of outstanding loans rose from 44 to 83. It is early as yet to say to what extent commercial banks are likely to face this problem.

AREAS OF CO-ORDINATION - LOAN POLICY

9.9 Next in importance to co-ordination in geographical coverage at the primary level is co-ordination in the sphere of lending. As we see it, a sound and progressive system of credit, whether followed by co-operative or commercial banks, should have certain well understood goals. It should (*a*) provide integrated and comprehensive credit facilities to all the producers, (*b*) be based on the purpose of the loan and in particular the improvement of productivity it can achieve through modernisation and diversification of farming, and (*c*) be responsive to individual needs, in matters such as the quantum, timing of sanction, spacing of disbursements, and the degree of technical help and supervision needed.

Formulation of Loan Policies

9.10 Available evidence shows that, by and large, the goals of loan policies, though generally understood as promotion of production, are not well appreciated by co-operatives in their total context. This seems to be due, mainly to the fact that those who formulate policies for agricultural development are not associated with the policy making bodies for agricultural credit at various levels. At the implementation level too, lack of involvement of agriculturists does not ensure the feed-back of information about the effectiveness of policies. Some of the State Governments replying to the questionnaire have suggested in this context that loan policies formulated for the co-operatives would become more flexible and responsive to local needs if representatives of the State Departments of Agriculture, commercial banks and research workers from agricultural universities are also associated in their formulation. They have suggested that the responsibility of laying down details of loan policies should be left to the State bodies within the framework of guidelines laid down by the Reserve Bank of India.

9.11 In the case of commercial banks, most of the national banks have developed policies relating to agricultural finance more or less after their nationalisation. In this they have been able to draw on the advice of agricultural specialists.

Some of them have appointed agricultural technicians at the field level to communicate with the farmers and to judge the adequacy of their policies.

Content of Loan Policies

9.12 In the case of co-operatives the content of loan policies is spelt out in the crop loan system. The crop loan system was evolved by the Bombay State in 1948-49. Later it was recommended for general adoption by the All-India Rural Credit Survey Committee (1954) and was introduced by the Reserve Bank through the co-operative banks all over the country in 1965. This system represents a major step forward to divorce loaning from security and to link it to production needs. The object is to relate short-term credit to the estimated credit needs for raising the crop. The main features of the system as it has evolved are: (*i*) determination of the quantum[1] of loan in relation to the production outlay and repaying capacity, (*ii*) disbursement of a substantial portion of the loan in kind, (*iii*) seasonality in advancing and repayment of loans, (*iv*) advancing of loans against the security of expected crops rather than against title to land and (*v*) streamlining of procedures for sanction and disbursement. Under the scheme, the repaying capacity of the borrowers is to be estimated at 50 per cent of the gross estimated value of crops produced under the traditional level of cultivation. A part of this (35 per cent of the estimated value) is reckoned as available for repayment of short-term loan and the balance for the repayment of instalment of medium-term loan.

9.13 In principle, most of the States have accepted the system. The All-India Rural Credit Review Committee which reviewed the implementation of the crop loan system in different States found, however, that several features of the system were not, in practice, being implemented.[2] The Committee recommended a number of refinements, including scales of finance being fixed by a group of experts conversant with agricultural operations instead of by a field workers' conference, introducing the system of working out credit needs with reference to individual requirements instead of on uniform basis, etc. The latter would facilitate, according to the Committee, inducing substantial cultivators to use a part of their own resources for meeting their working capital needs. Among other things, the Committee emphasised the need for flexibility in the matter of disbursement of the '(b)' component representing inputs and of the principle of seasonality in disbursement and recovery of loans. The cash credit type of accommodation was recommended on a trial basis to cultivators engaged in multiple cropping.

Purpose of Loans

9.14 Under the crop loan system, short-term loans are made for meeting the cost of seasonal agricultural operations,[3] including purchase of inputs and marketing of crops. Medium-term loans are made for identifiable purposes, *i.e.*, sinking of wells, purchase of oil engines and pump sets, reclamation of land, purchase of bullocks and milch cattle, construction of farm houses, purchase of agricultural implements, purchase of shares in co-operative sugar factories, etc. There is a general reluctance on the part of the banks, though there are some exceptions, to extend credit facilities for purposes other than those specified by the Reserve Bank as eligible purposes.

9.15 Most of the State Governments and apex and central banks that replied to the questionnaire have suggested that in making loans to farmers,

1. The quantum of loan a farmer is eligible for is determined with reference to a scale of finance which consists of (*a*) cash component which is generally not to exceed one-third of the gross value of crops produced at the traditional level of cultivation, (*b*) a kind component representing the outlay on input and (*c*) an additional cash component upto 50 per cent of what is drawn under (*b*) to absorb the expenditure in the application of inputs. (*Crop Loan Manual*, Reserve Bank of India).

2. *Report of the All-India Rural Credit Review Committee*, Reserve Bank of India, 1969, Pp. 466, 472, 473, 481 to 484.

3. Agricultural operations include animal husbandry and allied activities jointly undertaken with agricultural operations.

their entire needs must be taken into account and that the loans should be granted on the basis of their expected farm and non-farm income and repaying capacity. This would ensure that adequate short-term credit is available in cases where medium or long-term loans are advanced for improvement of land, provision of irrigation facilities, etc. From the farmer's point of view, it would be advantageous because he would not be required to approach different agencies for satisfying his needs. There were also suggestions that loans should be given for purchase of land and construction of houses and that working capital expenses relating to cottage industries carried on by farmers should be met by the primary institution.

Adequacy of Credit

9.16 Under the crop loan system, adequacy of credit for seasonal agricultural operations is sought to be ensured by (*a*) fixing scales of finance for different crops and (*b*) relaxing or removing the limit of individual maximum borrowing power. Certain limitations of fixing scales of finance for different crops have already been pointed out by the Review Committee. One of the major limitations of this system is the uniform application of scales of finance.

9.17 The Governments and banks which replied to our questionnaire have pointed out that heavy overdues came in the way of banks and societies raising adequate funds and that many banks were not adequately equipped to implement the crop loan system. Some banks complained that the system lacked flexibility and the procedures and forms were somewhat complicated. Others have found that the demand for credit worked out on the basis of crop loan formula was so great that it was beyond the capacity of banks to satisfy. The Review Committee has stressed the need for fixing separate scales of finance for different parts of a district and also separately for wet and dry areas. While this refinement may be adequate for areas where agriculture, by and large, continues to be traditional, it is also necessary to introduce further flexibility in the system so as to enable it to provide adequate credit where improved agricultural technology is adopted in individual cases. Otherwise it will be difficult to ensure the development of farmers into efficient producers because whether one is efficient or inefficient, the quantum of credit that he gets is the same in accordance with the scales fixed. In some cases the scale of finance is too small to promote intensive or diversified occupations.

Security

9.18 Under the crop loan system, though the loan is expected to be secured by the anticipated crop, in practice, security plays an important role even when the credit limit in each case is fixed on the basis of the scale of finance and acreage. Several borrowers were found to draw loans only upto the extent of the surety limits. These limits in many States do not exceed Rs 1,000, and in some States they are as low as Rs 250.

9.19 Loans in excess of the surety limits mentioned above can be made when sureties are supported by declarations executed by the borrowers creating a charge on their land or their interest in land in favour of the society. In some States, medium-term loans beyond Rs 1,000 and upto Rs 1,500 are made against charge on land and loans beyond that limit are made against mortgage of land. From time to time the Reserve Bank has relaxed the limit upto which medium-term loans could be made against sureties and/or against declarations. At present, medium-term loans upto Rs 3,500 can be given against such declarations for pump sets, electric motors, tractors, power tillers, etc., where a certain proportion of investment is borne by the borrowers. The collateral security of the asset bought with the loan is obtained.

9.20 Where the system of creation of charge does not exist, not all borrowers are willing to go through the processes of mortgaging land to the society. Members are also reluctant to execute either declarations or mortgages in favour of the society unless the latter is in a position to satisfy their entire credit needs. These limitations hold good even where the societies are financed by commercial banks.

9.21 The question, therefore, arises as to how it could be ensured that the loan facility does not become restricted on account of the limited range of acceptable security. A few State Governments have reported the practice of some of the banks extending loans against the collateral of dairy cattle, pump sets, machinery, bullocks, etc., although it is not widely prevalent. However, a charge on anticipated or standing crops seems to be the most widely accepted form of security next only to mortgage.

9.22 Governments and co-operative banks were asked to indicate what kind of safeguards banks would need if they were to accept as security for loans assets other than the traditional forms of security. Some have suggested that co-operative dues should be recoverable as arrears of land revenue or that the lending institution should have legal authority to stop the movement of the crops hypothecated. It should be made obligatory for the agents buying produce from the farmers to pass on that part of the sale proceeds to the society as would be adequate to clear the dues of the borrowers. It was also suggested that there should be a system of financing of groups of cultivators with the group leader guaranteeing the repayment. Many of them have suggested crop and cattle insurance or Government guarantee. To several central banks, the question of security presents a major problem in the case of oral-contract tenants and others not in a position to provide one or the other types of security normally accepted by banks. They suggest that loans to such tenants should be guaranteed.

9.23 What is important under a progressive loaning system is to increase the capability of the farmer to increase his overall income, which results from his improved productivity and efficiency of management. The system of credit should increasingly emphasise building up of these qualities in the borrower which make tangible security a matter of secondary importance. At the same time, such a system of credit should also enable farmers to acquire assets which help improve their productivity and risk-bearing ability.

9.24 Available data show that there is considerable scope for our credit system developing in that direction. In 1961-62[1] the real estate assets of the cultivator households including land and buildings alone accounted for nearly 84 per cent of the total tangible assets. Live-stock accounted for 7.7 per cent, farm and non-farm equipment used by cultivators accounted for hardly 2.8 per cent of such assets. Intangible assets of all the cultivator households, including financial assets, were estimated to amount to only 1.4 per cent of their total assets.

9.25 It is important to note that over 50 per cent of the rural households in the country had assets valued at less than Rs 2,500 each and the value of assets held by them was slightly less than 10 per cent of the total value of assets for the country. As for the cultivators, 41 per cent of them were in the asset group of less than Rs 2,500 each. In the case of non-cultivators, those belonging to this group accounted for 86 per cent of the non-cultivator rural households.[2]

9.26 It may be mentioned in this connection that 38 per cent of the total loans made by the primary societies and outstanding as on June 30, 1970 were secured by personal sureties, 33 per cent by immovable property, 20 per cent by charge on anticipated crops and 7 per cent by produce and 2 per cent by others.

1. Data are not readily available for any other subsequent year. *All-India Rural Debt and Investment Survey, 1961-62.*
2. For details see *Reserve Bank of India Bulletin*, June 1965, Pp. 806-811.

9.27 One important weakness of the formula under the crop loan system is that it does not provide for taking into account the income from sources other than agriculture for the purpose of assessing repaying capacity. Further, repaying capacity is worked out in a very general way, though the need for working it out precisely is recognised. As a result, under the existing formula, individual variations in efficiency, productivity and ability to manage resources to the best advantage are not taken into account. Another weakness is that the repaying capacity is worked out in a uniform manner for all borrowers with reference to the gross value of produce under the traditional methods of cultivation. This can result in an under-estimation of the repaying capacity of a farmer employing better agricultural technology.

9.28 In reply to our questionnaire, banks and Governments have generally stated that they follow the methods recommended by the Reserve Bank in estimating repaying capacity. Some have suggested that the repaying capacity should be based on the market value of the produce. Many have recommended that non-agricultural incomes should be taken into account. Some have suggested that there should be a uniform formula both for commercial and co-operative banks for reckoning the repaying capacity.

Financing of Small Farmers

9.29 There is a major credit gap in respect of small farmers. For the country as a whole, land holdings of the size of less than 2.02 hectares each account for 62 per cent, and those with less than 4.04 hectares account for 82 per cent of the total operational holdings.[1] There are roughly 40.6 million such holdings, accounting for 40 per cent of the total area under cultivation. A good part of co-operative credit (40 per cent of the total in 1969-70) goes to small farmers. But as the Review Committee observed, '.... a substantial proportion of small cultivators did not obtain co-operative credit at all and that those who did, received too little of it in relation to their needs'.[2]

9.30 Financing of small and subsistence farmers and oral-contract tenants has always been a problem for the co-operatives. It would be more so for commercial banks. Such farmers are numerous, their needs are not only for production, but also for consumption; they have low repaying capacity, and in most cases their marketable surplus is limited or negligible. They cannot offer adequate security either for developmental loans or for short-term loans. Where they are tenants, they can raise loans on the strength of a 'charge' created on their interest in land as tenants, where such provision exists; but where they are oral tenants they can execute neither a declaration nor a mortgage; often they find it difficult to furnish even sureties.

9.31 In their replies some Governments have expressed a view that the responsibility of financing small and marginal farmers should be that of the State Governments. One suggestion is that there should be a department of the State Government to take care of the rehabilitation of small and marginal farmers. There are a few others who felt that co-operatives who finance such farmers should be adequately compensated by the State Governments.

9.32 The state and central co-operative banks also seem to regard financing of small and marginal farmers as the responsibility of State Governments. They feel that where the co-operatives undertake this responsibility their risk should be properly covered by the State Governments. Some of the central banks have supported the setting up of separate agencies like the Small Farmers Development Agency or separate Agricultural Credit Corporations for the purpose.

1. *Indian Agriculture in Brief* (Tenth Edition), Directorate of Economics and Statistics, Ministry of Food, Agriculture and Community Development, Government of India, 1970, p. 48.
2. *Op. cit.* p. 563.

9.33 The Small Farmers Development Agency recommended by the All-India Rural Credit Review Committee is designed to meet the problems of small farmers on an experimental basis in selected districts. An important feature of the scheme is that it recognise the principles of combining credit with extension service and individual approach. The Fourth Five-Year Plan provided for setting up of such agencies in 40 districts and many of them have been registered. It is proposed to cover during the five-year period 40,000 to 50,000 small farmers who are potentially viable in each selected districts. The short-term credit needs at Rs 500 per farmer are estimated to go up from Rs 25 crores in the first year to Rs 100 crores in the last year of the Plan, a part of which will be provided by co-operative banks and the reminder by commercial banks. They are also expected to provide long-term loans roughly on an average scale of Rs 1,000 per cultivator to 7,500 cultivators. In another 40 districts similar projects for marginal cultivators and agricultural labourers have been launched. About 20,000 marginal farmers are expected to be covered of whom 50 per cent might be having land upto one hectare each.

9.34 The Reserve Bank of India has relaxed its normal standards applicable to the sanction of credit limits and sanction of loans to State Governments for share capital contribution in the case of co-operatives operating in the districts where these projects have been launched. In addition, the co-operative banks and the societies operating the schemes receive contributions to the risk fund. The Agency is expected to provide the required assistance for identifying the farmers and to extend technical assistance for preparing production plans for them. The central banks are required to earmark certain proportion of their credit limits for financing the small and marginal farmers.

9.35 It is too early to know what impact these special programmes will make on the problems of small viable farmers. There limitations too will be known only when they have been under implementation for a few years.

9.36 While the implementation of these programmes should continue on an experimental basis, it is important to note that small farmers are not concentrated in any one district but are dispersed all over the country. Their problems will, therefore, have to be viewed in the wider perspective of equipping the institutional structure designed to cater to rural needs to satisfy their needs also to the maximum extent.

9.37 It is well recognised that essentially, the problems of small and marginal farmers call for an integrated approach to their requirements combined with supervised credit. Unless the institution which is in direct touch with the rural producers is adequately equipped to provide integrated services combined with credit, a complete answer to the problem is not likely to emerge. It may be noted that the Farmers Home Administration in the U.S.A., has been very successful in combining loans with technical assistance. Though conditions in India differ considerably from those in the U.S.A., some valuable lessons can be derived from their work and experience.

Farm Guidance

9.38 To our question whether farm guidance was necessary to farmers and whether they had arrangements to provide such guidance from the co-operative banks, the answer of the reporting co-operative banks generally was that the farmers needed guidance but the co-operative banks were not in a position to provide such guidance. Extension work is done by the Government departments such as Agricultural Department, Panchayat Samitis, Block Development Offices, etc. According to the banks, there is no link between credit and extension work in most areas. The co-operative banks have generally stressed that there is need for suitable arrangements to provide comprehensive farm guidance to farmers in order to improve their methods of farming and viability, and to ensure proper use of credit and its prompt repayment. Further, many of the banks have suggested that (*a*) extension work at the field level should be geared up and the contacts of the credit institutions with the farmers should be made more effective; (*b*) the local leadership and the directors of the credit institutions should be well informed on the goals of the loan policies; (*c*) all the requirements of the farmers should be met by one agency and the credit institutions should be properly equipped to enable them to give farm guidance, and towards this end banks should appoint agricultural graduates properly trained in credit or they should start consultancy service in agriculture; and (*d*) farmers should be systematically educated in improved methods of farming and in subsidiary occupations, etc., and they should be provided with adequate marketing finance and advice in marketing.

9.39 Some banks recognised that small banks would not be able to employ farm guidance specialists and, therefore, suggested that major credit institutions should join together and maintain technical cells and that the Government should provide subsidy for the appointment of technical staff by banks. The technical personnel should also train the secretaries of co-operative societies and the supervisors of the banks. A suggestion has also been made that initiative and leadership in the matter should come from the apex banks.

LEGAL AND OTHER PROBLEMS MENTIONED BY THE COMMERCIAL BANKS

9.40 The commercial banks have stated that there were a number of legal problems which come in the way of their effective performance in lending to agriculture. These problems have been examined by the 'Expert Group on State Enactments having a bearing on Commercial Banks' Credit to Agriculture', set up by the Reserve Bank of India, in September 1969. This Group made a number of recommendations with a view to removing the restrictive features of the various State enactments, particularly those relating to rights of alienation of land or interest therein in favour of commercial banks. The recommendations also aim at providing certain facilities which are now available to borrowers from co-operatives to the borrowers from commercial banks also because in the Committee's view 'these facilities are primarily for the benefit of the individual cultivator-borrower rather than for that of the lending institution'. The Commission endorses these recommendations.[1]

Other Difficulties Faced by Commercial Banks

9.41 Other difficulties reported by commercial banks were: (*i*) most of the farmers do not keep a record of their cultivation expenses, sale proceeds and other income, and most of them are reluctant to disclose their financial position, which makes it difficult for the banks to work out their repaying capacity; (*ii*) farmers are found to be raising loans from more than one agency against the same security; (*iii*) there is diversion of loans intended for agricultural operations for other purposes; (*iv*) banks experience delay in obtaining 'no dues' certificates from co-operatives, for the purpose of financing those who are members of the co-operatives; and (*v*) in the absence of linking of credit with marketing, it is difficult to ensure recovery of loans through sale proceeds. Above all, the banks find it risky to make loans against hypothecation of crops in the absence of suitable crop insurance. We have made recommendations on these matters later on in this chapter and also in Chapter 11.[2]

RECOMMENDATIONS

(a) Loan Policies

9.42 In our view, the authority for laying down guidelines for policies to be pursued by all banks in the field of agricultural finance should be the same, *i.e.*, the Reserve Bank of India, as hitherto. We have recommended elsewhere in Chapter 10

1. See also Chapter 11, paragraph 11.57.
2. Paragraphs 11.53 to 11.61.

the transfer of legislative power regarding co-operative credit from the State Government to the Union Government.

9.43 In the case of co-operative banks, there is need for greater flexibility in their loan policies than exists at present. This is particularly important on account of the flexibility that is available to commercial banks. Towards this end, we recommend that the policy making body at the State co-operative bank level should be sufficiently broad-based so as to include representatives of agricultural departments in charge of extension work, a farm management specialist and a representative of the 'lead bank' in the area.

9.44 In so far as loaning policies are laid down by the Reserve Bank for co-operatives, we recommend that the Reserve Bank may take steps to encourage the policy making bodies of the State co-operative banks themselves to take decisions regarding details of policies (*e.g.*, purpose of loans, scales of finance, security to be obtained, seasonality of loan, etc.) subject to broad guidelines laid down by it as in the case of commercial banks.

9.45 As regards the loans granted to individual borrowers it is necessary to consider the purpose of the loan from the point of view of the improvement it can bring about in the productive efficiency of the borrowers and their income. In particular, diversification of farming is essential for improving the incomes and risk-bearing ability of the farmers. It is, therefore, necessary that the institutions at the primary level should be functionally equipped to provide credit facilities for all productive purposes to the farmers whether undertaken jointly with agriculture or independently, and whether they help production directly or indirectly. The primary units will also have to finance small scale and agro-industries like flour mills, oil crushing units, etc., for financing which there may be no separate institutions in the area.

9.46 We, therefore, recommend that the proposed rural banks as well as the recognised viable primary credit societies should be equipped to provide production loans for all purposes which help either directly or indirectly in improving the production capacity and income of the farmers. We further recommend that in the matter of eligibility of purpose for loans, as in other respects specified elsewhere in this chapter, a farmer borrowing from a co-operative should not be at a disadvantage as compared with a borrower from a commercial bank or its subsidiary rural bank.

9.47The loaning system should provide for accepting as security those assets, real as well as financial, which farmers may acquire to improve their production and repaying capacity. We, therefore, recommend that the commercial banks, the rural banks and recognised primary credit societies should be equipped to re-orient their loaning system in this manner.

9.48 In reply to our questionnaire, banks and Governments have generally stated that they follow the methods recommended by the Reserve Bank in estimating repaying capacity. Some have suggested that the repaying capacity should be based on the market value of the produce. Many have recommended that non-agricultural incomes should be taken into account. Some have suggested that there should be a uniform formula both for commercial and co-operative banks for reckoning the repaying capacity.

9.49 The system of credit rating of borrowers on the basis of certain personal data has been developed in a number of countries. This is particularly useful when the loan is of a small size and, therefore, detailed credit investigation is costly. It would be useful to find out whether such a system is applicable under Indian conditions and if so standardise the data to be collected and the method of working out the credit rating.

(*b*) *Supervised Credit and Guarantee Arrangements*

9.50 Farm guidance and supervised credit programmes are important factors in ensuring efficient use of credit. Farm guidance involves advising the farmer about the type of seeds, fertiliser and other types of arrangements needed so as to get maximum yield from his land.

Supervision of credit is needed to ensure that the loans advanced are utilised for the purpose for which they are advanced in the manner indicated by the Farm Guidance Experts. In many countries banks make arrangements to provide farm guidance. Under the conditions obtaining in India, where the number and the spread of small farms is very large, it would be quite costly for the banks to attempt this. Besides, there already exists an agricultural extension machinery at the Government level. In the Commission's opinion the best course would be to make use of this machinery through the co-ordination committees recommended later. Arrangements for credit supervision is the responsibility of banks and we recommend that there should be suitably co-ordinated supervised credit programmes.

9.51 Since the primary credit societies are too small to be in a position to appoint specialists for credit supervision, we recommended that the central/apex co-operative banks should appoint a suitable number of specialists and make their services available to the societies for undertaking supervised credit programmes as in the case of rural banks. We recommend that where necessary co-operative banks may be sanctioned suitable subsidies by the Government in the initial years.

9.52 However, it is unlikely that farm guidance and supervised credit programmes by themselves will encourage the lending institutions to undertake financing of weaker sections which are not in a position to provide any worthwhile or adequate security on a significant scale unless there is also a suitable guarantee system to cover the risk. The principle of guarantee has already been recognised by the authorities when they introduced the Credit Guarantee Scheme administered by the Industrial Finance Department of the Reserve Bank of India and later set up the Credit Guarantee Corporation for small loans.

9.53 In the co-operative system too, this has been recognised for several years now. The Government has been making contributions to the special bad debt reserves of co-operatives. It is some times argued that the co-operative system does not require a guarantee in view of the fact that the estimated bad and doubtful debts for the entire system are very low - less than Rs 2 crores - as at the end of 1969-70 as compared with their special bad debt reserves of Rs 3.75 crores and loans outstanding of over Rs 700 crores. This can be misleading because co-operatives do not generally undertake writing off bad debts unless overdue amounts have been outstanding generally for a period of 6 years. At the end of June 1970 those overdue for more than 3 years amounted to Rs 36 crores. But it is important to note that most of the co-operative loans are well secured by either immovable property or personal sureties supported by charge on land; loans given against sureties alone, are generally kept low in each individual case. This means that a large number of small and marginal farmers would be out of the purview of finance from the co-operatives. This is the main reason why guarantee arrangements are necessary for the co-operatives also.

9.54 We, therefore, recommend that the proposed rural banks and récognised viable primary credit societies should receive adequate guarantee support for undertaking financing of small and marginal farmers and other producers of similar categories in an integrated way. In view of the special factors affecting agricultural production it may be necessary to augment the resources of the Credit Guarantee Corporation by an adequate subsidy by the Government as otherwise, it is likely to mean a substantial burden on the borrowers. It may also be necessary for the Credit Guarantee Corporation, to suitably decentralise its work. But this should not present much difficulty, in view of the fact that the Reserve Bank of India has already opened branches of the Agricultural Credit Department in most of the States. These branches should be able to do the work of the Corporation in regard to loans to small farmers.

9.55 At present, the Credit Guarantee Corporation provides guarantee cover to commercial banks in respect of loans extended by them to certain classes of borrowers subject to specified limits. The object of setting up a Corporation will remain incomplete unless the scope of its guarantee cover is so widened as to extend its coverage to all institutions which give production credit to small farmers and other borrowers. Towards this end, even as the commercial banks are made eligible, the proposed rural banks and recognised primary credit societies and co-operative banks where they finance producers directly, should be made eligible for suitable guarantee cover.

(*c*) *Overdues*

9.56 Banks in different States have given different reasons for the increase in overdues. Broadly speaking, large scale failure of crops on account of floods, droughts, etc., are important only in those States/areas where these phenomena occur frequently. In most States, however, overdues are attributed to: (*a*) indifferent management or mismanagement of societies; (*b*) unsound lending policies leading to overfinancing, or financing unrelated to actual needs, diversion of loans for other purposes; (*c*) vested interests and group politics in societies and wilful defaults; (*d*) lack of adequate supervision over the use of loans by the borrowers and poor recovery effort; (*e*) lack of adequate control of banks over the primary societies; (*f*) lack of appropriate link between credit and marketing institutions; (*g*) failure to take prompt action against wilful defaulters; and (*h*) uncertain agricultural prices.

9.57 A number of suggestions have been made by the Governments and banks with a view to remedying these defective features.

(*i*) Management of societies should be motivated to take interest in the proper working of the societies:

Our recommendation in the previous chapter for the setting up of rural banks, and the direct interest which the co-operative bank and the parent commercial bank will take in their management can be expected to bring about improvements in this regard.

(*ii*) Improvement of the loaning system:

A good part of the overdues under the existing arrangements can be attributed to the traditional loaning system that has been in vogue for several years now. With the gradual implementation of a credit system adapted to individual needs, as recommended by us earlier, the intensity of the problem would be reduced. However, certain steps are necessary in the meantime. These are indicated below:-

(*i*) *Wilful Defaulters*

9.58 In the case of wilful defaulters, we recommend that the societies and rural banks where these are set up should take prompt legal action. We endorse the recommendations of the Review Committee that, wherever it has not already been done, the co-operative banks should be enabled to proceed directly against the borrowers where the societies have failed to take action. In the case of commercial banks, the legal impediments that stand in the way of their taking action against defaulters should be removed by the State Governments expeditiously.

(*ii*) *Extensions and Conversions*

9.59 The main problem of co-operative banks when crops fail in their areas arise on account of (*a*) delay on the part of the State authorities to declare the *annawari* shortfalls, *i.e.*, the proportion of the shortfall below the norm and (*b*) inadequate resources with the banks to absorb part of the overdues and convert them into medium-term loans according to the conditions stipulated by the Reserve Bank of India.

9.60 When the loaning system is rationalised on the lines indicated, it is unlikely that all loans will fall due on the same date. It is possible that due dates may be fixed for different borrowers on different dates. Similarly when the borrowers satisfy the primary institution regarding the purpose of the loan, their repaying capacity and security, it should be possible for the primary lending institution to defer repayment of loan by a suitable period in all cases of default for reasons beyond the control of the borrowers. In such cases, we recommend that upto a reasonable level of their resources, the institutions at the primary level should be allowed to grant extensions.

9.61 We also recommend that both central banks and the higher financing institutions including the Reserve Bank of India should treat such loans as current loans to the extent they are satisfied about the soundness of the purpose of the loans and the repaying capacity of the borrowers. The apex bank and the Reserve Bank may from time to time cause investigations to be made of such extensions granted by the primary institutions in order to make sure that the powers to sanction extension are not used injudiciously. We recommend, however, that this practice of granting extension should be confined to the proposed rural banks and recognised viable primary credit societies.

9.62 It also seems necessary to introduce a flexible system of making recoveries in those areas where (*a*) both the crops are not equally good or certain, (*b*) there are periodical crop failures. Essentially, the long-term solution to this problem lies in encouraging the farmers to undertake improvements on the farm and undertake supplementary non-farm activities so as to ensure steadily growing income. It seems possible to develop a system of loaning and recovery that will be appropriate to such area. For instance, in areas where one of the crops is more important than the other, a major part of the loan extended for the whole year may be recovered from out of the crop that is more important and the remainder from out of harvest of the other crop or other incomes of the farmers. Similarly, in areas subjected to periodical droughts once every three or four years, it may be possible to so adapt the recovery system that the repayment of that part of the loan which remains unpaid during the lean years is spread over the two or three years during which good crops can be expected. We recommend that wherever co-operative and commercial banks have the resources, and have introduced the supervised credit system, recovery may be spread over periods of two to three years.

9.63 On the question of relaxation of the existing conditions for converting short-term loans into medium-term loans on account of wide-spread crop failure, we endorse the recommendations made by the All-India Rural Credit Review Committee. In particular, we should like to emphasise that the eligibility of co-operative banks for conversion facilities from the National Agricultural Credit (Stabilisation) Fund of the Reserve Bank should not be asked to the State Governments declaring *annawari* shortfall of less than 6 annas in 16 annas (*i.e.*, 37.5 per cent) in the affected area. The decision whether or not the crop failure in the area justifies conversion facilities should be left to the Committee headed by the senior most officer in charge of agricultural production in the State.

(*d*) *Sharing of Responsibilities by Co-operative and Commercial Banks*

9.64 In any given area there are at present two main institutional agencies providing agricultural finance, *viz.*, commercial banks and the co-operatives. However, in areas where the scheme of rural banks recommended by us is implemented, there will be, in addition to the commercial bank operating at the Taluka or Block level or at the important villages, either an independent co-operatively organised rural bank or a rural bank as a subsidiary of a commercial bank, which may eventually take the place of primary societies in the area. Considering that a rural bank is designed essentially to cater to the needs particularly of medium and small farmers as well as those sections which have been hitherto denied credit facilities, it goes without saying that all these types of farmers should be adequately served by the rural banks or the viable primary societies, unless they are directly served by commercial banks. If needs of individual farmers for credit exceed a specified level they should be financed by the nearest branch of a commercial bank and not by a rural bank or a primary agricultural credit society. There are many reasons why it should be so:

(*i*) Their incomes are larger and they command larger surplus resources than the others. In their case there is a definite need for their using a good part of their own resources for current operations and investment in farming. This can be ensured better by a commercial bank which can stipulate suitable margins in each case, depending on the estimated past savings and expected future income from farming operations. For this class of farmers, more than for any other, a uniform scale of finance would be most unsuitable. In most cases it might mean a very much larger quantum of credit than they actually need.

(*ii*) The quantum of credit needs of this class of farmers is likely to be much larger than those of the medium and small farmers. A commercial bank can make such resources available without much difficulty.

(*iii*) Credit discipline on the big farmers can be enforced more easily by the larger banks than by the rural banks or primary societies.

(*iv*) These farmers do not require and should not, therefore, be eligible for subsidized credit. They should be charged the usual rates of interest on loans. This differentiation can be made more easily by a bigger institution like a commercial bank than a primary unit.

(*v*) Because of the size of the farm and possibilities of introducing sophisticated techniques for intensive as well as diversified farming, they would need technical help of a different type than that needed by an average farmer. The commercial banks would be in a better position to provide the technical help of the type and range needed by the big farmers. They need not be brought under the supervised credit programme which is necessary in the case of small farmers.

(*vi*) When the large and big farmers are asked to borrow directly from the commercial banks, their grip over the primary units would loosen; it would be possible to bring about suitable changes in the primary units to ensure that credit reaches all sections.

9.65 It is sound in principle and convenient in practice for both the lender and the borrower to have an arrangement under which as far as possible a borrower gets his entire credit needs satisfied by one single institutional agency. This should be encouraged to the maximum extent possible. Rural banks and recognised primary credit societies should be enabled to make long-term loans also as agents of the Land Development Bank. It would be useful to avoid 'splitting of security' among the lenders and enable the lending institution to have complete control over the assets offered by the borrower and help improve his production and income.

9.66 Where farmers have outstanding dues to any other institutional agency, the institution providing complete credit facilities may arrange to repay those dues and get the pledged security released in its favour, so as to have a better control over the assets of the borrower.

9.67 Where members of primary co-operatives are not in a position to obtain loans to the full extent of their needs on account of (*a*) inadequacy of resources with the society or (*b*) limitations of its maximum borrowing power, the society should enable the member concerned to raise the balance of requirements from a commercial bank or a rural bank sponsored by a commercial bank serving in the area. This can be done either by way of (*a*) entering into a participation arrangement with the commercial bank or rural bank or (*b*) by permitting the borrower in writing to approach the commercial bank for the balance of the loan.

Demarcation of Areas

9.68 Unless there are special circumstances like the commercial bank or co-operative bank adopting a group of villages for providing complete credit facilities and related services, demarcation of areas between commercial banks and co-operative banks does not appear to us as a practicable method of ensuring co-ordination between the two. Demarcation of areas can be justified when the two types of agencies operating in the respective areas are equally efficient both in mobilisation of resources as well as in making sound loans.

9.69 Demarcation does not take into account the preferences of borrowers. Borrowers' preferences stemming from a desire for a more efficient service, better technical advice, etc., are important factors in developing credit institutions into efficient units. Demarcation of areas rules out this possibility. It would also tend to force an efficient borrowing unit to go to an inefficient lending unit thus compulsorily slowing down the pace of growth in an area. This method of co-ordination is also unlikely to be fruitful so long as co-operative banks and commercial banks are subject to different legal provisions and follow different standards. If in an area a farmer gets loans according to scales of finance per acre subject to a ceiling and in an adjoining area another farmer gets to the extent of his total needs subject to no ceiling, demarcation of areas would lead to unjustifiable discrimination.

9.70 However, in areas where either commercial banks or co-operative banks launch their schemes of village adoption and seek to provide complete credit facilities for all the rural producers, other institutional agencies should not be allowed to operate.

Term Loans

9.71 In areas where there is scope for development loans, but co-operatives for various reasons have not been able to make development loans but are in a position to make adequate short-term loans, it would be preferable for commercial banks to confine their lending for development purposes by entering into suitable arrangements with the co-operatives. This could be done either (*i*) by the co-operatives lending against the hypothecation of crop and, if necessary, a second mortgage on the fixed assets like land, machinery, etc., while the commercial banks give term loans against the first mortgage on these assets or (*ii*) by the commercial banks providing the finance to the co-operatives to cover the loan for development purposes and the co-operatives handling all the requirements of the borrower themselves. In either case, there will have to be close co-ordination between the concerned co-operative and commercial banks to ensure that the total finance provided is adequate and is properly utilised.

Administrative Arrangements for Co-ordination

9.72 We are informed that for the purpose promoting co-ordination between commercial and co-operative banks at the State and district levels, Committees have already been set up in some States either in terms of the recommendations of the All-India Rural Credit Review Committee, or earlier on the suggestion of the National Level Consultative Committee set up by the Agricultural Finance Corporation. However, during the course of the Commission's visits to the various States, it was found that many of them had not started functioning effectively. The Commission feels that it is very necessary to have a regular machinery at the district level in all the States which will take a co-ordinated view of the credit problems of the various productive activities in a district. The Commission recommends the formation of a co-ordination committee at the district level with representatives of the lending agencies as members and the seniormost officer of the State Government in charge of development of the district as the Chairman.

Exchange of Information

9.73 One very important aspect of co-ordination is exchange of information between the co-operative and commercial banks. As far as the individual borrowers are concerned, the information is already being collected by the primary societies or branches of commercial banks and the problem is mainly of developing a system under which it would be possible to know within a short time whether or not the prospective borrower has dealings with any other institution in the area and the latest position of his outstanding dues. This will require some standardisation of the type of information to be collected and willingness on the part of the field level units of both the co-operative and the commercial banks to exchange such information readily. Since the number of borrowers in the area of operation of these units is rather large, the standardisation has to be such as to keep the details to the bare minimum as otherwise the costs would increase considerably. Another aspect on which exchange of information would be useful is information regarding crop prospects, availability and prices of the different agricultural inputs and so on. It will be one of the main functions of the district level co-ordination committees recommended in the previous paragraph to look into all such practical aspects of field level co-ordination and evolve suitable procedures to keep all the agencies lending to rural producers in a district properly informed.

CHAPTER 10

CO-ORDINATION BETWEEN COMMERCIAL AND CO-OPERATIVE BANKS III: RESOURCES AND CERTAIN ORGANISATIONAL ASPECTS OF CO-OPERATIVE BANKS

INTRODUCTION

10.1 The resources of co-operative banks fall into three main categories: (a) share capital and reserves, (b) deposits and (c) borrowings. We shall first discuss the problems and difficulties of co-operative banks in the sphere of deposit mobilisation and the possible lines on which these could be overcome and co-operatives may be enabled to raise larger resources. In the next section, the manner in which share capital and reserves have been built up and utilised in the co-operative banking system have been discussed. The third section examines the present position of borrowings of co-operative banks and proposals for improving (a) the ability of the co-operative banks to raise adequate resources and (b) the availability of funds to co-operative banks. Certain problems of urban and industrial co-operative banks have also been covered in the last section.

DEPOSITS

10.2 A feature of the co-operative credit system is that while for attracting deposits it is not as well equipped as the commercial banking system, it is also not in a position to borrow from the Reserve Bank beyond a specified limit. Thus, for the 17 major States, the net deposits (Table 10.1) (not inserted here) at Rs 517.75 crores at the end of June 1970 collected by the apex and central co-operative banks amounted to three times their net owned funds,[1] consisting of paid-up capital and reserve funds, and borrowings from the Reserve Bank amounted to about one and a half times the owned funds as on June 30, 1970. For the country as a whole, deposits at the apex bank level accounted for 37.8 per cent of the working capital and borrowings accounted for 48.8 per cent as on June 30, 1970. At the central bank level, deposits at 41 per cent of working capital were slightly higher by 1 per cent than borrowings.

10.3 The position of urban co-operative banks numbering 1,129, on June 30, 1970 is much different. Their deposits of Rs 140.63 crores formed 76.4 per cent and borrowings 5.2 per cent of the total working capital. Their time deposits accounted for 47.6 per cent of the total deposits. Four States (Gujarat, Mysore, Maharashtra and Tamil Nadu) alone accounted for 86.7 per cent of their deposits.

10.4 There were three State industrial co-operative banks (i.e., Mysore, Rajasthan and Tamil Nadu) in the country, whose total deposits amounted to Rs 0.98 crore forming 19.7 per cent of their working capital as at the end of June 1970. Their borrowings constituted 42.1 per cent of their working capital. The total deposits of 24 district industrial co-operative banks (of which 20 were located in Mysore State alone), stood at Rs 3.89 crores, which formed 37.6 per cent of the working capital. Their borrowings constituted 41.5 per cent of their working capital, as on the same date.

10.5 In the three-tier co-operative credit structure deposit collection is confined mainly to the district and apex co-operative banks while primary societies act, in the main, as agencies for providing credit.

1. Net owned funds at the apex and central bank level.

10.6 Another feature of the deposits position at the apex banks level is that five of them, viz., Maharashtra, Gujarat, Punjab, Uttar Pradesh and Tamil Nadu, accounted for 65 per cent of the total deposits of all the State co-operative banks in 1969-70. It is significant that the deposits kept by the member co-operatives accounted for a major part of apex banks' deposits. For instance, for all the apex banks together, member-institutions' deposits accounted for 71 per cent of their total deposits (Table 10.2) (not inserted here).

Types of Deposits

10.7 Tables 10.2 and 10.3 (not inserted here) show the State-wise position of different types of deposits at the apex and central bank levels. During the year 1960-61, the current and fixed deposits were significant at the apex level forming 34 per cent each. However, by the end of 1969-70, the proportion of current deposits declined to 24 per cent and that of fixed deposits rose to 61 per cent. The current deposits were more than 40 per cent but less than 50 per cent of the total deposits in seven States. The savings deposits exceeded 30 per cent only in 6 apex banks.

Central Co-operative Banks

10.8 At the district level, where deposit mobilisation is more important, the banks in Gujarat and Maharashtra generally and a few in the Punjab and Tamil Nadu have shown better performance than the others. Of the increase of Rs 50 crores witnessed in 1968-69, the banks in Maharashtra and Gujarat and the Punjab alone accounted for Rs 33 crores.

10.9 The proportion of the societies' deposits with central banks at the end of 1969-70, particularly current deposits representing largely the loans granted to them was more than 55 per cent of the total in six States as compared with 40 per cent for the country. However, the proportion of deposits of individuals and others was high and ranged from 60 to 85 per cent in the case of central banks of Gujarat, Haryana, Jammu and Kashmir, Maharashtra, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

10.10 There is also evidence that the current deposits of central banks have been on the decline. At the end of 1969-70, the current deposits of central banks formed 21 per cent of the total deposits for all the central banks as against 28 per cent in 1960-61.

Performance in Deposit Mobilisation

10.11 Available evidence shows that as in branch expansion (see Chapter 8), in respect of deposit mobilisation also, it is only in a few States that the central banks' performance could be considered to be satisfactory. Thus, 8 central banks in Maharashtra and 5 in Gujarat together accounted for 25 per cent of the total deposits of all central co-operative banks in the country. As few as 40 banks, mostly from Maharashtra and Gujarat and a few each from Mysore, Punjab, Tamil Nadu, Kerala and Andhra Pradesh accounted for about 45 per cent of the total deposits of all the 340 central banks in 1969-70. As many as 168 central banks, each of which generally covers a whole district, have deposits of less than Rs 50 lakh each, a good part of which is accounted for by those kept by the member co-operative institutions.

10.12 After a review in depth of the performance of co-operative banks in this regard the All-India Rural Credit Review Committee came to the conclusion that:

> 'the performance in terms of the deposits mobilized is not impressive in many banks despite the growth of deposit potential which is related to increased agricultural production and reflected in the deposits of commercial banks. Nor has there been much evidence of the involvement of the leadership of central banks in a drive for deposits'.[1]

1. *Report of the All-India Rural Credit Review Committee,* Reserve Bank of India, 1969, p. 183.

Deposits of Individuals

10.13 The performance of apex and central banks in mobilising deposits in their respective areas may be judged from the extent of the increase in the individuals deposits with them in the recent past. During 1963-64 to 1968-69, it was observed that in almost all the reporting apex banks in the more developed States there was a decline in the proportion of individuals' deposits to the total deposits. In the case of a number of reporting central banks there were either no increases or only marginal increases in individuals' deposits despite the fact that they were operating in prosperous areas.

Banking Facilities

10.14 Available information shows that co-operative banks in many States have generally not made much headway in providing other banking services comparable to those provided by their counterparts in Gujarat and Maharashtra and the commercial banks. This seems to be on account of confining their dealings mainly to member-societies and their inability to provide a wide range of banking services to the public, for various reasons including lack of trained personnel and legal restrictions.

10.15 If the income earned by co-operative banks by way of commissions, brokerage, etc., provides an index of the range and volume of ancillary banking services provided by them to their clients, it shows that their performance has been generally poor, barring a few exceptions. It is observed that for most of the apex banks income by way of commission, etc., in 1968-69 was less than 0.50 per cent of their total income. Only in a few cases it exceeded 0.50 per cent but was less than 1 per cent. As against this, income by way of commission, brokerage, etc., of the Indian scheduled banks worked out to 13.73 per cent of their total income in 1969.

Views of Banks

10.16 It is observed from the replies to our questionnaire that where co-operative banks have shown success in attracting deposits, it has been attributed to (a) sound financial position combined with equally sound management and efficient working, (b) vigorous branch expansion, (c) attractive rates of interest, (d) influential leadership, (e) provision of banking services comparable to those of commercial banks, (f) progressive and productive loaning policies combined with low overdues, (g) availability of properly oriented staff and encouragement given to staff to mobilise deposits. In some States like Maharashtra, it is attributed, among other things, to branch extension into rural areas and the support extended by local bodies, panchayats, municipalities, etc., to co-operative banks. The success of co-operative organisations in other spheres such as co-operatively organised industries also helped improve the business and image of co-operative banks.

10.17 Among the reasons cited for the failure of banks to attract deposits are (i) lack of offices in potential centres, (ii) lack of interest on the part of management in the working of the banks, (iii) poor management and low efficiency, (iv) poor quality loaning and heavy overdues, (v) inferior status (i.e., lack of 'scheduled status'), (vi) lack of facilities for discounting cheques and providing general banking services, (vii) inconvenient location of offices, lack of suitable buildings, (viii) the deposit insurance scheme not being extended to them and (ix) identification of the bank with a political party or group. While many Governments and some banks have denied that the liberal concessional refinance facilities from the Reserve Bank had anything to do with their failure in deposit mobilisation, others have conceded that such facilities may have made them indifferent or inactive.

10.18 The All-India Rural Credit Review Committee suggested, *inter-alia*, that the State Governments should extend more positive assistance to co-operative banks, particularly by enabling local bodies and similar institutions to deposit their surplus funds with the banks and by amending the law to extend deposit insurance to co-operative banks; that co-operative banks should improve their image before the public by improving their operations and financial soundness and by providing banking services needed by the local people; that they should appoint well-qualified and trained staff for the purpose and that State co-operative banks should take the responsibility for training a cadre of branch managers.

10.19 It also suggested that the Reserve Bank of India might link the rate of interest charged on its loans to co-operative banks to deposit mobilisation efforts put in by them. It further suggested that the existing rebate in the interest rate itself may be reduced from 2 per cent to $1\frac{1}{2}$ per cent and that the interest rebate allowed to co-operative banks should be slightly more in the case of banks which have shown progress in mobilising deposits and should be correspondingly less in the case of those which have not.

FACTORS AFFECTING DEPOSIT MOBILISATION

10.20 The factors which affect the deposit mobilisation efforts of co-operative banks are, broadly:

(a) Natural factors of the economy of the area;
(b) Organisational constraints within the co-operative system itself; and
(c) Those which are attributable to the State Governments' jurisdiction over co-operatives.

(a) Natural Factors

10.21 One of the major sources of difficulties for a number of central co-operative banks is the limitation on their area of operation to the boundaries of a district. This means that those banks which have to operate in economically poor areas because of inadequacy of irrigation facilities and failure of crops and droughts, are handicapped for no fault of theirs; while others operate in agriculturally prosperous areas and are, therefore, in a better position. This is in contrast to the branches of the much more powerful commercial banking system which does not suffer from such limitations.

(b) Organisational Constraints

10.22 Another source of difficulty for the co-operative banks is that the three-tier structure as it functions now does not represent in all cases the joint effort of all the constituents within the structure to attain certain given goals. Thus, the image that a central co-operative bank projects before the public in its area is its own, and not that of the structure as a whole or that of the apex bank. The branches of a commercial bank operating in the same area as a central co-operative bank have no such problems. The significance of this is best illustrated by the fact that the responsibility for deposit mobilisation is left entirely to the central bank in the district and the apex bank does not normally come into the picture even where the central bank has failed to mobilise available local savings.

10.23 Organisationally the apex and the district units are so constituted that the leadership (non-official as well as professional) of high calibre and managerial competence, to the extent available at the apex level, or to some of the individual central banks in a State, are of no avail to the central banks which lag far behind. Thus, while all districts in a State may have been covered by central banks, a situation has arisen in which, within a State, the services available to the people in a district from a central co-operative bank are good or bad depending on the competence and financial strength of and the quality of leadership available to the central co-operative bank concerned and not so much on the financial position and the leadership at the apex bank level. It is doubtful whether under the existing arrangements many of the apex banks take constructive interest in the working of the weak central banks. Had this been so, the number of central banks requiring rehabilitation would not have been as large as it is.

10.24 The 'scheduled' status that most apex banks enjoy is not available to their member banks, i.e., the district central banks, even though they are part of three-tier co-operative banking structure in each State and have been mainly intended to collect deposits for the entire system in competition with commercial banks. As a consequence, the central banks get an 'inferior' status in the eyes of the public and the other institutional investors, as compared with commercial banks.

(i) Size

10.25 Size is another factor which affects the performance of co-operative banks *vis-a-vis* commercial banks. The small size and consequent small volume of business, low profitability and poor management make it difficult for the co-operatives to effectively compete with commercial banks. Owing to the fact that their dealings are mainly confined to members, the range of services provided by them is limited. On account of the organisational link with the apex banks, they cannot become direct members of the Clearing House. Whatever advantages they may have by virtue of their small size are often more than offset by the disadvantages.

10.26 The requirement (under the discipline of the three-tier structure) that all the co-operative banks in the State should put their surplus funds with the apex co-operative bank without a corresponding obligation on the part of the apex bank to satisfy their entire credit needs puts the affiliated co-operative banks in a somewhat disadvantageous position. This requirement concentrates too much power and resources in the hands of the apex bank. To what extent the surplus funds available are used to develop loan business or to improve the position of weaker banks by adopting towards them a constructive approach, is difficult to judge.

(ii) Maximum Borrowing Power

10.27 Yet another special feature of the co-operative system is the principle of a ceiling on their borrowings (including deposits), which is fixed as a multiple of a bank's owned funds, i.e., paid-up capital and reserve fund. The basic idea behind such a requirement is that the bank should possess an inherent financial strength which is commensurate with the size of business it handles. Similar requirements exist in the case of commercial banks in some other countries and many financial institutions in India, but not in the case of the Indian commercial banks.

10.28 In the case of most co-operative banks, the maximum borrowing power requirement is of limited practical use, as we shall show later. If the business of a bank is conducted on sound lines, it experiences a rapid rate of growth. At such times the maximum borrowing power requirement becomes a hindrance rather than a help. This fact has been recognised by those countries which have prescribed such a requirement for the commercial banking system. In our country there are of course only a handful of co-operative banks which have experienced such a rapid growth rate. But when they did experience such a growth-particularly in the case of some urban banks - they have also been faced with the problem of having to obtain exemptions from the requirements. Where the bank is not doing well a high ratio of owned funds to deposits does not impress the public and when the bank is expanding fast the requirement becomes a needless obstacle.

10.29 The various constraints on co-operative banks have a cumulative effect on their competitive strength. Organizationally, considerations of effective functioning of the structure in each State point to district banks being linked more closely with the apex bank as well as with other district banks in the State. If the restrictions on dealing with non-members are done away with and the services of these banks are diversified, they would be in a position to attract much larger clientele as well as deposits, which in turn, would call for dispensing with maximum borrowing power.

(c) Effect of the State Government's Jurisdiction

(i) Administrative Problems

10.30 The fact that under the Constitution, 'co-operation' is a State subject seems to have adversely affected healthy growth of these institutions in several States. Even useful reforms are delayed considerably because this depends very much on the administrative convenience of the State Governments. The slow pace at which a large number of State Governments have been moving in the matter of amending the co-operative laws to facilitate the Deposit Insurance Scheme being extended to co-operative banks is an example. The measure of interest evinced and the standards of control enforced by the States vary considerably as between the different States. Available evidence shows that all the State Governments did not act with the same amount of vigour in the matter of helping co-operative banks to open branches in rural areas. Similarly, the slow pace at which different States acted on the question of reorganisation of primary agricultural credit societies into economically viable units during the past 15 years proves that the urgency felt at the national level in the matter of correcting defective features in the institutional credit was not shared by certain States. It appears that with the multifarious burdens on their administrative machinery and financial resources, the State Governments are generally not in a position to give the kind of attention that is needed for the proper development of co-operative banks. It also appears that it has not always been adequately realised that where the constituent primary units are neglected or prevented from growing into strong institutions, the path to the development of the central banks into effective instruments of deposit mobilisation and credit is also blocked.

10.31 The development of the loan business of a co-operative bank depends not only on its share capital base but also on its ability to raise resources by way of deposits and borrowings, which, in turn, depends on the effectiveness of loaning and recovery. Several State Governments have been slow in making co-operative banks eligible for deposits of local bodies and in taking measures to enable them to have effective control over loaning. For instance, in some States, the supervision over the affiliated societies continues to be either directly or indirectly, fully or partially with the State Co-operative Department, though some of the Governments have agreed in principle to transfer the functions to central banks. As a result, the financing banks in those States have to depend on the Departmental staff to effect recoveries - an arrangement which considerably undermines their control over their own operations.

(ii) Financial Difficulties

10.32 On account of the State Governments' responsibility towards the banks, they had to find resources to strengthen their share capital, to rehabilitate the weak banks and to provide subsidies for branch expansion. Not infrequently, the States find it difficult to make adequate budgetary provisions for the purpose. This tends to slow down the pace of progress. Considering the financial difficulties in which most States find themselves, it is highly problematical whether they would be able to undertake a financial burden of the order required to place co-operative banking on a sound footing. Indeed, the question may well be asked whether it is right and proper to ask the State Governments to bear the burden. The co-operative form of organisation does not by itself require that financial soundness and efficient working of a co-operative bank should be made to depend on the ability of a State Government to bear burdens of this type.

(iii) Management

10.33 Even a more important area of the State Registrar's jurisdiction is management. It is the quality and character of management of the institutions that is reflected in all aspects of its working. Judging from the poor progress in branch expansion and deposit mobilisation and the growing volume of overdues even in areas where there were no widespread crop failures, one doubts whether this important lever of control over co-operatives has been used effectively by the States in all cases.

(iv) Control

10.34 Under the existing laws and arrangements control over co-operative banks is divided among three different authorities. First, the Registrar of Co-operative Societies not only audits but inspects the banks under the provisions of the relevant Co-operative Societies Act. The Reserve

Bank of India undertakes inspections in terms of the statutory power vested in it under the Banking Regulation Act, 1949. In addition, the co-operative apex banks also inspect the co-operative central banks. Thus most co-operative banks have only brief spells of time between inspections for removing the defective features pointed out in inspections. It seems pointless to subject the co-operative banks to such divided system of control and multiplicity of inspections. Matters relating to managements, borrowings, loans, costs and profitability, control over which is essential for ensuring the attainment of the objectives of banking, continue to be outside the purview of the central banking authority under the existing system of divided control. As a result, the Reserve Bank has to operate mainly through the Registrar of Co-operative Societies for bringing about improvement in the banks. Past experience shows that on the whole this is neither a happy arrangement for the Reserve Bank nor a healthy arrangement for co-operative banks. All these matters should come under the effective control of the central banking authority which has the requisite technical competence, if a sound development of co-operative banking system is to be ensured in an environment where commercial banks will be made increasingly effective in the rural sector. In this way the cost of controlling the system as a whole can also be reduced.

10.35 The improvement of the management structure of co-operative banks has to be looked upon as the responsibility of the same organisation as the one which bears the responsibility for the improvement of management of banking organisations.

10.36 Banking is a highly specialised business. Its development, regulation and control are better taken care of by those who have close day-to-day contacts with banks and therefore know the areas in which improvement is required and the manner in which such improvement can be brought about. The expertise that is necessary for properly directing and controlling the banks is unlikely to be available with most State Governments. Nor is it necessary that they have it. In the overall context such expertise is best developed at the all-India level and its benefits made available to the various units in the banking system in a uniform manner. The strength and vigour displayed by commercial banks is due in no small measure to the fact that the responsibility for their control and development was unified in one institution, *viz.*, the Reserve Bank.

10.37 The technological advance possible in agriculture as a result of new varieties of seeds, larger availability of fertilisers and other inputs requires an increasing volume of credit to be made available to agriculture if it is to make full use of these opportunities. Also increasing incomes in agriculture will result in increasing other economic activities in the rural areas.

10.38 For efficient arrangements to supply credit for all these activities it is essential that the regulation and development of the whole of the banking system of which the co-operative banks form an important part, should be in the same hands as those which frame the credit policy. There has to be uniformity of laws and regulations relating to the commercial and co-operative banking system in these matters. The arrangements for recruitment and training of the personnel in the banking system have to conform to appropriate standards. Taking into account all these considerations, the Commission feels that it is essential to place the co-operative credit institutions under the same authority under which the commercial banks work. The recommendations in this regard have been made in Chapter 19 (paragraph 19.48).

SHARE CAPITAL AND RESERVES

10.39 Three important questions have received our attention in connection with our examination of the adequacy of owned resources of co-operative banks. These are: (*a*) to what extent the available share capital resources are put to the best use by the system; (*b*) to what extent the augmentation of share capital in the past has helped to develop the strength of the entire credit system in each State to undertake greater responsibilities in the sphere of loaning; and (*c*) whether the existing policies and norms for strengthening share capital and reserves in the system require any modification in order to improve its competitive position and effectiveness *vis-a-vis* the commercial banks.

10.40 As at the end of 1969-70, the paid-up share capital held by individual members at the primary level reached an impressive figure of Rs 189 crore (of which Government contribution amounted to Rs 15 crore). Nearly a decade earlier, *i.e.*, in 1960-61 it amounted to only Rs 58 crore (of which Government contribution was Rs 6 crore). This increase was accounted for partly by increase in the membership and partly by the same members contributing larger amount of share capital.

10.41 In pursuance of the policies that came to be adopted in most States following the recommendations of various Committees,[1] upto 50 per cent of the share capital collected by primary societies is being invested in the shares of the central banks to which they are affiliated and the latter, similarly, invest 50 per cent of share capital thus received in the shares of the relative apex banks. Their share capital resources are also strengthened from time to time by Government contribution in order to improve their borrowing capacity. Thus, the 340 central co-operative banks had paid-up share capital of Rs 128 crore as at the end of June 1970 of which Rs 33 crore were contributed by State Governments. The 25 State co-operative banks (*i.e.*, including those in the Union Territories) had paid-up share capital aggregating Rs 40 crore of which Rs 28 crore were held by member institutions including central co-operative banks, the remainder being accounted for by State Governments.

10.42 One result of the relatively large capital base is the very low rate of dividend that both apex and central banks have been able to pay. The dividend paid by the 17 State co-operative banks, for the year 1969-70 amounted to 3.73 per cent of paid-up share capital, which is the highest for the past five years, the lowest being 2.32 per cent in 1967-68. The higher rate of dividend, *viz.*, 5 per cent or slightly more than 5 per cent was paid by those States which have made better use of their 'borrowing power'. These are Gujarat, Maharashtra and Mysore. At the central bank level, the average dividend paid in 1969-70 worked out to 1.95 per cent for all the central banks in 17 major States, the highest being 5.03 per cent in the case of Gujarat. In two States, no dividend was reported. In 1966-67, when the average worked out to 2.04 per cent, the highest dividend paid was at the rate of 4.43 per cent in the case of Gujarat.

10.43 To the extent that the primary institutions do not receive adequate dividend on their share holdings in central banks, there are low returns on the members' share holdings in the societies. A good part of members' share capital at the primary level being deductions from loans advanced to them, a low return on their share capital amounts in effect to charging a much higher rate of interest on their loans.

Policy Relating to Share Capital Contribution

10.44 Accumulation of paid-up share capital at a rapid rate has been stressed by various Committees.[2] The Rural Credit Survey recommended substantial Government share capital participation in the reorganised large-sized societies to match compulsory contributions from members. At the higher levels of the structure, the Committee visualised major share capital participation by the Government 'in order that a powerful helping hand may be held out, capable of guarding the primary structure against dangers and weaknesses inherent in the present functions of the system as a whole.'[3]

1. *e.g.*, All India Rural Credit Survey, Reserve Bank of India (1954), Committee on Co-operative Credit, Government of India (1960).
2. *All-India Rural Credit Survey* (1954), Pp. 333, 376, 430 and 431. *Report of the Committee on Co-operative Credit*, Government of India, (1960), Pp. 112, 122.
3. *Op. cit.* p. 322.

10.45 At the different levels of the structure, share capital contribution is considered necessary (*a*) to provide adequate borrowing power to the institutions, (*b*) to provide for cushion against overdues, (*c*) to enable the primary societies to undertake non-credit business, and (*d*) to enable them to start advancing medium-term loans.

Members' Capital

10.46 At the primary level, the prescribed ratio of members' share-holding to borrowings which used to be 1:10 has been raised to 1:5 when the Action Programme[1] was introduced in 1964. In most areas, this has come into force. However, the required amount of share capital is being collected in the case of small farmers in two or three instalments. When the level of share-holding of the members has reached the ratio of 1:5 in relation to borrowings, further contributions are required to be made by members at 5 per cent of their loans through compulsory thrift deposits.

10.47 There is no doubt that without the capital base of the dimensions that has now been built up over a period of years, the co-operative credit structure would have been in a more difficult condition in the matter of absorbing overdues in most States than it is to-day. At the same time, there is also a view that larger capital additions on account of substantial member-contributions and the sizeable Government participation may have led to certain degree of laxity in effecting prompt recovery of loans from borrowers.

10.48 Additions to share capital in most cases have resulted in central co-operative banks acquiring much larger borrowing capacity. Indeed, if maximum borrowing limits are altogether removed, as suggested earlier, the borrowing capacity would be limited only by the ability of institutions to manage funds. But it is doubtful whether it has resulted in a corresponding increase in deposits or business. This is so because the co-operative banks both at the central and apex levels are required to raise resources either by way of deposits - for which they are not uniformly well-equipped in all cases as already discussed - or from the Reserve Bank, which is not expected to provide funds to the full extent of their borrowing power.

10.49 Thus the policy regarding owned funds of co-operative banks is based partly on the principle of maximum borrowing power being a definite multiple of the owned funds and partly on the principle of increasing such funds for the purpose of absorbing overdues. For the co-operative credit agencies, the share capital base has become rather large in relation to the volume of business resulting in a low rate of return to the individual shareholders. On the other hand, for the individual members, this has resulted in a good part of the share capital being collected from them as compulsory deduction from loans. From the point of view of the shareholders, it is more advantageous if the co-operative concentrates on deposit mobilisation rather than on raising more share capital. A better way would be to relate amount of owned funds to such factors as (*i*) the fixed capital requirements of the credit agency; (*ii*) bad and doubtful debts; and (*iii*) quality of other loans, and not to link it up with considerations of maximum borrowing power. The Commission recommends that the Reserve Bank should review the policy in this light and revise the requirements for share capital contribution by members of the co-operative credit agencies.

MEASURES TO STRENGTHEN THE CO-OPERATIVE CREDIT STRUCTURE

10.50 We have discussed in an earlier chapter why several central co-operative banks by themselves are not in a position to undertake branch expansion in a significant way in many States. Individually many of them are unlikely to be in a position to exploit to the full extent the potential created by a large capital base for expanding their loan business. Besides, there are in each State, some central banks with relatively

1. The various measures suggested by the Committee on Co-operative Credit (1960) for bringing about progressive orientation of credit to production needs were spelt out in the Action Programme drawn up in 1963 by the Government of India. This Programme outlined, among other things, the main features of the crop loan system, linking of share-holding to borrowings, etc.

low reserve borrowing power while there are others - a majority - with large reserve borrowing power.

10.51 One way of making the best use of the available capital base in the system seems to be to fix a combined maximum borrowing power for all the central banks in a State. To this, most State Governments and banks reacted unfavourably. They pointed out that responsibility for weaker units would fall on the bigger ones.

10.52 The idea of forming one co-operative bank for each State by converting the central banks into branches of apex bank has been favoured by some State Governments and apex co-operative banks. Apart from this, quite a few Governments and apex and central co-operative banks felt that the best way of improving the structure where central banks are weak would be to convert them into branches of respective State co-operative banks. By so abolishing the intermediate tier, it is argued, it would be possible to make better use of the capital base in the system and also to ensure better coverage of rural areas by extending branches which has not been possible hitherto on account of the district units being weak.

10.53 A solution seems to lie in so reorganising the co-operative banking structure in each of those States where it is generally weak to-day that the entire capital base of the apex and central banks forms the basis for raising the maximum amount of resources from the public, the Reserve Bank, etc. This would facilitate all the districts within a State - and individual members in different districts - receiving credit in proportion to their needs rather than in proportion to the ability of the individual central co-operative banks to raise resources, as has been the case now.

10.54 This is what would happen if the district co-operative banks together with the apex bank form into one unit. There will then be one co-operative bank covering all the districts with its branches and financing the primary level institutions whether they are rural banks or viable primary agricultural credit societies. Moreover, the reorganised bank in the State would be in a position to raise resources more effectively by way of deposits and also by way of borrowings from the Reserve Bank because of the better management and increased efficiency that such a reorganisation can bring about than the individual central banks are in a position to do. At the same time, it has to be recognised that there are quite a number of central banks which are well managed and have done a good job of mobilising deposits, providing credit to agriculture and generally developing the banking habit in their area of operation. Although they can impart strength to the apex bank if they are converted into its branches, there is no particular reason why such a step should be taken. Rather they should be encouraged in the work they are doing. At present in certain cases the apex bank itself has opened branches in the district to finance societies directly. This method may be continued wherever possible, particularly in cases where the weakness of the co-operative structure is confined to small pockets in a State.

10.55 We have already outlined the problems faced by central co-operative banks in districts which have poor agricultural potential because of natural factors. Such central banks are likely to remain under a handicap for reasons beyond their control unless the economy of such districts is improved through programmes of development which help to establish in these areas productive activities other than agriculture. Apart from districts of this type, weaknesses have developed for one reason or another in central banks in a number of other districts also. Whatever the reason, weak central banks are unlikely to be useful instruments of credit policy. The Commission, therefore, recommends that wherever such banks exist, the co-operative structure should be reorganised. In the Commission's view, this can be done in the following manner: (*i*) in those States where all the district central banks are weak it will be better to reorganise the structure so as to have only branches of the apex bank; (*ii*) in those States where there is a small number of strong central banks and a large number of weak banks, the apex bank should open branches in places where the weak central banks exist at present; (*iii*) in a State where the majority of the district central co-operative banks are strong, it is not advisable to disturb the existing structure. In such cases, the weak banks, which form the minority, may be converted into branches of apex bank till such time as they are transformed into strong viable banks.

10.56 In States where both the apex and district central co-operative banks are strong, there is no need to disturb the structure.

10.57 It is possible that the reorganised State co-operative bank in some States is likely to acquire deficits on account of taking over the assets and liabilities of the central co-operative banks already under 'rehabilitation' programmes or likely to be brought under such programmes. We recommend that in all such cases the net owned funds (share capital plus reserve fund) position of the reorganised banks be ascertained and where necessary suitable share capital contributions be made from the National Agricultural Credit (Long-term Operations) Fund of the Reserve Bank of India, taking care to see that the capital base is not thereby made excessive.

10.58 A problem that is likely to arise after such a reorganisation is that the reorganised bank alone would not be in a position to raise resources from the Reserve Bank because in terms of its statute two good signatures are to be furnished on the promissory notes submitted for discount to the Reserve Bank. It has been pointed out that the Reserve Bank would not be in a position to accept the signature of the large number of primary credit societies or marketing and other co-operatives for practical reasons. We recommend that the Reserve Bank of India Act, 1934, may be amended so as to enable it to provide financial accommodation to a State co-operative bank against a single (*i.e.*, co-operative bank's) good signature.

10.59 In those States where co-operative banks are generally strong and reorganisation on the lines recommended above is not considered necessary, we recommend that steps should be taken to simplify the existing documentation and procedural formalities that are required to be observed between apex and central banks. As a result of the proposed reorganisation in some States, offices of the central banks, as branches of apex banks, will acquire the status of the branches of a 'scheduled' bank, so long as the present distinction between the 'scheduled' banks and other banks remains.[1] This would mean, however, that those central co-operative banks which continue their independent existence because of their good performance will remain non-scheduled. The Commission feels that if these banks wish to be included in the Second Schedule to the Reserve Bank of India Act, 1934, it should be possible for them to be so included. In order that central co-operative banks are also enabled to be scheduled, the Central Government should notify them as eligible institutions under section 42(6)(a)(iii) of the Reserve Bank of India Act, 1934.

10.60 Apart from deposits, the main source of funds of co-operative banks is the Reserve Bank of India. The dependence of the co-operative system on the Reserve Bank of India has grown considerably over the years. The outstanding borrowings of the State co-operative banks from the Reserve Bank at the end of 1969-70 amounted to Rs 243 crores as compared with Rs 114 crores at the end of 1960-61. As at the end of June 1970, their borrowings from commercial banks amounted to Rs 13 crores and those from Government to Rs 16 crores.

10.61 Asked about the most convenient source of funds under the existing conditions, the majority of the central banks and some apex banks have felt that the Reserve Bank of India is the most convenient source, evidently on account of the concessional nature of Reserve Bank finance. A few banks have shown preference for the State Bank of India finance on account of its availability on the spot.

1. See Chapter 19, paragraph 19.95.

10.62 On the question of dependence on the Reserve Bank for finance most central banks have regarded it as indispensable because of (*a*) the inability of the banks to mobilise deposits, (*b*) the need for providing cheaper credit to the ultimate borrowers, (*c*) the need to maintain a reasonable margin between borrowings and lendings, and (*d*) the need to satisfy the growing demand for credit from agriculturists. Some apex and central banks thought that it was not desirable to continue to depend on the Reserve Bank for funds. The banks generally felt that the dependence on the Reserve Bank could not be dispensed with if the rate of interest charged to the ultimate borrower was to be kept low. If the banks depended on deposits, the cost of funds would go up. Besides, banks in backward areas would find deposit mobilisation difficult.

10.63 The State Governments were asked to give their views on how best commercial banks resources could be made available to the co-operative banks in order to reduce their dependence on the Reserve Bank. The alternatives suggested in the questionnaire were: (*i*) commercial banks keeping long-term deposits with co-operative banks, (*ii*) their buying the debentures or bonds floated by them, or (*iii*) commercial banks taking over a part of the agricultural loans made by co-operatives.

10.64 Five State Governments have suggested that commercial banks should keep deposits with co-operative banks and two have suggested commercial banks taking over part of their agricultural loans and six have suggested commercial banks buying debentures or bonds floated by co-operative banks. Those State Governments which considered floating of debentures feasible suggested that the bonds should be supported by Government guarantee.

10.65 On the other hand, 23 out of 31 central banks which considered the method of floating debentures/bonds feasible, suggested that bonds should be backed by Government guarantee and should be issued in smaller denominations at attractive rates of interest. Besides, they should also be treated as trustee securities and should be eligible for inclusion in the liquid assets maintained by banks. They have also suggested that the period of bonds or debentures should vary from 1 to 15 years.

10.66 However, eight of the reporting banks thought that floating of bonds or debentures should be done by apex banks and not by central banks. The difficulties visualised by them in this regard are: (*i*) the banks might not be in a position to redeem the bonds promptly as a major part of their advances would be for agricultural purposes and their repayment would depend, among other things, on good rains; (*ii*) unless some pressure was applied, institutions would not buy the bonds; (*iii*) it might have adverse effect on deposit mobilisation because the bond holders would receive better protection *vis-a-vis* that given to depositors; and (*iv*) lending rates might go up.

Views of the National Banks

10.67 On the other hand, a large majority of the 12 reporting National Banks have felt that supplementing the resources of co-operatives by placing deposits with them is not practicable, because the minimum acceptable rate of interest on deposits is 7.5 per cent, while the rate charged on advances to farmers by co-operatives is also more or less the same. They would, however, be willing to enter into participation arrangements wherever feasible. A few banks seem to be in favour of depositing their funds with some co-operative banks if their repayment is guaranteed by the Government, but the rate of interest should be 2 to 2.25 per cent above the Bank Rate. Those National Banks which are already providing agricultural finance on a significant scale do not seem to be in favour of making funds available to co-operative banks. They would prefer making direct loans.

Present Policy of the Reserve Bank for Providing Credit Facilities to Co-operatives

10.68 Under the existing policies followed by it, the Reserve Bank sanctions credit limits to central co-operative banks normally upto four times their owned funds to those classified under

'A' in audit, and three times their owned funds to those classified under 'B' in audit and twice their owned funds to those classified under 'C' in audit on the recommendation of the Registrar of Co-operatives. The last mentioned are sanctioned upto four times the owned funds on Government guarantee. In addition, 'A' class banks are also sanctioned twice the owned funds and 'B' class banks equivalent to their owned funds as 'additional credit' limits subject to their showing outstanding agricultural loans from their own resources to an extent equivalent to the outstandings under such limits from the Reserve Bank of India. Relaxations of these standards on merits are not uncommon, in the case of banks operating in special programme areas like the High Yielding Varieties Programme (HYVP) areas.

10.69 The Reserve Bank also sanctions credit limits to banks for medium-term loans and for financing industrial co-operatives (*e.g.*, handloom weavers) upto an amount equal to the owned funds in each case. Thus, under ideal conditions, a bank would be eligible to get upto 8 or 9 times the owned funds from the Reserve Bank of India.

10.70 An important condition stipulated by the Reserve Bank following the recommendations of the Vaikunth Mehta Committee on Co-operative Credit (1960) is what is known as the 'non-overdue cover' in terms of which a bank is required to show 100 per cent cover for loans outstanding to the Reserve Bank by way of non-overdue loans due from societies. Unless this condition is satisfied, drawals on the credit limits are not permitted by the Reserve Bank of India. In recent years, another condition, *viz.*, 'minimum involvement' is being enforced on banks with a view to ensuring that co-operative banks strive to mobilise deposits and employ a part of their funds in agricultural financing.

10.71 One aspect of the Reserve Bank's policy of sanctioning credit limits to co-operative banks is to call for the State Government's guarantee in cases where the second signature of a central bank could not be regarded as good by reason of its poor financial position, heavy overdues, etc. Credit limits to as many as 141 banks were supported by Government guarantee in 1970-71. In recent years, there has been relaxation of this condition as a result of which more and more banks have been able to come forward to obtain credit limits against their own signatures.

10.72 A more important aspect of the Reserve Bank's policy is the concessional nature of its credit facilities. Short-term agricultural loans are made at 2 per cent below the Bank Rate, while loans for financing industrial co-operatives (*e.g.*, handloom weavers' co-operatives) and medium-term agricultural purposes are made at 1.5 per cent below the Bank Rate.

Procedures

10.73 Short-term credit limits for agricultural purposes are fixed annually by the Reserve Bank in respect of each central co-operative bank on the basis of an application in a prescribed form together with necessary information and documents. The central banks apply through the relative apex banks and the Registrar of Co-operative Societies. The limit is fixed taking into account the financial position of the central bank, its audit classification, owned funds, its ability to match the proposed borrowings by non-overdue loans outstanding against its borrowers, and finally its lending programme.

10.74 However, as a result of the co-operative movement in certain States being weak and its inability to fulfil the conditions laid down by it, the flow of credit to these States has been very much less than to those where the movement is well developed (Table 10.4) (not inserted here).

10.75 What, in our view, is of the utmost importance is that the lending at the level of the ultimate borrowers should be sound. Towards this end, we have made appropriate recommendations in Chapter 9. To what extent the Reserve Bank may finance a co-operative bank should be determined not so much by the audit classification and the prescribed multiple of owned funds, but by the extent to which it has been in a position to make sound use of resources. Where the co-operative banks are financially sound, managed efficiently and when sound loaning policies are followed, it should be able to get credit facilities for meeting its actual needs. This may mean relaxation of or altogether dispensing with the existing multiples.

10.76 The problem, however, arises in the case of banks which are weak and are not so sound, and where loan policies require to be rationalised. In these cases, what the Reserve Bank provides by way of credit limits should be part of a total 'package' consisting of credit plus management guidance, plus a concrete annual programme for improving the loaning system along the recommendations made by us. This would enable weaker co-operative banks to draw larger loans from the Reserve Bank.

A Specialised All-India Bank

10.77 It is in this context that we have considered the suggestions for setting up of a National Co-operative Bank or an Agricultural Development Bank of India on the lines of the Industrial Development Bank of India (IDBI).

10.78 A number of arguments have been advanced, especially by a section of co-operative leadership, in favour of the former. These are: (*a*) it would help the co-operative system as a whole in developing self-reliance in the matter of resources; (*b*) a National Co-operative Bank would be in a better position to help and guide the co-operative banks than the Reserve Bank of India which is not a co-operative institution; and (*c*) it would be more responsive to the requirements of co-operative banks than the Reserve Bank. We have also considered in this connection the views expressed by the All-India Rural Credit Review Committee on the question of setting up of a National Co-operative Bank or National Agricultural Development Bank of India.

10.79 Taking the question of resources for the co-operative system, it would be obvious that an institution of the type suggested cannot mobilise deposits as that would mean setting up of branches and competing with the lower level credit institutions in the co-operative sector. Therefore, the only resources such an institution can mobilise are from borrowings either from the Reserve Bank or from the market. So far as the former type of resources are concerned, the setting up of a national level institution merely imposes one more tier in the system with the possibility of the cost of credit being increased thereby. As regards borrowings from the market under the conditions in which the market for gilt-edged and semi-gilt-edged securities is likely to remain in the foreseeable future, it is very doubtful whether the proposed national level institution will be able to mobilise any resources from this market.

10.80 In the total scheme for bridging the credit gaps in the agricultural sector, the major difficulty is that the co-operative banking sector which has a very wide-spread organisation at the field level is unable to mobilise deposits, while the commercial banks which are able to mobilise deposits in a substantial manner are unable to provide credit to agriculture owing to their low coverage of rural sector and their lack of knowledge of the problems of lending to this sector. Thus, it is not only a problem of shortage of resources in relation to the credit needs of this sector but, even more important, it is a problem of ensuring the distribution of available credit. It is this problem which has engaged our attention in these chapters on co-ordination between the two types of banks and we have made a number of recommendations to solve it. These recommendations will naturally take some time to be fully effective. Meanwhile, a way has to be found for meeting the growing needs of the rural sector.

10.81 In the future development of the economy, credit planning is expected to play a significant role. A proper system of credit planning should comprise both a system of making sectoral allocations of credit from time to time and a system which ensures that the decisions of the credit planning authorities are properly implemented. Since in the case of the agricultural sector, the main problem is of distribution of credit allocated, the authorities will have to devise ways and means of utilising the geographical spread of the co-operative system to the fullest extent. That is to say, they will have to devise methods by which any shortfall in the performance of the commercial banks in agricultural credit in relation to the allocation out of their resources for agricultural credit is made good by channelling more credit through the co-operative sector. In doing so, however, care has to be taken that the total credit situation remains under control. In other words, in this process, creation of additional credit beyond the total envisaged in the credit plan has to be avoided.

10.82 Keeping the total credit situation under control and ensuring that the various sections of the economy actually receive the credit allocated is the primary responsibility of the central banking authority, *i.e.*, the Reserve Bank of India. The Reserve Bank has the necessary powers and the expertise to do so. In particular, the Agricultural Credit Board of the Reserve Bank of India is intended to consider problems of this type. The proposed National Co-operative Bank can hardly have any role to play in this matter.

10.83 Besides, the creation of a National Co-operative Bank will not create new resources other than those which are now commanded by the banking system and the term financing institutions. What is required at the top level is not a new institution but an improvement in the mechanism of the flow of funds.

10.84 The other proposal, *viz.*, an Agricultural Development Bank on the lines of IDBI is mainly intended to bring together the expertise available for the development of agriculture and agricultural financing and not so much the resources, because in our view, the responsibility of allocating resources and ensuring adequacy of funds for agriculture rests with the Reserve Bank. The Agricultural Refinance Corporation which is a subsidiary of the Reserve Bank has already developed considerable expertise in project-oriented loaning. The Agricultural Finance Corporation has developed much valuable experience in this field. However, the Agricultural Refinance Corporation's resources and expertise have become available largely to the Land Development Banks and the other co-operative banks do not appear to have availed themselves of this facility to any significant extent. Similarly, the Agricultural Finance Corporation's services are, by and large, available to the commercial banks.

10.85 We have indicated earlier in Chapter 9 the inadequacy of medium-term loaning by the central co-operative banks. This is on account of lack of experience in analysing and developing medium-term loan programmes. There is a need for enabling these banks to undertake development loaning on a project as well as on individual basis on a very large scale, if they are to play a comprehensive role with regard to agricultural finance in their areas. At the same time, commercial banks also will have to make greater use of facilities available from the Agricultural Refinance Corporation in order to supplement their own resources and to take more active interest in a comprehensive type of development loaning.

10.86 In view of these considerations, we feel that there is a strong case for combining the Agricultural Refinance Corporation and the Agricultural Finance Corporation. The new institution that combines the Agricultural Refinance Corporation and the Agricultural Finance Corporation will be in a better position to help promote development financing to a much greater extent by both co-operative and commercial banks. It should be in a position to undertake many of the comprehensive functions outlined for the Agricultural Finance Corporation and undertake direct financing wherever necessary. It would not have the shortage of finance which the Agricultural Finance Corporation suffers from to-day because the combined institution would be in a position to draw from the Reserve Bank a part of the resources that may have been made over to it by commercial banks from time to time from out of the allocations made for agricultural finance. This would also ensure effectiveness of co-ordination between term-financing, technical assistance and finance for current operations within the Reserve Bank complex.

RECOMMENDATIONS

10.87 The Commission endorses the recommendations of the All-India Rural Credit Review Committee regarding the need for the co-operative banks appointing well qualified and trained staff and the extension of the Deposit Insurance Scheme to them. The Commission also considers that it is necessary that the Reserve Bank of India should link the rate of interest charged on its loans to co-operative banks to the deposit mobilisation efforts put in by them and recommends that the Reserve Bank should formulate a scheme at an early date for this purpose.

10.88 At present there is considerable variation in the regulation of co-operative banks, their inspection and the assistance they get from State to State. This has led to difficulties in the efficient management and functioning of the co-operative banks. As these banks are the main channel for providing institutional credit to agriculture, the differences mentioned above create a number of difficulties in effective implementation of the monetary and credit policy of the country. Moreover, the financial assistance provided by the States to these banks is mostly from the resources of the Reserve Bank or the Central Government.

10.89 The Commission feels therefore, that from the point of view of ensuring a unified monetary and credit policy, uniformity of laws relating to credit supplying agencies and ensuring a high quality of management of these agencies through programmes of training and exchange of information, co-operative credit should be transferred to the Union or the Concurrent List. The Commission has made recommendations regarding this in Chapter 19.

10.90 Thus, the policy regarding owned funds of co-operative banks is based partly on the principle of maximum borrowing power being a definite multiple of the owned funds and partly on the principle of increasing such funds for the purposes of absorbing overdues. For the co-operative credit agencies, the share capital base has become rather large in relation to volume of business resulting in a low rate of return to the individual shareholder. On the other hand, for the individual members, this has resulted in a good part of the share capital being collected from loans as compulsory deductions. From the point of view of the shareholder it is more advantageous if the co-operative concentrates on deposit mobilisation rather than on raising more share capital. The Commission feels that the requirements of owned funds should be related to such factors as (*i*) the fixed capital requirements of the credit agency; (*ii*) bad and doubtful debts; and (*iii*) quality of other loans, and recommends that the Reserve Bank should review the policy in this light and revise the requirements for share capital contribution.

10.91 The policy of establishing a central co-operative bank for each district does not take into account such facts as differences in the physical endowments of the districts, inadequacy of rainfall and the consequent possibility of recurrent crop failures, etc. The central banks established in districts with poor agricultural potential are considerably handicapped and, therefore, remain weak. Unless the economy of such districts is improved through programmes which generate productive activities other than agriculture, these banks are not likely to improve.

10.92 Apart from districts of this type, weaknesses have developed for one reason or another in central banks in a number of other districts also. Weak central banks are unlikely to be useful instruments of credit policy. The Commission, therefore, recommends that wherever such weak central banks exist, the co-operative structure should be reorganised. In the Commission's view, this can be done in the following manner:

(*i*) In those States where all the district central banks are weak, it will be better to reorganise the structure so as to have only branches of the apex bank;

(*ii*) In those States where there is a small number of strong central banks and a large number of weak banks, the apex bank should open branches in places where the weak central banks exist at present;

(*iii*) In a State where the majority of the district central co-operative banks are strong, it is not advisable to disturb the existing structure. In such cases, the weak banks which form the minority, may be converted into branches of apex bank till such time as they are transformed into strong viable banks;

(*iv*) However, in States where both the apex and district central co-operative banks are strong, the present structure may be allowed to continue.

10.93 The additional share capital requirements, if any, for such reorganisation may be made from the National Agricultural Credit (Long-term Operations) Fund of the Reserve Bank of India.

10.94 The strong central co-operative banks may be accorded the status of a 'scheduled' bank if they so desire.

10.95 The proposed reorganisation of weak central banks as branches of apex banks and granting of a 'scheduled' status to strong co-operative banks may create some difficulties for these banks in raising resources from the Reserve Bank because of the requirement of two good signatures to be furnished on the promissory notes submitted for obtaining accommodation from the Reserve Bank. The Commission recommends that the Reserve Bank of India Act, 1934 may be suitably amended to enable it to provide financial accommodation against a single good signature.

10.96 In order to enable the central and State co-operative banks to finance small scale industries in their States, the Commission recommends that individual membership in such banks should be allowed upto a limit to be specified by the Reserve Bank of India.

10.97 In providing finance through the central co-operative banks, the Reserve Bank should not proceed on the basis of the Reserve Bank finance being given upto a fixed multiple of the owned funds of the bank or on its precise audit classification. Financial soundness and efficient management should be the basic criteria to be employed for such a purpose.

10.98 The Commission has examined the suggestions for setting up either a National Co-operative Bank or an Agricultural Development Bank of India on the lines of the Industrial Development Bank of India. In the Commission's view, the major part of the difficulties in providing credit needed by agriculture are with the field level organisation and the Commission has made several recommendations to meet them. As regards the problem of resources, it is the primary responsibility of the Reserve Bank of India to regulate the availability of credit to the different sectors and it has the necessary powers and the expertise for this purpose. Establishment of a National Co-operative Bank is not likely to mobilise any more resources for this purpose. On the other hand, by creating one more tier, it is likely to add to the cost of the distribution of credit. Besides, it is important that all short-term credit, which has an important bearing on the money supply, should be under the control of a single authority and that authority can only be the Reserve Bank.

10.99 With the introduction of credit planning, it may be expected that broad sectoral allocations of the total available credit will be made from time to time by the credit planning authorities. However, because of the inadequacies of both the commercial and co-operative banks at the primary or the field level, there is likely to be a problem for some time to come of credit to agriculture and other productive activities in the rural areas not being made available fully. In particular, it is likely that while the deposits raised by the co-operative banks will be fully utilised for this purpose, the allocation out of commercial banks deposits remains unutilised. The Commission recommends that the Agricultural Credit Board of the Reserve Bank of India should keep this matter under constant review and devise ways and means of utilising the allocation from commercial banks' deposits more fully. The Commission, therefore, considers that there is no case for establishing a National Co-operative Bank.

10.100 As regards the establishment of an Agricultural Development Bank of India, the Commission is of the view that the Agricultural Refinance Corporation and the Agricultural Finance Corporation may be combined so that the resources available in both the institutions are put to the best use. The Agricultural Refinance Corporation which is a subsidiary of the Reserve Bank of India has already developed considerable expertise in project-oriented loaning. The Agricultural Finance Corporation which has been established by commercial banks, the majority of which are now in the national sector, has also developed its own expertise for identifying and formulating potential agricultural projects and organising consortia of commercial banks. The new institution formed by merging the two Corporations can serve the purposes the proposed Agricultural Development Bank of India is expected to serve.

REVIEW ARTICLE*

AUTONOMOUS DEVELOPMENT: A RADICAL 'POLITICAL' CRITIQUE OF CONVENTIONAL DEVELOPMENT PARADIGM

Subodh Wagle

1. INTRODUCTION

'The Radical 'Political' Critique of Conventional Development

The mainstream or the conventional development model and the paradigm guiding it have been subjected to criticisms from diverse perspectives. After the initial euphoria in the 1950s and 1960s over early gains of development, the theoretical shortcomings and practical failures of the conventional development model started becoming evident. It was then put to criticism by some social scientists as well as development planners and administrators. Their main concerns were the perpetuation and, in some instances, accentuation of social disparity and political marginalisation after the two decades of development. From the mid-1970s, the radical environmental critique started gaining ground. Since then, the radical environmental critique, with its diverse ideological shades and differing emphases, has developed into a body of comprehensive and profound literature. The critique has spread to and drawn from a range of social science disciplines (from anthropology and sociology to policy science, philosophy and even research methodology) and has investigated in detail a variety of issues in the field of development (including social, political, cultural, ethical and epistemological). However, the main argument of the critique has remained ecological/ environmental in essence. The arguments and positions that emerged from this critique received further boost with the eruption of grassroots level environmental conflicts across the Third World. As a result, the radical environmental critique has acquired the centre-stage of the radical discourse on development.

Simultaneously, another radical critique of development from a different perspective has been evolving in the last three decades. This radical critique is essentially a 'political' critique in a broader sense of the term. It is 'political' because it essentially focuses on the issues of ownership and control as well as on the power relationships (i.e., relationships of dominance) that are created, perpetuated or accentuated by the conventional development model or the paradigm guiding it. Similar to the radical environmental critique, it also has covered a range of disciplines (including economics, education, philosophy, political science, etc.). There are many commonalties and overlaps between these two radical critiques in terms of issues investigated and positions taken. However, in the latter critique, the 'political' emphasis--i.e., emphasis on power, control and ownership--remains the central. Again, similar to the radical environmental critique, it has drawn inspiration, ideas and strength from various grassroots efforts.

Paulo Freire and Ivan Illich could be identified as the pioneering proponents of this radical political critique of development though they seem to have differing emphases and positions on many issues. While Illich's work has mainly inspired a bevy of radical thinkers and academics, Freire's work inspired the conscientisation-based literacy movement especially in Latin America. A group of radical thinkers led by Wolfgang Sachs further developed one strand of this radical 'political' critique by largely following the path indicated by Ivan Illich. This group, which takes extreme 'anti-development' position, essentially argues that development, as an idea and as a practice, is not just moribund but dead, and there is no point in trying to revitalise it anymore. As against this, there are other writers and activist, who seem to be following the path illuminated by Freire and take a more 'positive' and 'pro-active' position toward development. They argue for fundamental restructuring of the politics of development as a way to resolve the problems created and perpetuated by development. For them, the real hope lies in (the poor and disadvantaged) people and their capabilities. Despite

Subodh Wagle is Associate Professor in the Indian School of Political Economy, Pune.

* *Autonomous Development: Humanizing the Landscape: An Excursion into Radical Thinking and Practice*, by Carmen Raff, Vistaar Publications, New Delhi, 1996, Pp. xii+244, Price: Rs. 295 (cloth).

the havoc wrought on them by the five decades of development, according to this position, people still hold the key to the 'reversal' of the fortunes of the globe and human civilisation. Chilean economist Manfred Max-Neef, Scandinavian academic/activist John Galtung and British writer Paul Ekins are some of the prominent proponents of this 'positive' strand of the radical political critique.

In India, critiques identifying with the 'positive' strand of radical 'political' critique of development could be witnessed in the writings of Rajni Kothari, Harsh Sethi, D. L. Sheth and others, whereas Vandana Shiva, Shiv Narayan, Ashish Nandi and Claude Alvares seem to be closer to the Sach's 'anti-development' stand. In terms of the volume and visibility, the 'anti-development' strand of the radical 'political' critique seems to have acquired more prominence in India as well as at the international level.

The Book Under Review

In this context, Raff Carmen's book, *Autonomous Development: Humanising the Landscape: An Excursion into Radical Thinking and Practice* is an important addition to the literature on the 'positive' strand of the radical 'political' critique of conventional development. Having worked at the grassroots level in Africa, Carmen seems to be appreciative of the urgency of ground-level situation and, hence, keen on finding practical solutions rather than indulging in the nihilistic theoretical criticisms. As a result, the book seems to suggest that 'autonomous' development should start from what the traditional societies have and bring in desirable elements from modernity and conventional development model without developing parasitic relationships or relationships of dominance of any kind. The book starts from the position that the conventional development has not just failed but has resulted into further accentuation of various problems. It presents a detailed diagnoses of the maladies perpetuated or created by the conventional development model by unraveling various sites and instances of relationship of power and dominance in the economic, political, cultural and organisational spheres. The book also elaborates the remedies and prescriptions suggested/adopted by the proponents of this strand of radical thinking at three different levels. At the conceptual level, the terms such as 'maldevelopment', 'Human Scale Development', and 'autonomy' are explained and articulated as alternative concepts or counter-concepts to those propagated by the conventional development paradigm such as 'underdevelopment' and 'participation.' At the theoretical level, the book presents a brief review of the work of Manfred Max-Neef on 'barefoot' or 'ecological' economics which is presented as an alternative to the conventional economics. At the practical level, it describes various grassroots-level initiatives of poor communities and activists (including community self-help groups in Africa, new community based methodologies for providing organisational and entrepreneurial training in Latin America and Africa, as well as 'the theater of the oppressed' in Latin America) which attempt to reclaim autonomy in different spheres and move toward humanised and autonomous development.

The book is divided into three parts. The first part of the book entitled 'Maldevelopment' provides author's analysis of what is wrong with the conceptual foundations of the conventional development discourse. It specifically 'examines notions and terminology used in the development discourse' (p. 5). They include: 'the end of history', 'the Third World', 'participation', etc.

The second part of the book is focused on the prescriptive elements. It discusses 'the four pillars' on which 'autonomous development' rests (p. 6). They are: political autonomy, cultural autonomy, organisational autonomy and economic autonomy. In this conceptual scheme, the autonomy is a key concept. As the concept of 'macro-economic growth' plays a critical role in the conventional development perspective, 'autonomy' plays a similar role in author's interpretation of development. The author explains the concept of 'autonomy': 'Autonomy is in no way synonyms with Eurocentric, self-assured claims to sovereignty and "mastery of one's own destiny" or co-opted notions of democracy and "good governance", still less on illusory and impossible autarky. Autonomy conceptualises what (is)... defined as "the right to invent one's own future"' (p. 6).

Chapter 10 in the third part of the book focuses on the ethical issues involved in the 'interventionism' of the conventional development perspective (p. 6). The author traces the roots of this 'interventionism' to the 'ethnocentric perceptions of what is wrong [with "them"] and what is right [with "us"]', and asserts that it is made possible in practice by 'the power of money' which supports it (p. 7). Part III also contains Chapter 9 entitled: 'Challenging the Given: Women Countering the Masculinization of the Motherland' (p. 163). The chapter presents a good review of the evolution of thinking on women's/gender issues in development discourse and practice over the last few decades. However, it remains a misfit in the logic and the structure of the rest of the book. Hence, it is not discussed in this review of the book.

The review largely follows the structure of the book. However, the effort is focused on presenting a comprehensive and an adequately detailed picture of the 'positive' strand of the radical 'political' critique of development using the discussion in the book.

II. DIAGNOSES OF MALDEVELOPMENT

'Economism' in Development

The title of Chapter 1, 'The End of History' refers to the recent proclamations by an American ideologue that, with the fall of the Soviet Union and the East Bloc and with the emergence of the 'unipolar' world order, history of human civilisation (characterised by the ideological conflict and wars) has come to an end. This essentially means that 'the fusion of liberal democracy and industrial capitalism' has now become 'the only viable base for modern human society' (p. 12). In the context of such proclamations, the author begins in Chapter 1 with the position that conventional development based on capitalism and free-market economy has failed and examines its conceptual and theoretical foundations to arrive at the diagnoses of its failure.

Questioning the conventional position that development is a scientific and dispassionate exercise based on objective and neutral modern sciences (including social sciences) and technology, the author calls conventional development the 'surrogate religion of the second half of the twentieth century' and 'a religion without atheists' (p. 11). He further comments that '(t)his modern religion boasts its own deities, its own creed, its own values, ethos, rites and rules. The supreme rule, no doubt, is an unswerving allegiance and obedience to the invisible hand of the forces of the market, "as if they were laws laid down by a new universal god"' (p. 11).

The author traces the conceptual and ideological foundations of this version of development to the ethics, traditions, knowledge-systems, as well as historical choices made by the modern Western civilisation. However, the key factor is the 'original myth of progress' on which modern Western civilisation is built. In simple words, the myth holds that the progress of society is possible only if the limits imposed by nature on human beings are transcended. Further, man, who is superior to nature can, by using his intellectual capabilities and by creating science and technology, overcome the natural barriers arresting progress of human civilisation for centuries. The myth required societies to 'increase and multiply, fill the earth and subdue it' (p. 16) which, in other words, implied 'unlimited aspirations for expansion and conquest' (p. 16).

These are said to be the cultural foundations of 'rational macro-economics' which, in turn, shaped the conventional version of development. The author criticises the role defined for economics in the modern world and describes its aftermath: '(a)rtificially narrowed down to the science of dealing with the effective *industrial* production of [consumption] goods for the market', macro-economics produced 'a frenzied productionist-consumptionist, continent- straddling vortex spouting commodities and creating in its wake a vacuum in what had previously been a network of [self]-supporting and supportive local communities' (p. 20).

Following this growth-mania in rational macro-economics, in the conventional development thinking, development was reduced to 'economic growth indicators under the regime of a non-operative trickle-down mechanism' (p. 20). In other words, according to the author, development became an 'attempt to steer the course of a complex organism, human society, by the sole macro-economic indicator of growthmanship' (P. 20). With this interpretation of development in mind, the author articulates his fundamental objection to the present mode of development: 'It is symptomatic of the culturally empty . . . development . . . that abstaining from what development is all about--human dignity, autonomy and the satisfaction of fundamental human needs--has been turned into a virtue in its own right' (p. 20).

Because this economics-dominated version of development draws its inspiration from the peculiar ideological constructs and cultural traditions of the modern Western civilisation, it is argued, purely economic or political rethinking and strategies will not be adequate to counter the effects of conventional development. Hence, according to the author, 'hope for a reversal of fortunes for humanity cannot come from political measures alone, and certainly not from exclusively economic measures, technological innovations, or organizational re-structuring. Deliverance will come from a drastic change in and re-assessment of cultural, spiritual and ethical values, eventually expressed in a transformation of both society and economics' (p. 21).

Such a fundamental reassessment would require 'an inter-disciplinary approach to development which draws not only from economics, but in equal measures from political science, sociology, adult education, anthropology, comparative religion, ethics, law and philosophy' (p. 22). But, the real thrust should be placed on the reassessment of the relationship between culture and economy. Because 'the main culprit (behind development failures) is the deeply unethical, disembedded practice of a rapine economics of extraction and despoliation, . . . (o)nly by restoring economics to its proper cultural matrix can this shift (to maldevelopment) be reversed to yield a true development' (p. 23).

Development Terms and the Implicit Messages

In analysing the concepts and terms prevalent in the conventional development discourse, in Chapter 2 (entitled: 'Coming to Terms with Terms'), the author focuses on the terms 'maldevelopment' and 'the Third World'. The author raises objection to the prevailing scheme of classification of societies/countries involving dichotomous and antonymous pairs of terms such as 'developed/under- or less-developed' or 'developing (world)/developed (world)'. Instead, he argues that the appropriate pair of terms for classification is 'underdevelopment/ overdevelopment'. The fault lies in the current practice of treating prevailing situation in wealthy countries as an ideal by calling it development, and then designating the absence of such situation in other countries in terms with negative prefixes such as under, un, less, etc. The author argues that the situation in wealthy countries (he calls it overdevelopment) is also rife with severe social, cultural, psychological, ethical and ecological problems. Further, it is closely linked with and instrumental in creating the prevailing situation in the poor countries (which is called underdevelopment). Hence, he argues that overdevelopment and underdevelopment are two integral elements of a single world-wide process of 'maldevelopment (which) epitomises the breadth, depth and tragic reality of a "global failure"' (p. 27).

Both of these classification schemes contain forceful though implicit messages. The conventional 'developed/under-developed' scheme has an admonishing, authoritative message for underdeveloped countries that 'one day they, too, can be like the developed; that they, too, will be rich, cultured and happy, provided they behave themselves, do as they are told, and don't talk back' (p. 28). As against this, the 'maldevelopment' scheme which overarches both the maladies (underdevelopment and overdevelopment) is a 'powerfully counter-discursive tool of analysis, contradicting the dominant, unilateral mode of speech' (p. 28). Along with underdevelopment as well as its causes and remedies, this tool brings into focus overdevelopment (mainly in terms of overproduction and overconsumption) in wealthy countries, the concomitant resource overuse and wastage, and the relationships of economic, military and cultural power that make this overdevelopment possible.

Equally interesting is the author's discussion on the term 'the Third World.' The author provides a range of interpretations and implications of this term. Generally, the term is used to designate a large group of countries which were not included either in the North Atalantic Treaty Organisation (NATO) Bloc (the First World) or the Warsaw Pact countries (the Second World). Many a times, in the same vein, the term is used to denote the 'formerly colonised peoples' (p. 26). Another interpretation of the term is based on the French term 'the Third Estate.' It differentiates 'the ordinary commoners' from the First and Second Estates of 'the Prince' (the State) and 'the Merchants' (market/corporate power) (p. 26).

The term 'Third World' has many advantages as well as disadvantages. While it is 'a crisp term, easily understood by everyone' (p. 27), the term has certain disadvantages. For example, first, it has the undertone of the condescending term 'the third rate' (p. 26). Second, it is also said to carry with it 'subconscious colonial and ethnocentric connotation' (p. 27). However, it is also argued that despite these disadvantages, the term retains its usefulness because there is 'no generally accepted alternative term which is credible, unbiased, not ethnocentric, equally valid and equally universal' (p. 27). The term has also gone through some transformations: 'in view of the great diversity of cultures and traditions covered by its scope (of the term the Third World)', a slightly different term 'the Third Worlds' was suggested (p. 26). Similarly, considering the portion of human population that lives inside the Third World, another term 'the Two-Thirds World' (i.e., 2/3 of the world) was also coined. Realising that the term 'the Third World' fails to create a complete picture of world situation, about 25 'least developed' or 'dirt-poor' countries in the world were categorised as the Fourth World in 1968 (p. 34). By 1991, their number had grown to 41. To further elaborate the present world situation, these terms (the First, Third and Fourth Worlds) were also used in the different contexts. Considering the socio-economic disparity that exists in both, the First and the Third World, it was argued that there are First Worlds in the Third World and Third Worlds within the First World. Similarly, the worst-off sections within the Third World including some acutely disadvantaged social groups ('lowest' castes and tribals) and mainly women from urban/rural resource-less families are also called the Fourth World inside the Third World.

In conclusion, the author warns that such terms play an important role in what really transpires under the name of development. He points out that most of such terms referring to 'them' (the poor or the Third World) are 'negativisms' and that they betray the 'ethnocentric' mind-set of people who coin and employ such terms. Further, such terms are often used to hide the inconvenient facts (e.g., overdevelopment in wealthy countries) and establish standards and yard-sticks that are convenient to 'us' (for example, designating the situation in wealthy countries as development).

The Politics of Participation

In Chapter 3, the main focus of the discussion is on 'participation' (in development). The author traces the roots of the term participation to 1960s when the international development agencies (such as the World Bank, United States Aid for International Development (USAID), etc.) were confronted with 'the obvious and consistent failure of linear development' through '(i)mport substitution, technology transfer and agricultural extension' (p. 43). Quoting the broader definition of participation as 'organised efforts to increase control over resources and regulative institutions . . . on the part of groups and movements of those hitherto excluded from such control' (p. 45), the author questions the nature of the control actually allowed to the powerless in the conventional development practice. In the context of this definition, the author argues that in conventional development thinking, 'participation' is nothing but an empty rhetoric. This is because, in actual development practice (i.e., projects and programmes), the outsiders retain 'the ultimate control' and often 'concession to the powerless of some measure of power . . . (is) advantageous to the maintenance of ultimate ownership and control by the traditional holders of powers' (p. 45).

Along with the term 'participation', the author also questions the related terms such as 'Putting People First' and 'Rapid Rural Appraisal' propounded by Robert Chambers and his colleagues at the Institute of Development Studies at Sussex, United Kingdom, as well as by Michael Cernea at the World Bank. Explaining his objections to the 'Putting People First' approach, the author quotes Cernea that 'people are--and should be--the starting point, the centre and the end goal of development intervention [*sic*]' (p. 48). Apart from pointing out the haughtily paternalistic undertones of the quote, the author argues that in this type of participation the ultimate and legal control and power still resides with the 'intervening' agencies. According to the author, it should be noted that 'someone, or some agency, external "to the people", is assumed to be doing the "putting" and is endowed with some entitlement or right to do so' (p. 48). Similarly, the author criticises the 'Rapid Rural Appraisal' approach as a deceptive strategy 'subsidised by the cost - free collaboration of the peasants, (and) . . . a far cheaper, more efficient and quicker mode of knowledge extraction (for the outside intervening agency) than the "long and dirty" (as well as costly) high-tech approach of the "old professionalism"' (p. 50).

Further, according to the author, the term 'participation' is inseparable from the interventionist instruments of conventional development, viz., development projects. It certainly involves politics as it is used as an instrument to maintain the real and ultimate control and power with the outside intervening agency. In this mode of thinking, participation essentially remains 'a vehicle (for outsiders' ideas), a feel-good enhancer or a cost-cutting device' (p. 51).

If we are talking about real and genuine transfer of ownership and control to people, then the author argues that the term 'participation' is not just inappropriate but subversive to the spirit. This is because 'external projects and participation relate to, and rely, depend and feed on each other as a plant feeds on the soil in which it is rooted. Take away the fertile soil of external intervention and participation withers on the vine' (Pp. 51-52). Instead, the author suggests the term 'autonomy' to indicate the genuine transfer of power and control to people. He argues that autonomy in cultural (cultural identity), political, organisational and economic (economic self-reliance) spheres is 'an inexhaustible, forever renewable energy source of development' (p. 53).

The Politics of Knowledge and Education

In Chapter 4, the author investigates the issues involved in the relationship between the knowledge-system (including education) and development. The author begins with criticisms of the role ascribed to modern Western science (which includes technology as well as natural and social sciences) in the conventional scheme of development. The author comments: '(m)odern science, in the guise of a universal, value-free system of knowledge acquisition and production, . . . continued to displace all other pre-existing systems of knowledge, in particular, popular and empirical knowledge' (Pp. 56-57). The epistemological criticisms mentioned in the first part of the quote have been amply elaborated by many radical environmentalists in their writings (for example, Vandana Shiva or Richard Norgaard). However, in this chapter, the author's main concern remains the politics of knowledge, i.e., the ownership as well as control over production and dissemination of knowledge. As mentioned in the second part of the quote, the tendency on the part of modern science 'to displace' and discard other knowledge-systems (because of the support of economic and military power) allows it and its custodians a monopoly rule in the field of knowledge. However, it needs to be understood that the exclusionary politics of modern science draws its legitimisation from its epistemological claims. In other words, modern science (including technology) as well as its practitioners and producers could claim a supreme and unassailable status (a form of political power) because the science they produce and practise is claimed to be applicable everywhere and every time, the only way to gain the truth, and free of any political or ethical undertones (epistemological claims).

The combination of various factors--the above-mentioned epistemological claims of modern science, the unassailable status awarded to its practitioners, the phenomenal productivity of modern science (and technology) in terms of input-output ratio, and the economic and military powers supporting modern science--shaped the peculiar relationship between modern science (as well as its custodians) and conventional development. In brief, in the conventional mode, development is impossible without the inputs from modern science and technology. This, in turn, means that the custodians of science and technology--the scientists, engineers, economists, planners and administrators--possess the key to and play a critical role in bringing about development. The author explains how this exclusive role breeds dependence and inescapable power relationships between professionals and common man in the course of transformation of traditional into modern societies: 'Needy man--once a self-reliant artisan, banking on individual as well as the surrounding relational society's store of knowledge, skills and, especially, wisdom--became increasingly dependent on professionals who were entrusted with the provision of commoditised needs and wants mediated by centres of provision such as hospitals, schools, economies and agricultural and other service systems which gradually displaced (family,) church and judiciary' (p. 59).

In discussing the politics implicit in present knowledge-system, the author questions the avowed neutrality of modern science as well as of experts and scientists: '(T)he much-vaunted objectivity and neutrality of science can be little more than a sophisticated form of partisanship, geared to the maintenance of a [power-knowledge] monopoly. The scientist himself-/herself is culturally, socially and politically grounded and part of a historical context: neutrality--simply washing one's hands of the conflict between the powerful and the powerless--means to side with the powerful, not to be neutral' (p. 68).

Thus, with such a key role and unassailable status accorded to science and its practitioners, came equally unassailable power. And, in the highly commercialised world, the power it holds made the sciences (or knowledge) a commodity with a high price-tag. As a result, 'efficient production and distribution (of modern science) became a matter of considerable importance for the running of a modern technological society' (p. 67). This, in turn, reduced education to 'disciplined transmission of commoditised knowledge' (p. 60). In this mode of thinking, education, like development, became an outside (Western) entity to be brought in and 'an outside professional body or agency (acquired) both the power and right to organise the former (education) in a functional relationship to the latter (development)' (p. 60). Thus, modern Western education, designed and administered by professionals trained in the 'discipline' of education, was considered universally applicable and superior to its ethnic versions and, as a result, was delinked from the cultural, social and historical contexts. Further, because 'there is too wide a range of knowledge and expertise which is reserved to the professional, ... (i)nstead of being a creative act, education becomes an exercise in "the castration of curiosity"' (p. 65).

The author criticises this version of education. He argues: 'There cannot . . . be such a thing as a "universal" educational model, established once and for all and valid for all and for all time' (p. 65). Instead, the author suggests: 'Education is about the acquisition of knowledge and about "learning together" . . . The act of knowing and acquiring knowledge [learning] is not a solitary but an eminently social act. Education and learning imply a dialogical process, an exchange of knowledge . . . . Every single act or situation being unique and non-repeatable, it follows that education potentially is a perpetual act of knowledge creation' (Pp. 64-65).

In conclusion, the author suggests: 'Genuine knowledge [wisdom] is holistic: it is not just "produced" but continuously created. In that sense, we are all intellectuals, educators, professionals and researchers--creators, not just producers of knowledge, . . . People already have a practical knowledge of their reality, they have a "feel" for it. The world is not, simply, divided into owners and receivers of knowledge. All humans have the innate capacity to create new knowledge which allows the understanding of reality in order to transform it . . . (E)ducation is more than the provision of instruction and skills. It is awaking of human creative potential, the building of endogenous capacities. It is also about the acquisition of the ability to master one's own destiny' (Pp. 68-69).

III. TOWARD AUTONOMOUS DEVELOPMENT

Political Autonomy

Disseminating the 'universally applicable' development model to the 'Two Thirds World' with immense political, cultural, social, institutional, epistemological and ecological diversity is itself a massive political process. It essentially involves deprivations of rights and controls held by certain sections of population (which were assumed to be hindrances for development) and transfer of these rights and controls to other sections (which are assumed to act as 'change agents' or conduits for development). According to the conventional convictions about development, for development to occur, this process of transfer of rights and controls needs to be executed in all the above-mentioned spheres of human lives.

After the initial euphoria over the early gains of development in some parts of the Third World, the developmentalist agencies realised that the boon of development is not accepted by the masses in 'the Two-Thirds World' with the same enthusiasm. As explained before, the author traces the roots of terms such as 'participation' and 'Putting People First' to this realisation and the resultant need to make extra efforts to convince people to accept development. In this chapter, the author examines another important strategic approach employed in the early phase of development--community development. The author traces the roots of 'community development' approach to the colonial strategies for 'preparing Britain's colonies . . . for independence' (p. 78). Later, the approach was thought to be useful in the initial cold war period for 'preventing newly independent nations from 'going Communist' (p. 78). According to the author, the approach had a special place in the anti-Communist strategy of that era mainly because '(c)ommunity development, it was believed, could extend control over the social sphere, where neither military nor economic assistance could reach' (p. 78).

According to the author, in such a strategic use of the community development approach, the term community played an important role. He explains: 'community is a term and concept of almost infinite elasticity, readily adopted by the entire spectrum of political persuasions' (p. 78). He elaborates this point by explaining how various 'anti-democratic' regimes--including Thatcherist and racists regimes--used the term to their advantages. To elaborate the point further, the author quotes Ignatieff who calls community 'a dishonest word' and 'a pious fraud' (p. 79).

In the context of this understanding of politics underlying the current development practice, the author emphasises on the need to reformulate the political content of development. However, for this purpose, he finds the term 'participation' not just inadequate but subversive. Instead, he suggests 'political autonomy' as the foundational idea which essentially means 'reclaiming ownership and control' of development by people (p. 82).

The author then provides a brief review of similar ideas and concepts proposed by various grassroots activists and researchers. For example, the term 'another agency' means 'the agency of the people to regain the ownership and control of resources' (P. 83). Another term 'self-development or people's power' is said to refer to the peoples' true power in the sense that it even 'transcends (the power) of people's organizations' (p. 83). In other words, this power acts even from within the people's organisations as 'a countervailing power within its own formal organization' when the formal organizations fail (p. 83).

Quoting Galtung, the author elaborates on the term 'autonomy' as autonomy 'to set one's own goals and realise them as far as possible through one's own efforts, using one's own forces' (p. 86). Further, he clarifies that '(b)oth in spirit and letter, autonomy ought to be understood as a political counterforce and definitely not a withdrawal or entrenchment behind the walls of naive self-sufficiency or impossible autarky' (p. 86). However, quoting Max-Neef, the author warns that '(t)o transform dependence into autonomy requires deep structural changes in the relationship between the state and civil society' (p. 84).

In conclusion, the author endorses the three principles of Manila Declaration as an articulation of the concept of 'political economy' he has proposed:

'1. Sovereignty of the people, the "real actors" of positive change. The legitimate role of government is to enable people to pursue their own agenda.

2. People's control of their own resources, their access to relevant information, and the creation of machinery by which people can hold government officials accountable. It is a government's elementary duty to protect those rights.

3. Those who would assist the people with their development must recognize that it is they who are participating in the support of the people and not vice versa: i.e., the interventionists principle and interventionist arrogance turned on its head' (p. 87).

Cultural Autonomy

Culture of traditional or underdeveloped societies is seen as a major impediment for development in the conventional development perspective. As a result, modernisation (of traditional cultures) becomes the important prerequisite for development in this model. The process of modernisation (essentially a process of cultural transformation) is supposed to prepare traditional societies and its members to utilise the tools provided by modernity (science, technology, industrialisation, economics, etc.) and get the engine of economic growth started to take them into the era of development.. The author criticises this concept of modernisation because it is 'based on the myth of peasant ignorance and endeavours to provide the answer to the problem of "traditional man" who, from a development perspective, represented the very antithesis of modernity' (Pp. 92-93). Communication (or communicology) is to play the key role in this process of transformation of traditional societies as 'communication is crucial to the jolting of the peasant out of his indolence, lethargy, lack of innovativeness and entrepreneurship, distrust, familism and fatalism' (p. 94).

In this 'communication (another term is extension) for modernization for development' approach, the change agents are the key players. The author explains the role of change agents and the implicit power relationships between the change agents and their 'client' traditional societies: '(T)he change agent, both functionally and etymologically, belongs to that class of professional outsiders who influence innovation decisions in a direction deemed desirable by the primary innovation source, and provide liaison between the latter and the "client" social system[s]. Whether or not allowance is made for the now almost mandatory references to "participation", "felt needs" and/or "empowerment", the "Sender-Message-Receiver" extensionist model, and the power relationships of which it is a vector, remains intact. . . . The modern communicologist (who includes the change agents such as field level extension workers, their trainers, and their bosses) is supremely confident of his knowledge, of his competence and of who is in charge. Those who do not make the transition "have only themselves to blame"' (Pp. 94-95).

The roots of such 'agent-client' power relationships are traced to the 'ethnocentrism' in the conventional development thinking. As the author explains: 'Ethnocentrism (is) the belief that "the other", the ugly outsider, lacks most or all of the qualities that the civiliser, the trainer, the proselytising missionary, the communicator, and the "agent" recognise in themselves' (p. 96). The images of the traditional and modern societies that emerge from ethnocentric attitude are the basis on which the power relationships implicit in this 'communication (for) cultural transformation (for) development' approach rest: 'The picture of "traditional" society . . . is one made up of non-participation, resistance to change, fatalism and conservatism. The picture painted of modern society is one of dynamism, productivity, social mobility and empathy' (p. 95).

The eminent tool for this transformation of traditional to modern society is literacy according to the conventional development thinking. All the above-mentioned 'positive' characteristics of the modern society, and especially empathy (i.e. 'willingness to change' (p. 113)) is 'somehow associated with the acquisition of literacy' (p. 95). This is because 'an increase in literacy, which brings an increase in the individual's capacity to "empathize", is the very yeast permeating the movement towards self-sustaining growth which ...(is) central to (conventional) development thinking' (p. 95). Hence, it is necessary 'to impart to the illiterate masses [or those presumed to be ignorant, unproductive and non-empathic] the basics of reading, writing and arithmetic' through various programmes and campaigns to eradicate illiteracy (p. 97).

The author does not have objection to literacy *per se* but to the 'ethnocentric' and condescending attitude as well as the politics implicit in the conventional 'literacy for development' approach. First, he is critical of the secondary status accorded to 'orality' ('orality is to literacy what the spoken word is to writing' (p. 99)) and oral cultures: '(I)t would be incorrect to assume that written culture is somehow "superior" to oral culture on the grounds that literacy fundamentally alters mental and social organisation' (p. 99). Second, the author observes that quite often 'literacy acquired in an environment virtually devoid of a literate substructure [libraries, newspapers, books] is (not) to the genuine advantage of orates (i.e., orates are to literates what orality is to literacy) . . . (but) to the advantage of those who are imposing printed literacy (on them)' (p. 100). However, such criticisms do not hint at glamorisation of, or continuation of, or return to purely oral cultures. Quoting Bohla, the author clarifies that 'people's capacity to make symbolic transformation is rooted now, absolutely and irreversibly, in the mastery of literacy' (p. 102).

As an alternative, the author endorses views and methods of Paulo Freire. In Freire's scheme 'literacy is never neutral, nor can the transmission of learning and skills [the skill of "reading the word"] be neutral. It is always a political issue and a political act ["reading the world"]' (p. 97). This is because: 'illiteracy is the result of people being prevented from reading and writing in the social reality in which they are' (p. 103). The starting principles for Paulo Freire's *Pedagogy of the Oppressed* are: 'no-one is orally illiterate' and 'there is no fundamental difference between the literate and the illiterate' (p. 103). The author also describes other similar efforts to invert the relations of cultural power implicit in the conventional development thinking such as community theater in Kenya and the 'theater of the oppressed' evolved in Brazil.

In conclusion, the important lesson for efforts to acquire cultural autonomy is that the 'indigenous communication systems and networks' as well as 'indigenous forums of social exchange (such as market places, shops, etc.)' may serve as 'roots of . . . a culturally responsible, culturally informed and culture-sensitive, living, authentic, autonomous development' (p. 111). Further, instead of denouncing culture as a 'drawback', 'constraint' and 'obstacle' to development, it should be visualised as a 'viable force for human survival and the source of development which continuously recreates itself' (p. 112).

Organisational Autonomy

In the chapter on 'Entrepreneurial Autonomy and Literacy', the author focuses on the organisational aspects of (conventional) development practice. Quoting Korten, the author calls the prevailing approach to organisation of development projects and programmes as the 'blueprint approach' (p. 119). The blueprint approach works as follows: Theoretical models of development programmes and projects conceived by experts and scientists are tested in pilot studies and refined. These tested and refined models are then passed on to the planners. The planners, using these models, prepare project blueprints which are then handed over to administrators. Following these project blueprints, project administrators implement the programmes aimed at developing target populations. Sometimes, the target population is invited 'to participate' in project activities. Sometimes, evaluation research is carried out and its conclusions are fed back to experts and planners. Thus, in the 'blueprint approach', the models, blueprints and programmes are handed down through a hierarchical chain in which target population is at the last rung and at the receiving end and has, hence, no real control over the design or outcomes of the project.

The author traces roots of this 'blueprint approach' to the 'Western scientific management paradigm' of Taylorist/Fordist origins (after F. W. Taylor and Henry Ford) and to the 'Theory X of human nature' underpinning this paradigm. The five elements of this mode of organisational/bureaucratic management identified by the author are: hierarchy of authority; fixed and elaborate rules and regulations governing procedures and practices; well-defined tasks and duties (with specialised functions and division of labor); impersonal relationships; and formal structures of offices and functions (p. 117). The 'Theory X of human nature' assumes that 'worker is workshy, in need of control, self-centred by nature, resistant to change, not very bright and easily manipulated' (p. 117).

The understanding underlying the blueprint approach could be summarised as follows: 'Rural development management . . . is all about the effective transmission of managerial decisions to [reactive] receivers by a [proactive] source, mediated by the right technology or instruments' (p. 118-119). In other words, this understanding betrays the 'ethnocentric paradigm of transfer and "induced" development' (p. 120). This could be witnessed in conventional development projects which follow the 'codes prevailing in the culture in which they were conceived--invariably the Western, literate/industrialised culture' (p. 119). In short, the condescending attitude as well as practices aimed at retaining control and maintaining relationships of power persist also in the organisation of conventional development projects and programmes.

While discussing the alternatives to the conventional approach, the author presents examples of two organisational methodologies that evolved from within the Third World. They are called 'EWTO ("Experimental Workshop on Theory of Organization", a training methodology for self-managed grassroots organizations') (p. 121) and NAAM (which means power in local African language) (p. 133).

Of these two methodologies, EWTO is supposed to be helpful to those who 'are losing control over their resource base (mainly land) and are trying to organise (themselves) in order to get that control back' (p. 122). According to the author, the only way-out for these uprooted displaced people is 'integration into a highly complex, sophisticated society and its mode of production' (p. 131). EWTO helps such people by acting as 'the medium which allows (traditional) artisans to become (modern, industrial) workers, in full understanding and in full control . . . of who they are and what they are doing' (p. 131). In a nutshell, EWTO is 'a theory and methodology which, at all stages, recognizes and respects their cultural identity and allows them to regain their autonomy' (p. 131).

NAAM is a similar methodology of African origin mainly aimed at the 'rooted peasantry . . . which still draws the bulk of its subsistence from the land, over which they still have a high degree of control' (p. 131). The NAAM methodology emphasises that 'development can grow from the inside, endogenously, based on people's own cultural autonomy -- (and) that there is no need for traditional society to pass away so that development can come and occupy the abandoned cultural home' (p. 132).

The alternative approaches exemplified by these two methodologies should essentially aim at 'bringing together . . . two distinct modes of production and organizational cultures, those of the (traditional) artisan and the (modern) worker' (p. 121). The author also suggests that these alternative approaches should build on the fundamental understanding: that '(1) a politically and culturally responsible integration into a world which is rapidly changing is an important element in the progress of (an underdeveloped) society, and (2) that societies are going to be objects of change or are going to be in control of that change, as subjects, then (in order to be in control of that change) the acquisition and control of modern organizational skills by the (underdeveloped societies) . . . (is) of the utmost importance' (p. 123).

In conclusion, the author reminds that '(r)econciling traditional values with the imperatives of economic efficiency and accumulation is a crucial challenge' requiring efforts to evolve truly autonomous organizational structures and methodologies (p. 134).

Culturally Embedded Economic Autonomy

In Chapter 8, the author further elaborates on his criticism of 'pre-eminence achieved by contemporary economics' in the conventional mode of development (p. 137). The author raises objections against the relentless logic of macroeconomics which 'demands that human relationships and values, once prized for their own worth, be turned into commodities which can be bought and sold' (p. 137). As a result, '(h)appiness is predicated on consumption and the only virtuous activity becomes material enrichment' (p. 137). Accepting that economics and economic growth should have an important place in development, the author, nonetheless, emphasises that 'pre-planned and pre-targeted economic growth' need not be made the 'essence of development' (p. 139). His main concern about this tendency is that it 'disembeds' economics of society from its culture and, in turn, reduces culture to a universally homogenised element determined by the needs of modern macroeconomics. According to the author, such development is 'destructive of values, of a sense of balance, of proportion and propriety, of a sense of justice, of the imperatives of environment, of cultural identities, of everything which gives meaning and direction to human life' (p. 157).

The main culprits responsible for this lop-sided emphasis, according to the author, are development economists: 'The multiple crises of development find their origin not in economics, but in the heads of the economists who, for reasons best known to themselves, did not take up the challenges thrown in their path, or who have concentrated increasingly on issues which, in the end, do not make sense, even on the basis of purely economic criteria..... Logically, economics (and economists) ought to have grasped the nettle through serious research into an entirely new and exciting field related to energy use, throughput processes and resource accounting. Inexplicably, it continued, instead, to concern itself with subsidiary fields such as economic indicators and cycles of production, distribution and consumption; or with self-contained monetary processes . . ., without considering the impact these may have on people or on the environment' (p. 139).

With the principles of economic autonomy and self-reliance in mind, the author endorses the work of Chilean economist Manfred Max-Neef as an alternative to conventional economics. Describing Max-Neef's propositions as 'barefoot economics' or 'ecological economics,' the author traces its moorings in the principles of Human Scale Development. These principles could be summarised as: '(s)atisfaction of fundamental human needs, the generation of growing levels of [economic] self-reliance and the construction of organic articulations (i.e. "coherent and consistent relations of balanced interdependence among given elements" (p. 158)) of people with nature and technology, (of) global processes with local activity, of the personal with the social, of planning with autonomy, and of civil society with the state' (p. 139). Further, 'ecological economics' is said to be 'premised on the affirmation of the trinity of basic elements on which our world's survival depends: Nature, Humanity and Technology' (p. 140).

As a starting point, 'ecological economics' proposes the 'threshold hypothesis' as an counter-argument to the imperative of 'relentless economic growth' conceived in conventional development economics. The hypothesis holds that 'in any society, there is a period of time in which the increase in GNP [economic growth], conventionally measured, brings about a positive change in the quality of life of the people. The threshold is the point beyond which any further (GNP) growth will result in a deterioration in people's quality of life' (p. 140). As a supporting evidence, the author cites work of Daly and Cobb in which they observe that between 1950 and 1975, Quality of Life Index (QLI) and GNP grew parallelly in the USA. But after 1975, though the GNP growth continued in the USA, the QLI declined considerably.

While explaining the propositions of 'ecological economics', the author provides a brief summary of Max-Neef's theoretical framework. This three-element framework proposed by Max-Neef distinguishes between 'needs' 'satisfiers' and 'economic goods'. Here, needs are not restricted to 'animal' or 'dead' 'basic needs' (such as food, fodder, shelter, etc.) as conceived in the conventional framework. Instead, Max-Neef proposes that there are nine 'fundamental' human needs which are 'finite and few' (p. 147). They include: subsistence, protection, affection, understanding, participation, idleness, creation, identity and freedom (p. 146). Satisfiers are defined as 'individual forms of being, having, doing, and interacting which "actualize" those (fundamental) needs in the present space and time' (p. 145). In other words, satisfiers are 'the way(s) in which needs (are) expressed (or satisfied)' (p. 145). In this scheme, food, shelter, etc. are satisfiers for the 'subsistence' need. Finally, economic goods are 'objects or artifacts which affect the efficiency of the satisfier' (p. 145).

Using this theorising, the author argues that because the fundamental needs are finite and few, '(g)enuine development "knows its limits", in material terms; (whereas) when it comes to what is both desirable and possible from the perspective of "becoming more human", the sky is limit' (p. 147). In other words, the equal emphasis on satisfaction of needs other than that of subsistence would help development to get rid of its economistic overemphasis and, as a result, spheres other than the economic sphere of individual and social lives of human beings will be attended to in a proper manner. It is also argued that, because satisfier is a 'time-and culture-sensitive notion,' economy of society (and hence development) will be embedded in the culture of society (p. 157). The 'essence of (such) development is not provision but creation. And creation, "the making of something out of nothing", lies at the heart of the meaning of culture' (p. 157).

The author also suggests that in the case of underdeveloped countries, the 'relational' and 'culturally embedded' economies of traditional societies should be treated as authentic and valid starting points for development, instead of trying to replace or substitute them by 'rational' economies prescribed by conventional development perspective. The 'relational' and 'culturally embedded' economies are 'highly appreciative of the collectivity aspect of society exemplified by the extended family, the clan and lineage relationships beyond. Here, wealth is redistributed often through elaborate festive celebrations which are laid on in order to nurture and celebrate these relationships.... Land or cattle are not first and foremost perceived in terms of "factors of production", but as a means to increase individual, family or group stature as well as a guarantee of the group's protection and survival' (p. 149).

To further elaborate his suggestion about culturally embedded economic autonomy, the author presents a brief outline of two real-life initiatives aimed at achieving economic self-reliance through culturally-embedded economic activities and institutions. The first example is of a local savings group (*tontine*) in Cameroon. The *tontine* is not only a self-help savings and credit institution but also 'a forum where friends exchange ideas, a social club, a network of social relations, a place where families' joyful moments can be shared and where solace can be found in moments of grief' (p. 149). The other example is 'gift and counter-gift' economy of the communities in the shanty towns of Dakar, Senegal where everyone has access to community savings.

The author insists that this formulation of 'culturally embedded economic self-reliance' is not intended to serve the 'purpose of a fundamentalistic harking back to the ancient values, customs and folklore of an irretrievably bygone age' (p. 148). It is rather aimed at 'exploring from the inside: people's values and the meanings they give to development' and arrive at that development which means not just 'provision of economic goods but creation' of a society which is wiser and more humane (p. 148).

IV. ETHICAL FOUNDATIONS OF DEVELOPMENT

The last chapter in the book examines the conventional development practice from ethical angle. The author complains that investigations into 'qualitative aspects and (especially) values underpinning those globe-altering changes (have) remained pitifully sparse as compared with quantitative studies about economics-driven development' (p. 193). In the quest for economic growth, along with the political and cultural aspects, the ethical and emotional aspects of human lives were given perfunctory treatment in the conventional discourse and practice of development. It was forgotten that development is essentially 'a process of perpetual creation, driven by meta-material rather than material[istic] values' (p. 193). As a result, economic growth became an end in itself: '(E)conomy -- and, by implication, development -- is an unalloyed good: if development (i.e., economic growth) is good, then, so the reasoning goes, "more of it can only be better"' (p. 194). Thus, once the 'perception of development as both value-free process and supreme good' in itself was accepted in the mainstream development thinking, all the possibilities of questioning over 'ethical implications of development' were foreclosed (p. 194). However, according to the author, '(t)he question of ethics is inextricably interwoven with development' (p. 195). This is because the core of ethics lies in investigations into 'oughtness of things', and development is about 'what ought to be, or what ought to be done [or not done] (by human beings) and why' (p. 195).

The initial belief in the 'rightness and goodness of a presumably value-free development' was shaken due to increasing ecological and social failures of development that became evident in early the 1970s. The increasing awareness of environmental implications of and limitations on economic growth as well as the awareness of its failure to provide succour to the poor and disadvantaged people in the Third World opened up possibilities of bringing 'ethical dilemmas' implicit in development choices to the fore (p. 196).

The author presents a brief outline of the work of the three generations of 'ethical theorists' in development who investigated ethical issues in development (p. 197). Denis Goulet, the author of *The Cruel Choice* is called 'pioneer and founder of a new discipline' of Development Ethics (p. 197). Goulet argued that 'development needed to be redefined, demystified and thrust into the arena of ethical debate' (p. 196). Development practitioners while implementing development programmes and projects make decisions and choices that involve 'fundamental questions about equity, justice and probity' (p. 196). Further, according to Goulet, '(d)evelopment ethics . . . requires . . . that decision makers versed in the constraints surrounding vital (development) choices promote the values for which oppressed and underdeveloped groups struggle' (p. 196). Thus, Goulet and his fellow first generation development ethicists promoted 'meta-economic' values in development and emphasised on 'maturation, growth and creative expansion of all human potential' as the correct interpretation of development (p. 197).

These propositions touched the right chords in the hearts of some mainstreamers in development field who joined this debate on ethical issues in development. The main contributions of these second generation of development ethicists were 'theorizing (that) gravitate(s) around the justification and consolidation of first generation theorizing' as well as 'clarification and systematization (of) . . . the field of Development Ethics itself' (p. 198). According to the author, Amartya Sen is one of the prominent second generation of development ethicists. Sen proposed redefinition of development as 'a process of expanding the capabilities and promoting the valuable functioning of people' (p. 198). According to the author, Sen and his colleagues established that 'the key question is not [any more] what or how goods are produced or what wants [preferences] are satisfied, but what "people are able to do and to be"' (p. 198).

The third generation of development ethicists questioned the 'mystifying (and) abstract' theorising done by second generation ethicists in their attempt to meld economic rationality and 'ethical categories inherited from days long past' (p. 204). These third generation development ethicists, labelled by the author as 'dissidents and discontents', attempted to bring in new ethical questions in development that emerged from a variety of new perspectives, including those of 'eco-feminism' (p. 204).

In conclusion, the author argues that bringing in the ethical dimension as well as cultural, economic and political autonomy in development practice would provide 'space and time [spimes] for people . . . to develop as creative human beings in their own right, or, as beings of worth on their own terms, independently of their usefulness to others' (p. 206). In this sense, autonomous development will have distinctly humanising effects. As mentioned before, such autonomous and humanising development should certainly involve economic growth but also involve 'culture, education, ownership and control, the satisfaction of fundamental human needs and everything involving autonomous human agency' (p. 210). Finally, the author, referring to various examples of real-life initiatives of many grassroots groups in the Third World he had quoted in this book, asserts: 'A just, ethical, autonomous, environmentally responsible, and human-scale development is not only imperative, but possible and *already happening* all the time, if only we have eyes to see' (p. 210).

V. CONCLUDING OBSERVATIONS

The book provides a fairly comprehensive presentation of the 'positive' strand of the radical 'political' critique of development. It covers both, the diagnostic as well as remedial, components of the critique. It can be seen that, though it covers a range of issues, especially when compared with the radical environmental critique, the 'political' critique is yet to grow and mature in both quantitative and qualitative senses. It surely demonstrates certain strengths. Because many of its protagonists and theorists seem to be closely connected with and working in collaboration with the local grassroots groups, the critique demonstrates an in-depth understanding of grassroots reality. This has instilled in its protagonists a sense of urgency and an urge to arrive at practicable remedies that will directly benefit the poor. This sense of urgency does not allow them to indulge into empty anti-development diatribes. Similarly, their urge to arrive at practicable remedies discourages them from dismissing outright and indiscriminately everything that is modern or conventional. It also encourages these protagonists to look for, accept and even utilise desirable and beneficial elements in modernity and conventional development.

The book is quite attractive and useful as far as its substantive content is concerned. However, there is considerable confusion and severe lack of clarity as far as the presentation and writing style of the author and the scheme of titles and sub-titles devised by him are concerned. The author's presentation and writing style is quite unorganised and, on occasions, puzzling. While discussing the main issue dealt in a particular chapter or section of the book, the author tends to digress and dwell on related issues in unnecessary details. For example, in Chapter 4, while discussing conventional interpretation of education, the author digresses and uses two pages of discussion to demonstrate how 'education' was favored by the World Bank in its programmes and, later, it changed the content of education so that, according to the author, education lost its soul (Pp. 61-63). As a result of such digressions, the discussion in the book often loses its focus, coherence, crispness and efficacy. In the process, clarity of the book is severely affected.

Similarly, the scheme of titles and sub-titles evolved by the author is quite perplexing. On many occasions, the titles and sub-titles do not aptly describe the exact content of the section, neither do they form a coherent scheme reflecting the logic of the discussion in the chapter. For example, though the first chapter is titled as 'The End of History' referring to Francis Fukuyama's now-famous term, the chapter is really about 'economism' in conventional development, its mythical foundations, and the problems it has engendered. Another example is the subtitle in Chapter 5: 'Participation and Autonomous Human Agency (Praxis)' (p. 86). The subtitle is followed by a single, short paragraph in which none of the two latter terms (Autonomous Human Agency or Praxis) or their relationship with 'participation' are explained. There are many instances of such 'hanging' subtitles in the book. A coherent scheme of appropriate chapter titles and section subtitles would have further helped the reader to understand the subject matter of the book.

Like many other attributes, the radical 'political' critique shares with the radical environmental critique its failure to pose an adequately strong challenge to conventional development thinking and practice. Despite efforts by stalwarts such as Paulo Freire, protagonists of this critique have failed to evolve and disseminate an effective political strategy for the poor and dispossessed to move toward 'autonomous development.' This issue of an effective political strategy continues to be a key but unresolved issue in the radical discourse on development. The top-down, revolutionary strategy of organising a vanguard party and taking over the state, which was tried in the Soviet Union and East Bloc countries, has now been accepted as a failure. The liberal strategy of representative democracy has also largely failed in many countries (including India) to provide social justice and a due share in national prosperity to the poor and dispossessed. The grassroots strategy proposed by many radicals (of 'political' as well as 'environmental' kinds) is also not bearing fruits. The grassroots initiatives working on these lines have remained small in number, too dispersed, short-lived, and insignificant in their impact. This certainly is the critical failure especially of protagonists and theorists of the radical 'political' critique. However, this failure appears obvious and understandable if we recognise that the mainstream macro-system (the system of six macro institutions of modern society--legislature, bureaucracy, judiciary, business and industry, media and academia) that supports the conventional development model is highly organised, extremely powerful and resourceful, highly unscrupulous and ruthless, and with an immense capacity to corrupt and manipulate individuals and organisations. This is being witnessed in the controversy over the Enron power project in India.

In the context of such a bleak situation, the key question is whether there is any hope for the poor and dispossessed who largely have remained neglected even after five decades of development? The answer to this question could be found in a combination of two strategies: (a) evolving a truly system-level alternative to the prevailing development practice, and (b) evolving a wider political coalition supporting such a systemic alternative and actively working to actualise it. The systemic alternative will reflect the imperatives of autonomous and humanising development. It will involve, among other things, simultaneous evolution of an alternative economic system of production-distribution-consumption, an alternative society-wide framework of institutions, and transformation of culture with inputs of desirable elements from other cultures.

Though evolution of such a comprehensive alternative is itself a stupendous task, evolution of a strong political coalition around such an alternative is equally difficult. It is a moot question whether societies fragmented along the lines of caste, religion, tribe, ethnicity, language and other factors can handle this crucial political challenge.

BIBLIOGRAPHY

Alvarez, C., 1992; 'Science' in Sachs W. (Ed.), *The Development Dictionary: A Guide to Knowledge and Power*, Zed Books, London.

Cernea, M., 1984; 'Can Local Participation Help Development?' *Finance and Development*, IMF, December.

Chambers, R., 1984; *Managing Rural Development*, SAS, Uppsala.

Chambers, R., 1985; 'Short-cut Methods of Gathering Social Information for Rural Development Projects', in Cernea, M. (Ed), *Putting People First: Sociological Variables in Rural Development*, Ithaca, New York.

Chambers, R., 1988; *Farmer First: A Practical Paradigm for Third World Agriculture*, Institute of Development Studies, Sussex University.

Daly, Herman, E. and Cobb, John B. Jr., 1989; *For the Common Good: Redirecting the Economy towards the Community, Environment and a Sustainable Future*, Green, Print.

Ekins, P., 1993; 'A New World for Whom?' *Development + Cooperation (D+C)*, 6, Bonn.

Max-Neef M., *et al.*, 1993; *Human Scale Development*, Zed Books, London.

Freire, P., 1972a; *Pedagogy of the Oppressed*, Penguin, Harmondsworth.

Freire, P., 1972b; *Cultural Action for Freedom*, Penguin, Harmondsworth.

Freire, P., 1973; *Education for Critical Consciousness*, Sheed and Ward, London.

Freire, P., 1976; *Education: the Practice of Freedom*, Writers' and Readers' Cooperative, London.

Freire, P., 1985; *The Politics of Education*, Mac Millan, London.

Fukuyama, F., 1992; *The End of History and the Last Man*, Hamish Hamilton, London.

Galtung J, P. O'Brien and R. Preiswerk, 1980; *Self-Reliance: A Strategy for Development*, Bogle l'Ouverture, London.

Goulet, D., 1971; *The Cruel Choice*, Atheneum, New York.

Goulet, D., 1990; 'Development Ethics and Ecological Wisdom', in Engel Ronald J. and Engel, Joan Gibb (Eds.), *Ethics of Environment and Development: Global Challange, International Response*, Balhaven Press, London.

Illich, I., 1973; *Deschooling Society*, Penguin, Harmondsworth.

Illich, I., 1977; *Disabling Professions*, Marion Boyars, London.

Kothari, R., 1984; 'Communication for Alternative Development: Towards a Paradigm', *Development Dialogue*, Uppsala, 1-4.

Max-Neef, Manfred, 1992; *Real-Life Economics*, Routledge, London.

Sachs, Wolfgang (Ed.), 1992; *The Development Dictionary: A Guide to Knowledge and Power*, Zed Books, London.

Sen, A., 1985; *Commodities and Capabilities*, Oxford University Press, Oxford.

Sen, A., 1987; *Hunger and Entitlements*, World Institute of Development Economics Research, Helsinki.

Shiva, V., 1989; *Staying Alive: Women, Ecology and Development*, Zed Books, London.

REVIEW ARTICLE*

TOTAL LITERACY CAMPAIGN IN PUDUKKOTTAI

Suneeti Rao

This is a reflective rumination over *Arivoli Iyakkam* (a total literacy campaign) undertaken in the spirit of a crusade in Pudukkottai, one of the smallest districts of Tamil Nadu, with an area of 4,663 square kilometres and a population of 13.2 lakh (1991 Census). It is also one of the least developed districts. Agriculture is at bare subsistence level for most of the population, about 85 per cent of the people in Pudukkottai live in villages, and industrially it is backward due to lack of infrastructure facilities, even of water and power. Although Tamil Nadu ranks above the national average in social development, Pudukkottai fared in 1991 poorly in comparison with the state average on the literacy front as well as in respect of institutional health facilities- 'one for approximately 13,500 (persons), a poorer situation than the state average' (p. 134), and although all villages have a primary school, the female and male literacy rates were just 44.2 and 72.8 per cent, respectively, when the campaign began in 1991. In such scanty settings, making 202,000 women and 90,000 men in the age group of 9-45 years literate within a period of 10 months or so in 1991-92 (p. 155) was the Herculean task set before the campaigners. And the campaign was, by most criteria, highly successful. Pudukkottai was declared the first fully literate district in Tamil Nadu. As per the National Literacy Mission norms, a district is declared totally literate when about 85 per cent of its population is literate, and a learner is declared literate when s/he completes the three primers and satisfactorily gets through the final test, called T-9, for short. Today, other districts seek Pudukkottai's help in gender issues or for their requirement of resource persons in campaigns. So one can imagine the improvement in its profile. Participation of women as learners, instructors, trainers and organising activists, and empowerment of women through related developmental initiatives during the campaign, such as learning cycling, managing stone quarries or cutting and marketing artificial gems, were a few of the highlights of the Pudukkottai campaign. 'UNESCO is of the opinion that the story of Pudukkottai is a success story that deserves to be told ...' (p. 13). Hence, the UNESCO supported the publication of this study which documents and analyses almost all the details of the drive, so that the experiment would serve as a prototype to be replicated in the developing world.

However, this ex-post facto analysis may belong to those documents which lack *'(r)igorous research and robust evaluation designs....* As a result, cause-and-effect relationships cannot be clearly established between potential determinants and outcomes of literacy training' (emphasis original) [Abadzi, 1994, p. 1]. Yet, the omission of such details does not reduce the significance of the book under review. After all, illiteracy is a problem wholly of human resource development and, as such, the success of any programme for its eradication depends largely on how human beings- thank God, not clones as yet- act and react in that programme. The book adequately analyses such actions and reactions of all the participants including the organisers of the Pudukkottai total literacy campaign (TLC). Rather than emphasising merely the exhaustive official facts and figures and thereby rendering the discourse mundane and monotonous, the study engrosses readers, because it draws sketches- not just of remarkable learners who overcame insurmountable difficulties to attend literacy classes, or of those who could help themselves in difficulties as a result of acquiring literacy, but also an inspiring sketch of exceptional teamwork, so uncommon to Indian soil; it narrates the firsthand personal experiences shared by the literacy campaign organisers- an academic economist-cum-literacy activist and an officer in the Indian Administrative Service. They are themselves the authors and were both deeply involved in the policy formulation and implementation of the campaign. What they want to communicate and stress primarily here is the fact

---

Suneeti Rao is a Research Fellow in the Indian School of Political Economy, Pune.

The reviewer wishes to thank Prof. A.S. Nadkarni, the Editor, for his valuable counsel.

*Athreya, Venkatesh B. and Sheela Rani Chunkath, *Literacy and Empowerment*, Sage Publications, New Delhi, 1996; Pp. 299, Price: Rs 295.

that the excitement and the elation that almost everybody involved in this unique TLC went through were central to its success. It was not simply an experiment nor any official assignment but an experience, a human-interest saga. The uniqueness of its performance lay in its capability to generate motivation among the hundreds of thousands of illiterate women. That was the key to its success. The presentation of the contents in this depiction and the style adopted for that purpose convincingly convey the message that the 'revolutionary elan' experienced by the participants- learners, instructors, resource persons and also policy makers- and their ability 'to internalise the ethos, structures and logic of the TLC' (p. 284) mattered more than funds and expenses in bringing about this social transformation.

The Pudukkottai campaign required less funds than what was expended on the not so successful contemporary centre-based adult education programme (AEP) (Rs 65.20 per learner incurred in the former campaign as against Rs 180 to Rs 200 per learner in the latter). Further, '(w)hile volunteers taught without any remuneration, project funds were needed for motivation and mobilisation activities, ... To those uninitiated in the ways of running a mass campaign, spending money on motivating and mobilising people may seem unnecessary and wasteful. However, the money spent on *jathas*, on organising conventions, rallies and *padayatras*, on audio cassettes and newsletters and on the various motivational activities during the project implementation, gave very good returns in terms of mobilising learners and volunteers and in sustaining the momentum of the campaign. ... (Again), 'resources were mobilised locally for certain activities, not provided for in the budget. Even if the amount generated was not substantial, it helped to promote a feeling of participation among the people' (Pp. 136-39). 'The human generosity the campaign was able to evoke had little to do with economic variables. It had a lot to do with people's innate goodness and volunteer spirit' (Pp. 274-75). Non-monetary inputs are of crucial significance for the quantitative expansion of literacy as well as for the qualitative improvement, as observed by the Kothari Commission in its report: 'No comprehensive programme of educational development can ever be put across unless it involves *every* educational institution and *all* the human factors connected with it - its teachers, students and the local community - and unless it provides the necessary inducements to make them put in their best efforts (emphasis original) [Kothari, 1966, para 10.24].

In the book under review, initially how the strategies for mass literacy evolved in the modern world in general, and India in particular, is traced. Also, an analysis of the literacy scenario in India, especially in Tamil Nadu, precedes the account of Pudukkottai. Discussion on efforts in adult education includes an entire chapter on the National Policy on Adult Literacy in India. The main section of eight chapters offers an accurate, perceptive and thorough, but maybe not entirely objective, account of the campaign, its unique features, the difficulties faced, and measures utilised for overcoming them and also its few limitations. The last section of two chapters draws lessons in the form of theses from the campaign and also raises issues critical to the success of a total literacy campaign.

Literacy: Historical Perspectives

In the olden days, literacy and learning were restricted to certain so-called high castes, and among these castes too, primarily males who constituted a small number of elites. They used it to dominate over the illiterate non-elites and to preserve the gap between the two. Education was essentially religious instruction and, leave aside learning to read, even hearing Vedas and other religious scriptures was prohibited for the deprived groups like the *shudras* and women. Defying such restrictions incurred severe punishments like pouring boiling oil into the ears of such a person. '(L)iteracy was apparently universal among the two highest classes (castes) of Gupta India (fourth century B.C.E.) the Brahmins (priests, lawgivers and scholars) and the Kshatriyas (rulers and soldiers)' [Marvin, 1989, Vol. 2, p. 437]. There was no formal school system organised and supported by the state until about the arrival of the East India Company, i.e., around the end of the eighteenth century. The traditional system of education comprised, besides the Hindu *pathashalas*, the Islamic *madrassahs* also, and both of them predominantly instructed in religious scriptures. However, '(t)heir total student enrolment was only a microscopic fraction of the total population. The ... institutions of elementary education which taught the three Rs ... were availed of by the middle classes.... But even these were mostly attended by boys and did not enrol more that one or two per cent of the total child population. The large masses of the people had no access to the formal schools and were ... (merely) socialized in the culture and value-system of the caste or the class to which they belonged by the family itself. They also acquired the vocational education they needed through a non-formal apprenticeship in the family .... (Yet) there was very little social dissatisfaction with this system, in spite of its restrictive and inegalitarian character' [Naik, 1975, Pp. 2-3]. With a legacy of such total apathy toward education, it is no wonder that in post-Independence India also the rate of literacy has been rising rather slowly. Opportunities for acquiring and practising literacy are still dependent on many social factors, like class, gender, occupation, ethnicity, birth order, rural/urban residence, religion and caste. Muslim women, even in certain urban areas, are still not allowed to learn anything but a very limited religious instruction.

Under the colonial rule, the Calcutta *Madrassah* was established in 1781 and Benaras Sanskrit College in 1791, to appease the Muslims and Hindus, respectively. The former provided free instruction, also free boarding and lodging. Both the institutions received substantial grants, but they provided traditional education. On the contrary, the missionary schools were not supported by the British Parliament on the following ground: 'We have lost America by our folly, in having allowed the establishment of schools and colleges and it will not do good for us to repeat the same act of folly in regard to India' [Kuldip Kaur, 1985]. Since 1797 Charles Grant, called the father of Modern Education in India, advocated the cause of imparting Western knowledge to Indians through the medium of English. As a result the Charter Act of 1813 incorporated a provision for education of Indians. During 1813 to 1921, it was possible to lay the foundation of the modern educational system, mainly for their own imperialistic needs like that for middlemen between the official rulers and the ruled, or for loyal clerks, accounting pen-pushers, etc. Like the Curate's egg, this system was partly good, constructive and partly bad, adverse. It tried to remove certain obviously discriminatory practices of the traditional system which prevented access to literacy for certain castes and girls, but created another gap between the well-to-do and the poor, since '(t)he British administrators insisted on the levy of fees at all stages of education' [Naik, 1975, p. 13]. Besides, the formal structure of the educational system with its single-point entry in Class I at the age of about six, sequential annual promotion from class to class, and full-time instruction by full-time professional teachers deprived large numbers even of elementary education.

The colonial state, in spite of its interest in the education of the backward classes and girls, refused to take any measures for adult literacy or (free) universal elementary education. Not surprising, because literacy for all, supported by a democratising ideology, has a special place of its own which could not have been to their imperial liking. Free education, on the other hand, was championed by Indians who, *inter alia*, did not digest the idea of 'selling *vidya*', i.e., knowledge. A demand for four years' compulsory, free education for all children was put forward for the first time before the Indian Education Commission in 1881 by Dadabhai Naoroji [Naik, 1975]. That literacy and primary education form the 'question of questions', was the expression used by Gopal Krishna Gokhale while pleading for universal primary education. On March 18, 1910 he moved a Resolution in the Imperial Legislative Council that 'a beginning be made in the direction of making elementary education free and compulsory throughout the country' [Planning Commission, 1993], As expected, it was opposed by the official side for want of funds. A bill to that effect moved by him on March 18, 1912 was thrown out, in spite of spirited exhortation by Jinnah to find the three crore then required for the purpose [Natesan, 1916, p. 774]. In was in 1917 that Vitthalbhai Patel was instrumental in getting the first law on Compulsory Primary Education in British India passed by the Bombay Legislative Council. However, prior to it, Vadodara (formerly the princely state of Baroda) had passed an Act in 1906 for compulsory primary education for boys of 7-12 age and girls of 7-10 age. It was the first princely state to do so. With the passing of the Government of India Act, 1919, introducing the principle of dyarchy in the provinces, education became the direct responsibility of the Indian ministers. By 1930, every province of British India had a law on primary education. The grant of provincial autonomy made this possible. Yet, implementation was difficult due to lack of funds for free and compulsory education for seven years (period required in those days for completion of primary education). Hence emerged Mahatma Gandhi's concept of Basic Education in 1937. The process of schooling was to be made self-supporting, with education centering around some form of manual productive work.

In order to provide equality of educational opportunity, 'the *Post-War Plan of Educational Development in India (1944)*, known popularly as the Sargent Plan after the name of the Educational Adviser to the Government of India, John Sargent, put forward proposals to provide free and compulsory basic education to all children between 6 and 14 within 40 years (1944-84). However, the nationalist B.G. Kher Committee proposed that this goal should be achieved in 16 years. The Constitution of India, still more ambitious, envisaged that the state would 'provide, within a period of ten years from the commencement of this Constitution, free and compulsory education for all children until they complete the age of fourteen years' (Article 45), yet today India shelters about 50 per cent of the world's 885 million illiterates. 'Going by the '81-91 growth of literacy as well as population, it would take another five to six decades for India to achieve total literacy' [Sharma, 1997, p. 7]. 'At present, India spends an abysmally low amount on education, about 3.5 per cent of GDP. What's worse, much of this is spent on higher education, where the rate of social subsidy is very high, and much higher than that on primary education' [Bhattacharya, 1997, p. 7]. Naturally, '(t)he objective of universal primary education - not to speak of universal elementary education- still remains on the agenda, and is far from being fulfilled' (p. 70). This is the most significant reason for large scale adult illiteracy in India. Moreover, non-implementation of such universalisation of elementary education up to the age of fourteen has led to the problem of child labour and its multidimensional repercussions, such as proposal for a ban on entry of Indian exports by some of the countries on the ground that due to the involvement of child labour in their manufacture, they violate one of the norms in the social clause of the World Trade Organisation (WTO). One more fallout of this yet unfulfilled constitutional directive is that it relegated the entire problem of adult education *per se* to a relatively unimportant position in the general scheme of education, both in policy and financial terms. 'In the period immediately after Independence, ... the policy focus was on primary education. ... (T)he implicit assumption at the policy level seemed to be that the expansion of primary education would take care of the problem of mass illiteracy. ... Second, adult literacy was to take a back seat, and other "social" aspects of adult education were to be given priority' (Pp. 69-71). The authors are necessarily sceptical about the effectiveness of such programmes for eradicating illiteracy. Literacy being the first step to education, without it, all the governmental adult education projects and schemes[1] have hardly made any dent and proved dismal failures. The record of adult literacy efforts in the first three decades after Independence is aptly summarised by the authors as one which '... resulted in the painful and slow fall of adult education and literacy programmes- Fundamental Education was talked about for a while. Social Education was a fashion one time and then non-formal education caught the imagination for some time. Thus adult literacy- the programme for the masses- marked time' (p. 74). Vocational training content of social education received undue attention at the cost of the three Rs and social reform contents. 'Literacy programme is not getting due attention because various activities of community development are carried out by a community centre' [Jain, 1989, p. 126]. Again, the immediate economic gains through employment or work assignments were few and far between. As a result, frustration and disillusion set in which diminished the urge to attend literacy classes.

The authors seem to regret that achieving a reasonable mastery over reading, writing and simple arithmetic should have figured as the last but one objective of social education (p. 71). However, there are different opinions held on the point. In fact, the Pudukkottai campaign itself was not restricted to writing, reading and numeracy and the authors attribute its success to this fact. There are several objectives of social education, 'which implies an all-comprehensive programme of community uplift through community action' [Planning Commission, 1952, p. 542]. These objectives are discussed in this review in the next section on 'Aims of Adult Literacy'.

The constitutional dream of providing equality of access to education did not come true in quantitative terms, and likewise in qualitative terms, too. A study of the realities of the day-to-day schooling at grass-roots, undertaken in three different institutions in Lucknow, Uttar Pradesh- a village primary school, a village *maktab* (Islamic primary school) and an English medium Catholic-run urban school for upper middle classes- provides detailed account of the disparities and emphasizes the fact that most of the well-educated people with needed skills come from the narrow group that can attend schools of the third type while most of the unsuccessful ones, many of whom relapse into illiteracy, from schools of the first two kinds [Newman, 1989]. Of course, the various reasons for our failure in providing universal elementary education of a passable quality, being outside the purview of the present review, are not discussed here. But one unanimous explanation for our poor performance on the educational front overall is dearth of earnestness on the part of our political and administrative authorities.

Kothari Commission on Education (1964-66), rightly stressed the need of 'a clear conviction on the part of the national leadership that the education of the masses of non-literates has a direct bearing on economic and social progress and on the quality of national life' (p. 72). The National Policy on Education (1968) incorporated the recommendations of the Kothari Commission. Yet, policies do not always get translated into action, as during 'the entire period from 1951 to 1974, adult education received a total outlay of Rs 180 million out of a total education outlay of Rs 21,220 million or a mere 0.85 per cent! ... (T)he political will to eliminate adult illiteracy was utterly lacking' (Pp. 73-74). Such absence of sustained political commitment was 'not confined to the sphere of education alone, but equally evident with respect to land reforms and several other pressing socio-economic issues' (p. 32). One wonders whether the National Literacy Mission (1988) and its fall-out, the mass literacy campaigns in the 1990s, are supported by the state more out of international compulsions!

Aims of Adult Literacy

As early as in the 1960s, the UNESCO adopted the concept, known as the economic development model of the theory of mass literacy (i.e., economic development as the main motive for adults to be literate) for its Experimental World Literacy Programme (1967-73) (EWLP) which was launched for urban and rural workers in eleven countries. EWLP aimed at integrating literacy training with pertinent occupational training, thereby increasing the productivity and income of the neoliterates and contributing to national economic development. 'Literacy is often thought of as simply a certain minimum level of mastery of the mechanics of reading and writing in a particular language- plus, some would add, a minimum competency in numeracy. ... (UNESCO) gave wide currency to the term *functional literacy* defined as follows: "Rather than an end in itself, [functional literacy] should be regarded a way of preparing man for a social, civic and economic role .... Reading and writing should lead not only to elementary general knowledge but to training for work, increased productivity, a greater participation in civil life and a better understanding of the surrounding world, and should ultimately open the way to basic human culture". ... The productivity-connected concept of functional literacy, however, ... soon came under fire from various quarters for being too limited and rigid. ... UNESCO's own leadership ... became increasingly uncomfortable with the narrow utilitarian concept of functional literacy ...' [Coombs, 1985, Pp. 279-80]. They had to soon modify this concept of the theory of mass literacy by supplementing it by a broader structural development concept: 'literacy programmes can only be fully functional - and development contexts can only be fully conducive to literacy - if they accord importance to social, cultural and political change as well as economic growth' [UNESCO, 1976]. Literacy has to be a means for rising above both, poverty and socio-cultural constraints. '(L)iteracy is to be seen as an instrument for human liberation:

> ... literacy creates the conditions for the acquisition of the critical consciousness of the contradictions of the society in which man lives and of its aims; it also stimulates initiative and his participation in the creation of projects capable of acting upon the world,, of transforming it, and of defining the aims and objectives of an authentic human development ...' (p. 26).

Contemporary definitions of literacy emphasise not only on social purposes of literacy, such as realising goals for oneself and one's family, creative participation in community and nation building, but also on personal pride, dignity, self-affirmation and self-assertion. Literate achievement is expected to result in higher perceptive and logical processes, such as the capacity for abstract thought, decontextualisation, propositional logic, cognitive mobility, and greater success in interpreting messages. Still 'correct' interpretation reflects the socio-cultural framework within which it occurs. As a rule, the established frame-work, the socio-economic structure is authoritarian when literacy is an exclusive monopoly of the few, because literacy, cannot be dissociated from its socially embedded practice, has no independent existence apart from a social situation. Total adult literacy campaigns are capable of banishing both, illiteracy of the masses and along with it the monopoly and authoritarianism and, thus, usher in equality. But, it is necessary for the educators to imbue adult illiterates with belief in such positive value of literacy because that belief 'precedes the Enlightenment' [Marvin, 1989, Vol. 2, Pp. 437-41].

There are, thus, two approaches- social education and social transformation- to adult literacy : (i) Social education approach- the concept of adult education was customarily confined to teaching adult illiterates just the three Rs- reading, writing and simple arithmetics (numeracy). It was widened by the First Five Year Plan to include social education and, hence, the minimum level of literate talents necessary to cope with the ordinary demands of daily life were to be infused through community development programmes. Learners' general awareness regarding health care particularly family planning, their awareness about relevance of science in today's world, about government policies, laws, etc., was to be raised, as well as they were to be imparted skills of various types- vocational, domestic handcraft skills especially mother-craft for women, recreational skills, skills for self-expression, etc.- for more productive use of their time, in order that they should supplement their income and shape their future better. Social education included acquainting learners with the meaning of citizenship and the functioning of democracy and the panchayati raj institutions. Also, refinement of emotions, spirit of tolerance and scientific temper were to be inculcated among them. Social education was also expected to build public opinion against existing social evils, and strive 'to give to the illiterate adult the minimum knowledge required for a purposeful civil life. ... to develop the resources of mind and improve upon his heritage' [Jain, 1989, p. 97]. (ii) Social transformation approach- that is, authentic transformation of the underprivileged illiterates as well as of everyone else's, transition of the extant oppressive social structure to an egalitarian one, so that the former are accepted as equals by the latter. Here knowledge is not something to be *given* to adult illiterates in adult literacy classes but *gained* by all in a people's movement for literacy.

In order to spread the three Rs, the developing countries, including India, follow both the approaches to adult literacy, since these are not mutually exclusive. The first underscores individual motivation, and views adult literacy as a means for performing specified vocational-technical functions within specific development projects, for teaching 'people to read the word as well as the world' [Bhola, 1987, p. 248]. Whereas the second emphasises empowering learners to (i) give up their 'culture of silence' [Freire, 1972]; (ii) 'become aware of the causes of their deprivation and move towards amelioration ..., and participation in the process of development' [Ministry of Human Resource Development, 1987, 12]; (iii) overcome the limitations on the life opportunities because of their exclusion from a significant part of the communications mainstream; (iv) be integrated into political, economic and social structures by catalyzing the perceptions of their hitherto subjugators; and thereby (iv) help create a new social order. For such social transformation, the second approach focuses also on the privileged literates and foresees a change of attitude in them, particularly their attitude towards the underprivileged. In Pudukkottai, for example, taxi drivers and van drivers at the taxi stand outside the main bus stand shared the usual gender prejudices and indulged in eve teasing. *'Arivoli* changed all that dramatically. ... The success of a movement to empower women should be evaluated not only by the extent to which it liberates women but also by the changes it brings in the thinking and psyche of the men' (Pp. 251-52).

There are diverse reasons that led to such change of views on adult literacy. Large-scale programmes with literacy as an end in itself were less effective than smaller programmes with literacy as a means to other activities, in spite of their being hopelessly inadequate in number, not only in India but the world over [Abadzi, 1994]. Further, a certain conscious effort is required on the part of learners 'to acquire mastery over certain written symbols in the elementary stage. To some extent, it appears artificial to the adult learners (beginners). This initial hardship often nips in the bud their educational process. In order to overcome this problem, ... (and) to create interest among adult learners for education, it has to be presented in an attractive form. ... The methods of social education are the most effective ways of executing the programmes connected with it' [Jain, 1989, Pp. 124-25]. Illiterates are not passive beings, the objects of the process of learning, nor 'starving for letters', 'thirsty for words', so that the word must be *brought* to them to save them from 'hunger' and 'thirst'. The word, cannot be 'deposited', it has to be born of the creative effort of the learners. Programmes with literacy as an end in itself take a misguided view of the illiterate's predicament as a marginal man. 'In accepting the illiterate as a person who exists on the fringe of society, we are led to view him as a sort of "sick man", for whom literacy would be the "medicine" to cure him, enabling him to "return" to the "healthy" structure from which he has become separated. ... In the light of such a concept - unfortunately, all too widespread - literacy programmes can never be efforts toward freedom; they will never question the very reality which deprives men of the right to speak up - .... The solution to their problem is (actually) not to become "beings inside of" (the structure), but men freeing themselves; for, in reality, they are not marginal to the structure, but oppressed men within it. Alienated men, they cannot overcome their dependency by "incorporation" into the very structure responsible for their dependency' [Freire, 1970, 1975, Pp. 24-28]. They are marginal, not out of their own choice, to the structural reality with its several dimensions, not only of physical space, but historical, social, cultural and economic. They are forced to be marginals 'whose gestures to some extent simulate those of the animals and the trees, and who often consider themselves equal to the latter ... (They) must come to discern themselves as *persons* prevented from *being*' [Freire, 1972, p. 142]. Literacy should triumph over their total marginality which involves hunger, sickness, rickets, pain, mental deficiencies, living death, crime, promiscuity, despair, in short, the impossibility of being.

Many a time, the deprived illiterate are apprehensive of embracing freedom, of taking initiative and responsibility. They have long mistakenly identified literacy with elite literacy or learning and, therefore, viewed as something beyond access, feasibility. There is substantial fear of failure although literate skills are undoubtedly more utilitarian than academic and, like computer literacy which is distinct from computer programming, are distinct from intellectual skills. Also, political organisations of any hue have vested interest in maintaining the *status quo*. They 'believe in "doing good" to the deprived in accordance with their perceptions, shunning community empowerment (through literacy) for fear of losing influence' [Sinha and Ghosh, 1997]. What they fear is the liberating power of literacy and education. Lack of interest is thus on both the sides. Such constraints must be removed and education demystified.

In Pudukkottai, the organisers *not* being at all reluctant to empower the participating learners, on the contrary keen on empowering them, the TLC was not restricted to the productivity development concept for motivating illiterate masses. It embraced a wider structural development approach to mass literacy, which envisages literacy as the first step to genuine social, political and economic transformation. 'Greater self-confidence, a new resourcefulness and presence of mind to tackle complex situations, an enhanced ability to manage interpersonal relationships, effective communication skills, greater gender sensitivity, a more keenly felt humanism, both in the general and in the concrete sense- all these and more are skills and strengths that we have seen many a participant in the TLC acquire, as a consequence of the campaign process' (p. (281). The TLC in Pudukkottai brought about a significant change in not only the women's perceptions regarding themselves but also the entire societal perceptions about women. Pudukkottai district had the largest male-female literacy differential in Tamil Nadu, as per the 1991 Census. It reflected women's poor status. 'Women were wives, mothers, sisters and chattel but never individuals' (Pp. 239-40). After the campaign, Pudukkottai is 'a model for women's mobilisation' (p. 270). Pudukkottai campaign was not an inconsequential process of teaching and memorizing *a, aa, i, ee, e ai*, etc. (alphabet in the regional languages), that dulls the 'empty consciousness' of learners with innumerable alienated words and phrases and, simultaneously, keeps them unconscious of the reality of their being dominated. It was what Freire calls a 'cultural action for freedom, ... an act of knowing ... a process through which men (here women) who had previously been submerged in (structural) reality begin to emerge in order to re-insert themselves into it with critical awareness' [Freire, 1970, 1975, p. 29]. The Indian perception of literacy, education and learning as *sa vidya ya vimuktaye* (the learning that liberates a person is real learning), and the UNESCO's analogous definition of literacy- 'a person who can with understanding both read and write a short, simple statement on his everyday life' [Marvin, 1989, Vol. 2, p. 438]- both imply that literacy is an implicit condition for open expression, necessary for a just and stable civil society, a prerequisite for shared political power, a means of ensuring informed participation by democratic electorates, and an instrument of upward social mobility, occupational entry, security, etc., in a world in which science, technology and the world economy are largely organised by literate models. Both these conceptions support the two lessons (Theses 6 and 7) that the authors draw in the last but one chapter of the book under review. They are as follows: 'Thesis 6: The relationship between the total literacy campaign and women's empowerment is essentially symbiotic. ... (I)nitially it was the massive involvement of women and organisational training provided to them, that helped carry out efficiently a large number of decentralised mobilisation campaigns- such as *padayatras*, cycle *jathas*, and door-to-door "meet-the-learner" campaigns- which enabled the TLC to reach an extraordinarily high rate of learner enrolment. Subsequently the TLC's successful advance led to the emergence of a new social force : a large number of empowered women organisers and volunteers, and a substantial number of very confident neo-literate women. ... (They) are functioning in the post-literacy phase, as lobbyists, spokespersons, and solid supporters of DWCRA (Development of Women and Children in Rural Areas Scheme) women in particular, and gender justice and women's empowerment in general. Thesis 7 : In the TLC, the process is as important as the product, and this should be taken into account in any scientific assessment/evaluation of the TLC. ... (I)n the case of India's current mass literacy campaigns, the avowed objective in terms of learning outcomes includes, besides specified literacy and numeracy levels, functionality and awareness as well. These are inherently qualitative in character and not amenable to simple, scalar measurement. So even in terms of evaluation of learning outcomes, one has to go beyond the somewhat more readily measurable literacy and numeracy norms, and look at the qualitative aspects central to functionality and awareness' (p. 280). Women in Pudukkottai were better inspired to learn, because they began not only to read and write, but also to articulate, *feel* self-reliant and experience the exhilaration of creativity, as well as a sense of achievement which prompted them to make further efforts, take greater pains, thus self-actualising them. Motivation to learn, crucial for the success of any TLC, comes from what the aims of learning are. 'The action of men without objectives, whether the objectives are right or wrong, mythical or demythologized, naive or critical, is not praxis, though it may be orientation in the world (i.e., adaptation to the world). And not being praxis, it is action ignorant both of its own process and of its aim. The interrelation of the awareness of aim and of process is the basis for planning action, which implies methods, objectives and value of options. Teaching adults to read and write must be seen, analysed and understood in this way' [Freire, 1970, 1975, Pp. 21-22].

Apparently, the message of Pudukkottai did reach the relevant ears, because officially it was asserted that 'literacy which is basic to human development has to be a concern of the entire Indian society and an atmosphere must be created for enthusing all citizens to give their best for achieving this great task' [Planning Commission, 1993, p. 42]. Until such awakening takes place among the masses and they are motivated to learn, it is sometimes argued, compulsion should be resorted to, as was done in the case of *sati* prohibition. It may be exerted in an indirect way such as, various schemes for the benefit of the illiterate rural poor like IRDP, loans on easy terms, and such other facilities could be linked to literacy. It would not be too arduous for them to be literate since, presumably, just three and a half months are required to learn, both writing and reading. Of course, the best option is the learner-centred Pudukkottai model.

Motivation and Mobilisation for Eradication of Illiteracy

As already pointed out, the lion's share in Pudukkottai's success goes to the ability of the TLC organisers to motivate adult illiterates to join the literacy classes and also to sustain their interest until the end. Many beginners lose interest as soon as the initial excitement dies down and the arduous work of teaching and learning has to be carried out 'more often than not, "silently" ... without much recognition or reward' (p. 188). The drop-out phenomenon starts not only among learners playing truant but among volunteer instructors also. Motivation or sustained efforts on the part of adult illiterates are dependent on various factors- besides aims of literacy, 'factors, such as the quality of instruction, the availability of suitable materials, opportunity for practice and development of the skill, the value of literacy in the community and the purpose or function of literacy in the individual's life' [Abadzi, 1994, p. 76]. For the very poor in India, acquiring literacy skills is not an issue at all in their daily struggle for meeting the two ends meet. Even if they may visualise the future benefits of literacy, their present is fraught with so many problems that they hardly afford to spare any time and energies on learning.

Second, literacy and education are not the absolutely indispensable inputs for acquiring status and power especially economic and political status in our country today, since nepotism and political clout are the criteria for annexing them. In addition, the large number of educated unemployed in India indicates that economic advantages do not always follow literacy and education. Approximately 1.75 crore men and more than 0.50 crore women- educated up to matriculation, that is, Xth Secondary School Certificate (SCC), graduation and above in all branches of knowledge- were work-seekers in 1991 [Labour Bureau, 1995, Pp. 84-85]. The learned never acquired enormous power, pelf and privileges even in ancient India. They received only respect and recognition. Otherwise, why should Dronacharya, the teacher of the Hastinapur princes, not afford to give milk to his son, Ashwatthama, who had to be fooled with water mixed with flour for milk? In such a cynical, materialistic environment, the motivation to be literate and to remain literate is not sustained. It results in very high drop-out rates not only in adult literacy classes but also in schools.

Third, although adults (at least up to 70) are likely to be generally faster than children in the acquisition of literacy on account of their knowledge and cognitive skills yet the perseverance required for learning is absent, probably, because in today's world of 'instant' results, the benefits from literacy are perceived as too slow to strive for, whereas the efforts required are too tedious. Lethargy and fatalistic outlook of the people result in lack of motivation. Nevertheless, there is a silver lining to the dark cloud of mass illiteracy, especially in rural areas. With the technological missions launched during Rajiv Gandhi's period, the transport and communication facilities, such as the STD/ISD telephone booths, television and cable channels, jeeps and motorbikes, etc., have substantially reached the interior regions. Consequently, rural masses are becoming aware of the process of technological advance and modernisation in the world. Liquidation of mass illiteracy is essential for accelerating programmes of production, especially in agriculture, and for quickening the tempo of national development in general (p. 73). '(T)he sector which is most vulnerable to low literacy is neither industry nor services but agriculture. ... Sustained productivity increases can come about only when the average farmer is able to directly access, assimilate and apply technological information. This requires not merely literacy, but a considerable degree of sophistication, which the educational system will have to provide' [Sen, 1997, p. 7]. Further, with the decline of traditional village industries and handicrafts, particularly landless rural labourers are progressively realising that their future employment prospects lie not in their traditional caste-bound callings, but in such modern service sector as transport, courier, lodging and boarding, etc. They, therefore, feel the urgency not just of literacy but also of at least primary education and, if not for themselves, for their children.

The quality of instruction is a significant reason for the masses to have little motivation for literacy and education. Education in India today is, what Freire calls, banking education, i.e., 'an act of depositing, in which the students are the depositories and the teacher is the depositor. ... (K)nowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing. Projecting an absolute ignorance onto others, a characteristic of the ideology of oppression, negates education and knowledge as processes of inquiry' [Freire, 1972, Pp. 43-46]. Our tradition has all along been that *Vidya* or knowledge is something to be donated, and *vidyadan* is the highest meritorious deed anybody can perform. Banking education is an act of narration, in which the teacher is the narrator, and the learners receptacles. Its 'outstanding characteristic ... is the sonority of words, not their transforming power. "Four into four is sixteen; the capital of (India) is (New Delhi)". The student records, memorizes and repeats these phrases without perceiving what four times four (4 x 4) really means, or realizing the true significance of "capital" in the affirmation .... (T)he *raison d'être* of libertarian education ... lies in its drive towards reconciliation ... of the teacher-student contradiction, ... so that both are simultaneously teachers *and* students. ... Whereas banking education anæsthetizes and inhibits creative power, problem-posing education involves a constant unveiling of reality. The former attempts to maintain the *submersion* of consciousness; the latter strives for the *emergence* of consciousness and *critical intervention* in reality' [Freire, 1972, Pp. 45-54]. Banking education, in which the teacher should choose and enforce her/his choice in all pertinent matters, say, course content, timings, place of instruction, etc., and the students, as welfare recipients, comply and adapt, is hardly learner-centered. And even if it is, there are two dilemmas 'one is the actual needs of the masses rather than what we fancy they need, and the other is the wishes of the masses, who must make up their own minds instead of our making up their minds for them' [Freire, 1972, fn. on p. 67]. Further, adult literacy drives for even such type of 'banking' education have many shortcomings: absence of basic infrastructure facilities, like proper place for running the class, light, blackboard, teaching materials, etc., lack of discipline among teachers including teacher truancy, shortage of teachers and, in consequence, overburden on them (just two persons- one social education organiser and one *Mukhya Sevika*- working for about a hundred villages) [Jain, 1989, p. 127]. Also, such drives have been so far sporadic and isolated.

For making a literacy campaign acceptable to villagers, the National Literacy Mission is advised to adopt the concept of integrating literacy with political literacy through panchayats and 33 per cent reservation for women in various local self-governing bodies, and with land literacy, i.e., utilising community knowledge about local resources and their use as the foundation for formal literacy and education. 'One way to link literacy to economic development would be ... to encourage each village ... to take up what may be described as "resource mapping" for every village. ... Resource mapping programme (RM) could become potentially one of the most important links between grass roots literacy and grass roots empowerment for development. RM means basically the involvement of the village or local community in the mapping, survey and understanding of its own local level resources and conditions of existence. In doing so, it generates ... a powerful ... also a highly informed demand ... for specific projects of their own choice which villagers know will be effective and relevant to their needs' [Sinha and Ghosh, 1997].

The Pudukkottai TLC is a success because it has never been a campaign for banking education of the vertical pattern, nor for fulfilling the designated targets. It was 'a people's movement for literacy (where) the campaign process is characterised precisely by dialectical, two-way learning. Every participant in the TLC is, in a non-trivial sense, a learner. ... The teaching-learning process, as well as every other process of a TLC, transforms the volunteer remarkably, and in many cases even more dramatically, than it does the learner. ... The process of learning, in its widest as well as delimited sense, includes as its participants not merely designated "learners", and at the next level, the designated "volunteer instructors". It necessarily includes every participant- instructor or master trainer, resource persons or district academic committee member, full-time coordinator or district collector- and its consequences are quite palpable' (p. 281). Structural flexibility, implicit in the design of the Pudukkottai TLC, in procedures and processes avoided bureaucratic straight-jacketing. At the same time it did not cause any delays because it rested 'on three main principles: the campaign mode, voluntarism and a participatory approach. The campaign mode meant that the entire programme would be implemented within a time frame : in Pudukkottai ... within one year. Volunteers were to be mobilised from the people ... not only for teaching but also for organising the various activities of the campaign .... Thus voluntarism meant far more than merely involving some voluntary organisations. ... The participatory approach meant in practice that every activity of the campaign would be made a mass activity and wide popular mobilisation would be attempted' (Pp. 136-37). The programme was implemented by a three-legged structure, comprising the district administration, the full-timers and the people's committees at different levels. There was so abundantly visible cohesion between the dedicated activists and supportive district administration on account of a strong commitment to teamwork and a subordination of the ego in working together. There was no lack of leadership or of cooperation and coordination at organisational level which has been one of the main reasons for the earlier campaigns.

The Pudukkottai TLC placed emphasis on the campaign process as much as on the product. It was 'different from the earlier centre-based NAEP (National Adult Education Programme) whose bane had been "targetitis" and the built-in incentives for false reporting' (p. 285). The NLM Authority (NLMA) was keen on achieving financial targets, i.e., utilising the allocations made under this head within the stipulated period. Political pressures were exerted by elected representatives of people from various constituencies, state governments and lobbies of various hues. 'With literacy campaigns attracting media attention, and in the light of the perception that it was a highly visible programme which would redound to their credit, many district collectors and state-level officers in charge of adult education wanted to join the literacy band wagon' (p. 284). Media attention to TLCs in some districts was hyped to such an extent that they became a prestige point, whereas at the ground level the TLC projects faced severe problems, due to poor preliminary preparations. Such 'an explosive combination ... naturally generated pressures for false reporting' (Pp. 284-85). These drawbacks pointed out by the authors make one sceptical about such suggestions of certain experts as newspapers and people's representatives should participate as watchdogs in TLCs.

To sum up, motivation was attained in Pudukkottai through facets, such as (i) relevance of the programmes to learners' needs, (ii) special arrangements to teach specific disadvantaged groups of people like nomadic tribes or the scavengers of Pudukkottai municipality, (iii) use of themes from their daily life and their dialect in the preparation of the teaching and learning materials, instead of universal adult primers, for example, culturally appropriate mnemonics, (iv) structural flexibility of the programmes, convenient timing preferably at night not only to reassure attendance of day-workers but also to facilitate skill consolidation during dream sleep, convenient location, (v) effective handling of all social, motivational, instructional and cognitive obstacles to learning[2], for example, utilization of festivals, functions and local events to sustain momentum, (vi) adequate human and material resources, especially, dedicated literacy activists and volunteers, their training in a totally new kind of pedagogy- 'the Improved Pace and Content of Learning (IPCL) methodology, as ...also in the philosophy, the mechanics and the logistics of the mass literacy campaign' (p. 43), (vii) their involvement as well as involvement of the community at large, also the commitment and active participation of policy-makers, and last but not of least significance, (viii) the spirit of team work.

Supra-state donor countries like the World Bank and also some of the governments are reluctant to fund adult literacy programmes because of their very ineffectual outcomes. It is pointed out that due to very high rate of drop-outs and, simultaneously, low rates of retention and mastery, 'the effectiveness rate of some projects may only be 12 to 15 percent' [Abadzi, 1994]. Also, it is argued that literacy acquired in adulthood may not be as effective in influencing positively the quality of life as that acquired in childhood. The book under review belies such arguments and makes one sceptical about the reasons advocated for refusing funds for adult literacy projects.

NOTES

1. A few of the schemes are: the Gram Shikshan Mohim (GSM) initiated in Maharashtra in 1959; the Farmers' Functional Literacy Project (FFLP) initiated in an era of Green Revolution period of 1967-68 'to promote the acceptance of High Yielding Varieties (HYV), and usher in an era of Green Revolution' [Ministry of Human Resource Development, 1989, p. 74]; the National Adult Education Programme (NAEP) formally inaugurated on October 2, 1978; the Rural Functional Literacy Project (RFLP) which merged the functional literacy component of FFLP and the then ongoing scheme of Non-Formal Education Programme (NFEP) for the

productive age group of 15-35; the National Literacy Mission (NLM) launched on May 5, 1988; the Jana Shikshan Nilayam (JSN), 1989 for institutionalizing post-literacy and continuing education, i.e., ensuring retention of literacy skills, providing facilities for learners to continue their learning beyond elementary literacy and to apply it for improvement of their living conditions, and also for dropouts of secondary education and pass-outs of primary and elementary education, non-formal education, neoliterates and Functional Literacy Project (FLP) centres.

Yet, the Fifth All-India Educational Survey (1986) records that 507,806 rural habitations of the total 979,065 rural habitations had primary schools/sections covering 80.34 per cent of the rural population. 'In the country as a whole, of the 530,246 (54.36 per cent) habitations with a population of 300 or more, 76.98 per cent had the facility for primary education within the habitation of residence or within a walking distance' [Planning Commission, 1993, p. 28].

2. The organisers of the Pudukkottai TLC tried to eliminate as many causes for the low effectiveness of the adult literacy programme as possible through continuous monitoring. For instance, in order to cope with 'the "drop-out" phenomenon started' by the end of the second month of the campaign, a series of motivational initiatives were undertaken so that the morale of both learners and voluntary instructors remained high. Retraining of volunteers was also done (Pp. 188-89).

REFERENCES

Abadzi, Helen, 1994; *What We Know about Acquisition of Adult Literacy: Is There Hope?* World Bank Discussion Papers, No. 245, World Bank, Washington, D.C.

Bhattacharya, B.B., 1997; 'Debate', *Economic Times*, Thursday, May 8, 1997, Bombay Edition.

Bhola, H.S., 1987; 'Adult Literacy for Development in India: An Analysis of Policy and Performance', in Arnove Robert F. and Harvey J. Graff (Eds.), *National Literacy Campaigns: Historical and Comparative Perspectives*', Plenum Press, New York.

Coombs, Philip H., 1985; *The World Crisis in Education: The View From the Eighties*, Oxford University Press, New York.

Freire, Paulo, 1970, 1975; *Cultural Action for Freedom*, Ramos, Myra Bergman (Tr.), Penguin Books, Harmondsworth.

Freire, Paulo, 1972; *Pedagogy of the Oppressed*, Ramos, Myra Bergman (Tr.), Penguin Books, Harmondsworth.

Jain, S.P., 'Social Education as an Aspect of Community Development: An Analysis', in Panchamukhi, P.R., (Ed.), *Reforms towards Equality and Relevances* in the series *Studies in Educational Reform in India*, Vol. III, Indian Institute of Education, Pune and Himalaya Publishing House, Bombay.

Kothari, D.S., 1966; *The Education Commission, 1964-66*, (Chairman: D.S. Kothari), Ministry of Education, Government of India, New Delhi.

Kuldip Kaur, 1985; *Education in India (1781-1985): Policies, Planning and Implementation*, Centre for Research in Rural and Industrial Development, Chandigarh.

Labour Bureau, 1995; *Indian Labour Statistics, 1991-93*, Ministry of Labour, Government of India, Shimla/Chandigarh.

Marvin, Carolyn, 1989; 'Literacy', in Barnouw, Erik (Ed.), *International Encyclopaedia of Communications*, University of Pennsylvania and Oxford University Press, New York.

Ministry of Human Resource Development, 1987; *National Literacy Mission : Draft*, Department of Education, Ministry of Human Resource Development, Government of India, New Delhi.

Natesan, G.A., (*Pub.*), 1916; *Speeches of Gopal Krishna Gokhale*, Second Edition, G.A. Natesan and Company, Madras.

Naik, J.P., 1975; *Equality, Quality and Quantity: The Elusive Triangle in Indian Education*, Allied Publishers, Bombay.

Newman, R.S., 1989; *Grassroots Education in India: A Challenge for Policy -Makers*, Sterling Publishers, New Delhi.

Planning Commission, 19?; *The First Five Year Plan*, Government of India, New Delhi.

Planning Commission, 1993; *Report of National Development Council Committee on Literacy*, Education Division, Government of India, New Delhi.

Sen, Pranab, 1997; 'Debate', *Economic Times*, Thursday, May 8, 1997, Bombay Edition.

Sharma, Atul, 1997; 'Debate', *Economic Times*, Thursday, May 8, 1997, Bombay Edition.

Sinha, Subrata and Ghosh, Arun, 1997; 'Literacy Campaign, Land Literacy And Watershed Development', *Economic and Political Weekly*, Vol. XXXII, No. 6, Feb. 8, 1997.

UNESCO, 1976; *The Experimental World Literacy Programme: A Critical Assessment*, UNESCO Press/UNDP, Paris.

BOOK REVIEWS

Mehta, Jashwant B., *Quest for a Better Democratic Alternative*, 2nd Edition, 1996, Distributors N.M. Tripathi (P.) Ltd., Mumbai, Pp. x+212, Price Rs 125.00.

There is widespread dissatisfaction with the way the parliamentary system has been working in India. Almost every institution of government has come under severe criticism for its failure to play its part in accordance with the letter and spirit of the Constitution. The question whether an alternative institutional structure needs to be adopted in order to preserve and promote the democratic system is agitating the minds of many writers and thinkers. In Mumbai, a voluntary organisation called *The Forum for a Better Democratic Alternative* has been formed to spread awareness of the issues involved and solutions proposed in this field. The volume under review has been published by *The Forum* as part of this endeavour. It contains fifteen chapters dealing with various aspects of our polity threatening or distorting the democratic ideal. A liberal use of cartoons to bring home the points made is a noteworthy feature of the book.

The organisation of parties, their finances, internal elections, methods of selecting candidates to contest elections to representative bodies at various levels and similar issues relating to the party system have been scrutinised under appropriate headings in the book. Suggestions are offered for improvement of the system, mainly in terms of necessary legislative enactments. The model adopted by the author is mainly that of the presidential system as it functions in the U.S.A., though in certain places recourse has been taken to other systems as, for example, the German system of proportional representation in national elections, to a limited extent.

In matters other than the working of the party system also, the author makes a strong plea for the wholesale adoption of the American system of government in which he does not seem to find any weaknesses or pitfalls. A single individual elected for a fixed term as head of the executive by the entire electorate makes for stability; a cabinet selected by him on the basis of talent and not amenable to the pressures of the legislature helps the effective and rigorous implementation of policy; elimination of corruption in government by reason of the separation of powers and the irrelevance of defections under that system; are some of the advantages claimed for the changeover to the presidential system by the author. If accepted, this system will, according to the author, mean stable and efficient government at the federal, state and local levels without sacrificing the sovereignty of the people which is the hallmark of a democratic polity.

The ills of the present parliamentary system are well known. By putting politicians in power at every level of government, the entire polity becomes highly politicised and the rule of law is given a go-by for short term advantages, ministers tend to take the administrative function in their own hands and are tempted to make money out of appointments, transfers, distribution of patronage and favours. Cabinets tend to be large and unwieldy and the appetite for ministerships is vetted all the time, irrespective of its financial burden on the tax-payers. Defections are engineered and there is no sense of loyalty to or discipline within the party. It is not necessary here to cite other defects in the present system which the author has described with concrete examples from the contemporary scene.

Interesting though the whole thesis of the author is one cannot help feeling that the author labours under the belief that all our problems arise on account of the present institutional structure and all one has to do to solve them is to change that structure. But a little reflection shows that the presidential system under the U.S. model is no panacea for our political ills. Given the multiplicity of political parties as against only two major parties in the U.S. system, the election of a single Executive President is not likely to be a smooth operation with an electorate running into crores of voters. Then there is the ubiquitous caste system and the intense competition for power among different caste groupings. The idea that an Executive President will be able to function independently in the best interest of the nation without having to worry constantly about retaining the support of the majority of the members of the popularly elected house of the legislature (as is the case today) is likely to be difficult to realise in practice. The possibility of the President belonging to a party different from that having a majority in the legislative branch severely limits the independence of the President. Various compromises will have to be made by him to humour the legislature into supporting legislative measures as well as the all-important budget initiated by him. Even within the legislative wing, the formation of various committees will involve a lot of bargaining between different regional, caste, language and communal groups. Besides there is always the danger of the President assuming dictatorial powers for his government and frequently using his veto over the bills passed by the legislature. In Sri Lanka, where they have tried the experiment of changing over to the presidential system for almost two decades, opinion has veered round to the view that the earlier parliamentary system was far more democratic and there are clear indications that that country will revert to the older system soon.

For any system to function in a smooth, progressive and responsible manner, it is necessary to have a general consensus in favour of observing the rules of the game as it were. In the absence of such a consensus, the situation resembles that of a 'free for all' fight. The end product of this fight is personal power to the exclusion of the larger social objectives. Corruption at every level thrives in such a political atmosphere. For the success of a democratic system the first thing necessary is the cultivation of what can be called 'democratic self-restraint'. It implies that no one will exercise power without reference to the accepted social or national objectives to be pursued. Our common weakness today is the tendency to go to the logical limit of authority, following the letter and not the spirit of the law. This is modified only by the necessity of retaining power as long as possible and thus making compromises and concessions which spell disaster to the concept of the rule of law. So long as such an ethics prevails, any institutional structure can be perverted, be it that of a parliamentary or a presidential form. Though institutions are important to provide the framework within which political activity is to be carried on, one must remember that institutions by themselves are inert, they have to be worked by people. If the people do not accept the sanctity and also the limitations of institutions, they can play havoc with any system of government. It is therefore for serious consideration of all concerned whether the need of the hour is to change the institutional structure of our polity or whether the malaise from which we are suffering goes deeper into the psyche of the people, influenced by narrow, parochial pursuits through the electoral system of democratic government.

While much praise is due to the author of this book for pointing out the many distortions of the parliamentary system in India, the complete reliance that he seems to place on the presidential system needs to be further examined with reference to the possible distortions of that system if it is adopted without any change in the attitudes, expectations and aspirations of our people. In adopting the existing system of government the framers of our Constitution were influenced by the fact of our familiarity with its working for nearly a century. In changing over to the presidential system we shall be launching the ship of state into uncharted seas and subjecting ourselves to all manner of unknown and unexpected risks, making the present confusion worse confounded.

S.V. Kogekar
Former Professor of Political Science,
Ex-Principal, Fergusson College, Pune,
and Ex-Vice-Chancellor, Tilak Maharashtra
Vidyapeeth, Pune.

Sathe, S.P., *The Tribunal System in India,* N.M. Tripathi Publishers Ltd., Bombay, 1996, Pp. xiv+264, Price: 160.

We have now a large number of 'tribunals', grown almost sporadically, mainly as a part of system of redress law. Can we say, we have a 'system of tribunals' as a part of the process of reform in Indian law? Sathe, in his unique compendium, has sought to examine critically 'tribunal' as a concept and has tried 'to suggest criteria which distinguish it from a court on the one hand and a quasi-judicial body on the other' (p. ix). He has made a study of the law relating to 95 tribunals set up under 88 central statutes.

While all courts are tribunals, all tribunals are not courts. Similarly tribunals and quasi-judicial authorities are both required to observe principles of natural justice before passing any order. However, tribunals are more judicial than quasi-judicial. One of the essential features of a tribunal is that it is not any 'part of the machinery of administration'.

Sathe sets out the main characteristics which distinguish the tribunals from the courts. (1) Courts are required to follow the procedures prescribed by the Indian Evidence Act, the Code of Civil Procedure and the Code of Criminal Procedure, while the tribunals might be governed by procedures laid down in the Act under which they are set up or might be able to regulate their own procedures. (2) The tribunals are expected to acquire expertise in a particular field of adjudication. The courts on the other hand are 'generalists' and deal with a variety of matters. (3) The tribunal members are generally appointed by the government and may not necessarily be from the Judicial Service. (4) There could be single member tribunal or multi-member tribunal presided over by a judicial member. (5) Generally the tribunals may not have powers to punish for contempt or for sanction of prosecution for perjury. (6) Certain tribunals entertain appeals against the decisions of the administrative authorities. (7) The decisions of the tribunals may be final or subject to appeal to a higher tribunal or to a court of law. While these could be the distinctive features of the tribunals, the common features of both the courts and the tribunals are that they are independent of the government, and are required to follow certain formal procedures and both perform judicial functions.

Based on the above tests to distinguish tribunals from courts, Sathe considers Family Court, under the Family Courts Act, 1984, as a tribunal rather than as a court. He says that it 'meets all the tests of a tribunals' (p. 57), as mentioned above. It deals with a specialised type of litigation. Its judges are expected to acquire expertise in dealing with matrimonial matters. It has freedom to follow its own procedures. While it is correct to say that the mere use of the word 'court' in respect of the Family Court is not sufficient to categorise it as a court, are the tests referred to above, sufficient to identify it as a tribunal as distinct from court?

Prior to the setingup of the Family Court, all matrimonial matters were within the purview of regular civil or criminal courts (Section (S.) 125 Criminal Procedure (Cr.P.) Code for maintenance). It was the Law Commission (54th *Report*) which recommended the establishment of one single court for dealing with all problems of preserving the families without the conventional procedure dominated by the adversary system (which system being not suitable for disputes concerning the family). The Family Courts did not change the substantive law. It only provided a new, an exclusive forum. That should not mean that the new forum ceases to be a court and becomes a tribunal.

Significantly, no statute has defined a court. The only statute which defines court is the Indian Penal Code where the definition is of 'Court of Justice' (S. 20). The expression is significant - Court of Justice, not a mere court of law. Maybe - justice according to law. What is important is justice. It defines the words 'Court of Justice' to denote 'a Judge who is empowered by law to act judicially alone, or a body of Judges which is empowered by law to act judicially as a body, when such Judge or body of Judges is acting judicially'. So also it is the Indian Penal Code alone that defines a 'Judge' (S. 19). It says: 'The word 'Judge' denotes not only every person who is officially designated as a Judge, but also every person who is empowered by law to give, in any legal proceeding, civil or criminal, a definitive judgement, or a judgment which, if not appealed against, would be definitive, or a judgement which, if confirmed by some other authority, would be definitive, or who is one of a body of persons, which body of persons is empowered by law to give such a judgement'.

The illustrations under the section make it clear:
(a) A collector exercising jurisdiction in a suit under Act 10 of 1859 is a Judge.
(b) A magistrate exercising jurisdiction in respect of a charge on which he has power to sentence to fine or imprisonment with or without appeal, is a Judge.
(c) A member of a panchayat which has power, under Regulation VII, 1816, of the Madras Code, to try and determine, is a Judge.
(d) A magistrate exercising jurisdiction in respect of a charge on which he has power only to commit for trial to another court, is not a Judge.

So, the courts are courts of justice presided over by a judge who is empowered by law to act judicially and to give a binding and authoritative judgment. (See *Brajnandan Sinha* Vs. *Jyoti Narain*, All India Reporter (AIR) 1956 Supreme Court (SC) 66). It is not the Criminal Procedure Code or the Civil Procedure Code or the Indian Evidence Act that makes the court a court. Procedure could be any judicial, legally recognised procedure. Suppose the present Procedure Codes are replaced by a simple, non-technical procedure, the courts will not cease to be courts. So also, instead of the Indian Evidence Act, if we adopt a simple rule of evidence based on principles of natural justice, it cannot be said that the courts will not be able to give any definitive judgement. In fact there is such a need for change in our procedural law and the Evidence Act, for one of the main reasons for delay in courts is the procedural hurdle and the rules relating to receipt of evidence.

Similarly the other test that the judges in courts are 'generalists' and deal with a variety of matters and may not get expertise, while the tribunals dealing with a specified subject may acquire expertise, may not hold good while distinguishing a court from a tribunal. In fact judges do acquire expertise, in the matter of procedure, in the matter of evidence and assessment thereof, in the matter of interpretation of statutes and documents and in the matter of giving judgements. Even otherwise, very often a judge is designated as a Special Judge or a Special Court as in corruption cases or under Terrorists and Disruptive Activites (Prevention) Act (TADA) and as such he would be dealing with only a particular field of adjudication. Yet, he is still a court and not a tribunal.

Sathe's main apprehension is that if Family Court is considered as a court and not a tribunal, the judges would be tempted to bring in the procedure which is prevalent in the ordinary courts and 'the Family Court's effort to innovate the procedures and be informed by considerations of gender justice may be discouraged'. As he rightly says: 'The Family Court ought not to become another court. It must emerge as a tribunal ready to make innovations in its procedures equipped with sufficient expertise' (p. 62). That does not mean that it should be categorised as a 'tribunal'. If the litigants and women activists are disillusioned by the functioning of the Family Court, it is because the state governments and the High Courts have not understood the purpose for which such courts are to be established. Many High Courts have framed rules in a mechanical fashion, some of the rules being contrary to the Act itself. The Act specifically empowers the High Courts to frame rules or guidelines for the purpose of adopting innovative procedures by the judge, and no High Court has framed such rules. If, per chance, a judge brings in any innovation, there is no guarantee that, in Appeal, the High Court would appreciate it. Judges of the Family

Court are recruited from the regular judicial service - mostly on an *ad-hoc* basis - with no training on the methods of conciliation or non-adversary dispute settlement and some with no commitment to gender justice. This is further compounded by the fact that there is no Family Division in any High Court.

Sathe has, similarly, included Consumer Courts (or the Forums) under the Consumer Protection Act, 1986 as 'tribunals'. What has appealed to him are the deprofessionalised composition of judicial and non-judicial members sitting as judges, the three tier system making it autonomous from the courts, excepting the provision for appeal from the National Commission to the Supreme Court, and the informal nature of the procedure to be followed by these Forums. However, would these criteria make these tribunals in any way different from 'Courts of Justices'? The Consumer Courts have not created any new rights nor do they provide for any remedy. They are only additional forums. They are not even exclusive forums. The judgements of these forums are definitive judgements. Sathe has rightly lamented upon the governments' 'lackadaisical attitude' towards these forums. He apprehends that 'soon there will be total disillusionment of the consumers against this new system. Those whose interests the system has jeopardised would doubtless be happy, if this system meets with a failure' (p. 164). With the delays in disposing of matters, with sufficient number of courts not being established and with increasing technicalities, these courts, like the Family Courts are soon going to be like any other courts!

Sathe has categorised tribunals under different headings:- Single Member Tribunals with Judicial Chairperson, Single Member Tribunals without Judicial Person, Multi Member Tribunals with Judicial Presidents, Multi Member Tribunals with Judicial Presidents, Multi Member Tribunals with non-judicial members, Administrative Tribunals, Domestic Tribunals, and Statutory Arbitrations, etc. He has discussed Family Courts and Consumer Courts (the latter under the title 'Grievance Redressal System') separately.

Some of these tribunals can be as well considered as 'courts' as analysed above. Some of the tribunals like the domestic tribunals such as the Bar Council or the Council of Architecture or the Medical Council, etc., are all really tribunals and cannot be considered otherwise. So also statutory Arbitrations under the Aircraft Act or under the River Boards Act or under some of the University Acts, etc., are all tribunals.

However, the various other tribunals discussed under several other statutes could be considered as a part of administrative law. Every administrative act is bound to affect some citizen or the other. While a citizen may not have an appropriate legal remedy in the ordinary courts, the administration itself cannot ignore the consequences of its acts of commission or omission on the citizen. To the extent the administration provides for a suitable 'grievance redressal system' for the citizens, to that extent the administration becomes smooth and tension-free. That is how in very many statutes, there is the initial stage when an officer takes a decision, sometimes after hearing - call it administrative or quasi-judicial. If a citizen is not satisfied with the same he can take it before a higher officer who may decide as a *persona designata* or as tribunal. The Acts may differ with regard to the scope, powers and composition of the tribunal. But all said and done, it is still a part of 'grievance redressal system' - which is the genesis of all administrative law.

The trouble with most of these tribunals is the excessive judicialisation, excessive legalism, delay, complexity and costs (e.g., Customs, Excise and Gold (Control) Appellate Tribunal (CEGAT) or some of the Appellate Tribunals). In most of these Tribunals retired High Court or Supreme Court Judges are appointed. Naturally, the appointments would be for a short duration, not exceeding three years. During this period neither any expertise is acquired nor any significant jurisprudential contribution is made. Sathe has made a very useful suggestion, to have a common law on tribunals prescribing the procedures, powers, mode of appointment, qualifications of members and provisions for appeal or review. If such a common law is enacted, it would not only speed up the disposal of matters before the tribunals, but would also minimise the excessively wide and arbitrary exercise of discretionary powers vested in some of these tribunals.

Sagade, Jaya, *Law of Maintenance: An Empirical Study*, N.M. Tripathi Private Ltd., Mumbai 1996, Pp. xxiii+224, Price: 100.

While there are any number of books on the law of marriage which would incidentally deal with the law of maintenance - mostly cursorily -, there is hardly any book which treats the law of maintenance substantially. Jaya Sagade's book which, as S.P. Sathe, her guide, says (p. vii) 'has grown out of a dissertation submitted by the author for the degree of Ph.D. in Law at the University of Pune', fills up this lacunae in a major way.

Under the Constitution every man and woman have been guaranteed the right to equality Article (Art. 14) the right to non-discrimination on the ground of sex, (Art. 15) and above all the right to live with dignity and liberty (Art. 21). Yet, our law of maintenance is based on perpetual inequality between men and women, keeping women economically dependent on men. It is still a part of the patriarchal social order in which husband is the wage earner/protector and wife the housekeeper/mother to be protected by the husband. This notion 'of protection implies inequality and weakness, a power imbalance ....' (p. 28), which the law has failed to address. Sagade wants to apply the analogy of Reservation Policy - a temporary measure, for ameliorating the conditions of the weaker sections and socially disadvantageous sections of the society. To improve their lot, however, mere reservation policy is not enough. Other efforts will have to be made to change social and cultural values by education. So also in the case of law of maintenance where the wife/ex-wife depends on the husband, it should be considered as a temporary measure. If in the meanwhile opportunities are made available to women to become economically self-sufficient and proper education is given to bring change in their social and cultural values, they could become free from being victims of the present patriarchal system. Sagade hopes: 'It is expected that a day will come, when this provision will wither away from the law books, on establishment of an egalitarian society' (p. 29).

The book begins with a brief historical survey of the position of women in India, without which one will not be able to understand the law of maintenance as is applied. There was a time when women were equal to men in position, power and status. However, during the last about 1,000 years women were reduced to occupying inferior position and were made to feel subordinate to men in all walks of life. It is only during the last about five decades that this trend is being resisted and women are asserting themselves to regain status and power.

The author then considers maintenance under two headings - as an ancillary remedy and as an independent remedy. Under the first, the right to maintenance is considered as a part of matrimonial law. Thus, unless a petition for matrimonial remedy, i.e., petition for divorce, judicial separation, nullity or for restitution of conjugal rights, is filed, the court has no jurisdiction to grant maintenance. This has led to a feeling that unless a relief in a matrimonial matter is granted, no relief by way of maintenance can be granted. Of course, all the marriage laws such as the Indian Divorce Act, or the Hindu Marriage Act (HMA), the Parsi Marriage and Divorce Act, etc., provide for granting alimony *pendente lite*. This is only with a view to seeing that a party (wife) to a proceeding should not suffer during the pendency of the proceeding by reason of poverty. The main consideration, as can be seen from the reported cases, is whether she has an independent income for her support. If she has, the courts are chary of giving a reasonable amount. This is all because maintenance is still a charity and not an obligation. It is difficult to appreciate why the courts should consider wife's independent income for determining husband's liability. The more appropriate test at the interim stage would be, how much the husband would have spent on his wife if she was living with him, and, if on account of the dispute she has suffered any discomfort, such as being thrown out of the matrimonial home, or on account of want of facilities, how much she should be compensated. At the interim stage, the marriage still subsists and no husband should be allowed to avoid his obligations on the basis that wife can stand on her own legs.

However, as far as permanent alimony is concerned, different considerations may arise. If a matrimonial petition ends in divorce, wife's independent income would be a relevant factor, because alimony is granted on considerations of public interest that wife should not become a destitute and be not compelled to adopt a disreputable way of life.

Under all matrimonial laws permanent alimony can be granted at the time the main matrimonial petition is disposed off by 'passing any decree'. The expression 'passing any decree' led to different interpretations by different High Courts. However, the Supreme Court in the case of *Chand Dhavan* [1993] purported to settle the controversy by saying that if the court rejects a matrimonial claim, it 'certainly does not pass a decree in terms of S. 25 (HMA) for its decision has not moved or done anything towards, or led through, to disturb the marriage, or to confer or take any legal character or status' (p. 53). Therefore, no alimony could be granted. Sagade has rightly criticised this judgment and has submitted that this decision needs to be overruled by a larger Bench of the Supreme Court. If the basis of alimony or maintenance is public interest and gender justice, the technical considerations, whether a petition is dismissed or allowed, become irrelevant. Dismissal of a petition is no test for determining whether two persons can be compelled to live together against their will.

Maintenance, as an independent right, is recognised only under the Hindu Law, i.e., the Hindu Adoption and Maintenance Act. It is here that we have a definition of maintenance which includes provision for food, clothing, residence, education, medical attendance and treatment - thus covering the basic needs of life. However, in real terms all these things would depend upon the husband's status and financial position.

The Act says that a wife is entitled to maintenance under this law. Questions have arisen whether wife would mean only a wife whose marriage was valid according to HMA. The courts have taken conflicting views. The Andhra Pradesh High Court has rightly held that wife contemplated by the Act means 'a Hindu wife whose marriage is solemnised' (p. 66), as any other interpretation would result in injustice for a wife who lived with her husband only to be told that her marriage is not valid. Sagade has rightly said that our judiciary should be more responsible and responsive to the emerging practical problems, for which a technical construction of a statute may not give real answers.

There are other problems under this Act, relating to interim maintenance and payment of Court fees. Sagade could have also added the other major problem - the delay and expenses involved in a suit in a Civil Court. Similarly, we have no statistical survey of the number of such suits pending or disposed off in any court. The Act has mainly remained as a piece of legislation on paper with no impact as a real measure for getting maintenance.

The other independent remedy for maintenance is under the Criminal Law - S. 125 of the Criminal Procedure Code. It is a secular provision available to any destitute wife belonging to any community or religion. It does not create any substantive right nor can it be considered as a permanent remedy. It is left to the magistrate to grant maintenance or not. One of the important requirements is that wife should be unable to maintain herself. Thus, it is not based on any principle of husband's obligation to maintain his wife. Here again the courts have taken the view that wife should be a legally wedded wife. Sagade has rightly criticised this approach of the Court - including the Supreme Court - as it has failed to realise the social realities and plight of many wives - maybe second wives - who are factually married but whose marriage is legally considered to be invalid.

The amount of maximum maintenance that can be granted is only Rs 500/- per month - which at the present state of inflation would not even guarantee two square meals a day to any person. This figure has remained the same in the statute since 1955. Sagade has rightly said that there is no justification for fixing a ceiling on the quantum of maintenance. As she says, the very fact that there is a ceiling operates as a 'psychological deterrent' (p. 88) and that is one of the reasons for granting a meagre sum as maintenance. Despite the Law Commission's recommendation [1991] and a private member's Bill to abolish the ceiling, no step has been taken to amend the law, so far.

Under the Muslim law a divorced wife is not entitled to any maintenance. There is a provision for maintenance of a divorced wife only during the period of *iddat*. Even when the marriage is subsisting, if a neglected wife files any application for maintenance, the husband would frustrate the proceedings by pronouncing oral *Talaq* to his wife and would get her divorced. That is why when the Code was revised, the ambit of S. 125 was widened to include divorced wife. However, when it came to Muslim wives, the magistrate was empowered to cancel an order of maintenance, if it could be shown that she had received what she was entitled to receive on divorce, under the Muslim Personal law, viz., the *Maher* (dower) and also the amount for the *iddat* period. In reality *Maher* money used to be a small sum and Muslim wives had no choice. Many courts have taken the view that the question of adequacy of *Maher* money could not be gone into. However, in *Bai Tahira* case [1979], Justice Krishna Iyer said that the *Maher* money should be adequate enough to keep the (wife's) body and soul together. He said: 'The Chapter IX of (Criminal Procedure Code (Cr.P.C.) has a social purpose. Ill-used wives and desperate divorcees shall not be driven to material and moral dereliction to seek sanctuary in the streets. The key-note of S. 127 is adequacy of payment which will take reasonable care of her maintenance..... The payment of illusory amounts by way of customary or personal law requirement will be considered in the reduction of maintenance rate but cannot annihilate the rate unless it is a *reasonable substitute*. The only just construction of S. 127(3)(b) is that Parliament intended that the divorce should not derive a double benefit' (p. 102). This was an ideal interpretation. It preserved the Muslim personal law in tact. At the same time it guaranteed the divorcee wife a reasonable amount towards her maintenance.

Unfortunately, this was undone in *Shah Banoo's* case [1985] by making observations which were all beyond the case in hand. Observations were made to the effect that the Holy Quran mandates that it is the husband's duty to maintain a divorced wife. Together with this, observations were made enjoining the State to pass a Uniform Civil Code. These occasional outbursts without proper argumentation and on wrong premises have always had a negative effect. This is what happened in *Sarala Mudgal's* case [1985] when Justice Kuldip Singh Made similar observations for effecting national integration! All such observations have been perceived as a threat to the existence of Islam. The Government brought Muslim Women (Protection of Rights on Divorce) Act, 1986,which literally took away whatever rights Muslim women had achieved through courts. It is unfortunate that though petitions challenging this Act on the ground of bias and discrimination, are pending in the Supreme Court for the last more than five years, it has not felt the need to dispose it of early (though it could chastise the Government for being slow in passing Uniform Civil Code).

Sagade's main contribution is in her empirical study of the cases of maintenance decided by the trial Courts in Pune. In fact, such a study on an all-India basis is needed, as she says '(t)o find out the discrepancy between normative law of maintenance and functional law of maintenance' (p. 111). She selected a period of two years 1986 and 1987 and practically went through each case involving the issue of maintenance. And it was not an easy job. Under the Hindu Marriage Act, she studied 1,129 cases and has analysed them table-wise, under different headings. Her study includes 38 cases under the Special Marriage Act, 1954, and 27 cases under the Indian Divorce Act. Similarly she took into account 500 applications under Sections 125 to 128 of the Cr.P.C.

While it is not possible, in this review, to deal with all the detailed analysis she has made, her observations on these cases are very relevant. One of the most important observations is that in a large number of cases maintenance was not claimed by the wives though they needed it. What is regrettable is that no efforts were made to make the woman aware of her legal right to get maintenance under sections 24 and 25 of the HMA. So also our courts grant meagre maintenance and out of proportion to the husband's income. Very often the judges were too technical and would not know that in an unequal fight, the court has a duty to tilt the scale in favour of the weak for the purpose of doing justice.

Sagade's concluding remarks are very apt. She rightly expects an interventionist's role by the State. She has suggested various amendments to the existing provisions of Sections 125 to 128 of the Cr.P.C. One of the interesting suggestions is that there should be one uniform law of maintenance for all persons, irrespective of the religion to which they belong. She also suggests that because of the meagre amounts granted by courts having no logical relation with the incomes of the husbands, specific guidelines will have to be framed for granting adequate maintenance. Since maintenance includes food, clothing and home, it is necessary to develop the concept of the right of the wife to a matrimonial home. Another important suggestion is that the State should evolve a scheme for supporting destitute and indigent persons. There are many cases where the husband himself is not in a position to pay adequate maintenance due to his own poverty and, in such a case, granting of a paltry sum will be worse for both. The State, in such a case, must offer shelter, food, clothing and, if necessary, formal education and training to give the deserted wives opportunities to get them involved in some job or work. Above all maintenance must be considered as a means to liberate and empower woman, and not as an instrument to reduce her to bondage for ever.

REFERENCES

Bai Tahira v. *Ali Hussain*, 1979; All India Reporter 1979 Supreme Court 362.

Chand Dhavan v. *Jawaharlal Dhavan*, 1993, II (1993) *Divorce and Maintenance Cases* 110.

Law Commission, 1991; *Report on the Code of Criminal Procedure, 1973*, Government of India, New Delhi.

Justice H. Suresh (Rtd)
'Ann Abode', St. Martins Rd.,
Bandra, Mumbai - 400050.

Caufield Catherine, *Masters of Illusion: The World Bank and the Poverty of Nations*, Macmillan, London, 1996, 1997; Pp. xii+432, Price: £ 20; (£10 for sale in India only).

This is an able and detailed assessment of the first fifty years' performance of one of the major international institutions launched with great idealism after World War II. It is not a heavy tome of sustained and rigorous analysis but a series of incisive and well-documented critiques in an easy and readable style. But it covers the ground very thoroughly and reviews the policies and performances (positive and negative) of each of the presidents of the Bank during the period. The issues are clearly set forth and are dissected skillfully. As the publishers' blurb says: The author 'peels back the World Bank's bureaucratic layers to reveal a development agency so focused on economic factors and political interests that it has consistently failed to see the human equation'.

The Bank's purpose, as defined by its founders, was 'to assist in the reconstruction and development of territories of members by facilitating the investment of capital, for productive purposes' (p. 330). By the 1960s an explicit mandate was added to this, namely, 'to fight world poverty ... - a condition of life so degraded by disease, illiteracy, malnutrition, and squalor as to deny its victims basic human necessities' (p. 330).

'Perhaps the key assumption underlying the Bank's creation was that there was a condition called underdevelopment and that virtually every country in Asia, Africa and Latin America suffered from it. According to this view, scores of distinct nations, as well as thousands of regional cultures, are indistinguishable - and myriads of social, political and economic problems are merely aspects of a single global crisis' (Pp. 333-34). Such a situation calls 'for the creation of a centralised agency able to apply a uniform remedy: Development. That crude and inadequate analysis is still the central tenet of the Bank's philosophy' (p. 334). Another assumption was that 'poor countries cannot modernise without money and advice from abroad' (p. 334).

In 1972, the Bank said that 800 million people lived in absolute poverty. That number has since increased by 60 per cent to 1.3 billion, out of a world population of 5.5 billion. The growth in absolute poverty has not kept pace with population growth, the proportion of the developing world living in absolute poverty has declined from 40 to 25 per cent. That is what poverty reduction amounted to at the end of half a century.

'Whatever its enthusiasm for the task, the Bank seems singularly ill-placed to advise anyone on free markets, private enterprise and the beauty of competition. Despite the ideological commitment to these principles, the Bank has more in common with governments than with private enterprises..... If a Bank project fails, the Bank suffers no penalty. Its borrowers, on the other hand, suffer twice - from the direct consequences of the failure and from having to repay the loans that financed it - and very often, another loan for a new project to put things right' (p. 288).

As to the assumption of poor countries needing money (capital) for development from abroad the situation today is piquant. '(T)oday the developing world saves and invests in their own economies at a higher rate than do the United States and Europe. In any case, the hundreds of billions of dollars developing countries borrow from abroad each year are more than canceled out by the hundreds of billions they send back each year in debt service. In 1944, for example, the developing world received $ 167.8 billion in foreign loans and paid out $ 169.5 billion in debt service - a net transfer from the poor to the rich nations of $ 1.7 billion' (p. 335).

The almost inevitable conclusion is: 'The past half century of development has not profited the poorest people, nor the poorest countries.... On the other hand, there are many who *have* profited from development': Bank's bureaucracy and the bureaucracies of countries that have done business with it, many heads of government, well-connected contractors, exporters, consultants and middlemen. 'Given all this, and given the fact that development funds, including the World Bank's, are ultimately supplied by the ordinary taxpayers in donor nations, there is much truth in the saying that development at least in the monopolistic, formulaic, foreign-dominated arrogant and failed form that we have known is largely a matter of poor people in rich countries giving money to rich people in poor countries' (p. 338).

The two principal causes of this tragedy come out very prominently from the detailed narrative. One, perhaps the way of all flesh, the way human organisational structures inevitably become bureaucratic, develop and swerve away from the original ideals with which they are started. And second, the economic ideology that was the basic assumption on which the World Bank was based and functioned.

As to the first, it is an abiding historical finding that human bureaucratic structures, in course of time, develop their own inner life compulsion and politics which overwhelm the original ideals. In the course of time as the original pioneers leave or retire and their place is taken by bureaucratic professionals the original inspirations and ideals are subverted and the institutions begin to serve ends that are way away from the original ones.

This is not the story only of the World Bank but the way all national and international human structures function and develop. As a matter of fact, a similar book, like the one under review, can be written about the other international institutions like the International Labour Organisation (ILO), Food and Agriculture Organisation (FAO), World Health Organisation (WHO), etc., with equal conviction and documentation. In that sense the World Bank is the species of a large genus.

The second cause, that of the underlying ideology of the Bank, its clients and officers is in a way equally fundamental. An observer remarked in 1988: 'A lot of what is wrong with the World Bank ..... can be traced right back to where the officers of the Bank got their training. They're mostly economists .... they all went to the same few schools - Harvard, MIT, Stanford, Oxford, Cambridge, Chicago - and they all learned the same thing' (p. 222). 'By education and lifestyle, Bank officials from developing countries have more in common with the political and social elite in the industrial nations than they do with poor farmers and labourers who form the majority of their compatriots' (p. 226).

And what do they learn by way of economics in these well known places of learning round the world? Though basically economics is an art, its votaries during the last century and half have been vainly endeavouring to make it a science. This has been done by importing mathematics into economics on such a scale that if mathematics is a language economics has become merely a dialect of it. It has in this form ceased to be a social or human discipline. Dealing only in models (usually mathematical) the economists have come to hate reality because it does not behave as the models. No wonder those trained in such a discipline are not able to deal with human and cultural problems, except in a hamhanded manner.

No wonder that with such a deadly combination of the two, there results a tragedy of world proportions.

N.V. Sovani
Former Professor
Gokhale Institute of
Politics and Economics,
Pune.

Dutt, Gaurav, *Bargaining Power, Wages and Employment: An Analysis of Agricultural Labour Markets in India,* Sage Publications, 1996, New Delhi, Pp. 224, Price: Rs 295/-.

Studies on wages of agricultural labourers encompass various issues like factors affecting wage rates, effects of changes in wage rates on demand for and supply of labour, movement and behaviour of money and real wages over a period of time across regions, actual process of wage determination, etc. These issues provide important insights for understanding the working of agricultural labour market and are helpful in providing explanations for existing quantum of employment and level of wage rates in agriculture from policy point of view. The literature on these issues, however, points out that our understanding in this regard especially in terms of the exact process of wage determination has remained inadequate. This can possibly be attributed to the existence of a large number of unorganised, unskilled labourers, informal exchange relations, personal ties and interlinked transactions which characterise the Indian agriculture. Similarly, heterogeneity in the agricultural labour market due to location specific, socio-economic, physical and institutional factors, makes it difficult to formulate a hypothesis on wage determination which can be applied to situations across regions which are at different stages of development. As a result, the puzzle of downward rigidity of wages in spite of the existence of involuntary unemployment (which cannot be explained by the neoclassical theory) is sought to be solved by various theories which provide alternative explanation for the same phenomenon. The earlier theories like subsistence wage theory and the theory of marginal productivity have doubtful validity both theoretically as well as empirically. Various demand and supply models take into account different factors affecting wage rates but their major drawback relates to their inability to explain the stickiness of wage rates in spite of unemployment among the labourers. This particular problem is sought to be solved by 'efficiency wage theory', 'implicit co-operation theory' and 'insider-outsider' theory. The efficiency wage theory postulates wage-productivity- profit nexus, the latter two theories consider the rent seeking behaviour and implicit co-operation among workers, respectively, for explaining wage determination process. But these are also not free from criticism due to the differences observed in the empirical verification of the theories and the ground realities in the village labour markets.

Against this background, Gaurav Dutt's present book provides a fresh outlook for explaining the process of wage determination in the rural agricultural labour market in terms of a bargaining model. The author tests the model empirically and comes to the conclusion that the results are consistent with a number of stylized features of the Indian labour market. The major amongst these features are uniformity of wage rate for a particular operation and labourers of the same gender, spatial and temporal variability of wages (due to changes in the demand and supply conditions), involuntary unemployment and absence of undercutting of wages. The author claims a general applicability of the proposed model.

The book extends over eight chapters. After the introduction and an extensive review of literature in the area of wage and employment of agricultural labourers in the first and second chapters, respectively, the author chooses to depart from the existing set of theories. In the third chapter, the author explains the idea of tacit collusion among labourers which maintains the rigidity of wage rates. The bargain-theoretic model explaining the process of agricultural wage determination through bargaining (between the groups of labourers and employers) is presented in the following chapter. Chapters five and six contain the estimation results of the basic model and the extended model incorporating analysis of gender wage disparity. Finally, the model is extended to explore a number of issues related to the operation of agricultural labour markets and some simulation results are presented in Chapter seven. This is followed by the concluding chapter wherein the author summarises the discussion on the key arguments and findings presented in the book.

The focus of the book is on determination of wage and employment through the process of bargaining between the groups of village labourers and employers as a whole, who make offers and counter-offers to arrive at an equilibrium wage rate. The first important distinguishing feature of the book is the application of game-theoretic framework to explain the process of bargaining. This idea, which is central to the book, is quite new in the area of literature on agricultural labour. To solve the bargain-theoretic model, the author adopts Nash bargaining solution, which has the characteristic feature of being generally applicable. In simple words, given a bargaining game comprising of a set of bargainers, set of possible agreements, disagreement event and a utility function for each agent, it can be demonstrated (as was demonstrated by Nash) that there is a unique bargaining solution which satisfies the axioms of pareto optimality, in variance to equivalent utility, independence of irrelevant alternatives and symmetry. However, it can be shown that symmetry requirement is not necessary to realise in a game theoretic framework the Nash bargaining solution. This is how the author brings in the concept of asymmetric bargaining between the groups of labourers and employers. As the author says, despite the variations in actual bargaining process in village labour markets, their results in terms of wage and employment outcomes can be approximated by the asymmetric Nash bargaining solution. Further, the author attributes the absence of undercutting wages by the unemployed labourers to tacit collusion among labourers which sustains the bargained wage. The incentive to collude tacitly is derived from the possibility of getting a surplus over the disagreement wage (alternate earnings) of the labourers due to their bargaining capacity. Another important sociological reason for this phenomenon is the fear of social sanctions if the labourer resorts to undercutting wages. The support for this particular line of thinking can be traced back to the earlier literature by economists [Rudra, 1982] as well as sociologists [Srinivas, 1987; Beteille, 1974]. With these initial concepts, the author presents the bargaining model which is jointly defined by the profit function (which is determined by prices of inputs and output), the labour demand function (which captures the influence of various demand enhancing factors and gives the elasticity of demand) and employment and the bargained wage function, given the prices and bargaining coefficient (β). The model thus jointly determines employers' profits, employment and the bargained wage rate. It also tells us that the relative net gains from bargaining are directly proportional to relative bargaining powers of the groups of employers and the labourers for a constant wage elasticity of labour demand.

The important distinguishing feature of the book as mentioned above is the application of the idea of bargaining to explain the process of wage determination implying that factors over and above the economic factors like disagreement payoffs and labour productivity are at work in the process of wage determination. The author looks at the process as a bargaining game wherein labourers too are in a position to influence the wage rate. The earlier theories attribute the initiative for maintaining downward rigidity of wages either to the employers (efficiency wage theory) or to the labourers (implicit co-operation theory, insider-outsider theory), unlike the bargaining model presented in the book. However, though the labourers here have the ability to bargain, their bargaining power is found to be less than that of the employers. The benefits from their bargaining power are limited in the sense that they are just able to derive a marginal surplus over their disagreement payoff. For example, the estimates of the coefficient of bargaining for employers comes out to be 0.87 which means that the coefficients for labourers should be 0.13, making the coefficient of bargaining for the two together as unity. Hence the hypothesis of symmetric bargaining power is rejected. The other important hypothesis of gender equality of bargaining power is also rejected. Bargaining power of female labourers (estimated at 0.03) is less than half of that for the male labourers (estimated at 0.08) and is significantly lower than that of the employers. Here the author tries to explain the gender wage gap in terms of differences in the bargaining powers of male and female labourers. Comparative static results point out that equal bargaining power of labourers and employers and that of the male and female labourers has decisive distributional impact. Under conditions of symmetric power, wage rates and wage earning of male and female labourers would rise substantially, accompanied by a fall in the profits of the employers.

Notwithstanding all this, the major question which remains to be answered in the book is the determinants of bargaining power of both the parties. This limitation of the book is, in fact, frankly accepted by the author. Two probable reasons which the author provides for differences in the bargaining power are differences in risk aversion and in the discount rates of the two groups. Besides, one of the non-economic factors which is not mentioned by the author but which is very much an integral part of the Indian society is the traditional institution of caste which leads to differential access to various resources and differences in political power enjoyed by individuals from different castes. Hence, a higher caste employer might be in a better position to bargain with lower caste labourers. Secondly, doubts can be raised about the prevalence of tacit collusion among labourers against the background of changing nature of village societies. Though the village is still the domain for operation of the labour market, it might get affected by the modern stimuli, and the assumption of social sanctions of the village affecting the economic processes may not hold true in some of the cases. Thirdly, it has to be seen whether the concept of bargaining can be applied to all kinds of agricultural labour market regions, ranging from interior tribal areas like Chota Nagpur (Bihar) to the commercialized agricultural labour market regions like Punjab. The concept seems to be relevant in the latter case where the importance of timely completion of agricultural operations with the help of seed- water - fertiliser technology, among other things, increases the bargaining power of the labourers. But in the case of the former, i.e., underdeveloped regions, especially the tribal areas, exploitation of the labourers in the form of lower wage rates received, cannot be ruled out. In such cases, the concept of tacit collusion may be realised due to, say, the fear of social sanctions, if any, so that there is no tendency to undercut the wage rate. However, the wage rate itself might be determined solely by the employers. It is unlikely that the labourers are capable of bargaining with the employers for wage rate in such a situation. As the author himself mentions, a detailed research on the concept of bargaining power would provide background for understanding the theory more clearly and for making policy prescriptions. It is certain that the book is an important addition to the theoretical literature on agricultural labour markets and provides helpful beginning for future explorations in the area. Similarly, the empirical validity of the theory can only be confirmed with the help of micro - level studies in various regions. The book is well written and the author has to be lauded for the lucid style of writing which makes otherwise difficult concepts easier to understand.

REFERENCES

Beteille, A., 1974; *Studies on Agrarian Social Structure*, Oxford University Press, New Delhi.

Rudra, A., 1982; *Extra Economic Constraints on Agricultural Labour: Results of an Intensive Survey in Some Villages near Shantiniketan, West Bengal*, Asian Employment Programme Working Papers, ILO-ARTEP, Bangkok.

Srinivas, M.N., 1987; *The Dominant Caste and other Essays*, Oxford University Press, New Delhi.

Jayanti Ghanekar,
UGC-Fellow,
Gokhale Institute of
Politics and Economics,
Pune.

BOOKS RECEIVED

Currently, a large number of books are being published on Indian economic political and social problems and developments. We give below a list of books we have received with a request for a review. For want of editorial resources, it is not possible to review all of them though many deserve a critical review. Interested readers are requested to write to the editor indicating which of the following books he would like to review or write a full review article on. We shall be glad to do the needful. Readers are also welcome to review books recently published, but not appearing in the following list. As the contributors to this Journal are aware, all contributions published here are adequately remunerated.

Bagchi, Amiya Kumar, *The Evolution of the State Bank of India*, Vol. 2, *The Era of the Presidency Banks: 1876-1920*, State Bank of India and Sage Publications, New Delhi, 1997; Pp. 664, Price: Rs 450.

This second volume along with the first volume in two parts presents the first comprehensive history of the State Bank which opened its doors to public as the Bank of Calcutta on June 2, 1806. Both the volumes have to be read in conjunction. Based on the regionally disaggregated data in primary documents and archival records available in the State Bank, the total study brings them into some order and also insightfully conceptualizes afresh an important segment of our colonial past- the critical role played by the organised money market, that is, formal and government-regulated banking and financial institutions, in both shaping and supporting the British empire and the commercialization process in India. This particular volume analyses the working and activities of the three Presidency Banks of Bengal, Bombay and Madras and their impact on and relationship with the different sectors of the economy, like industry, agriculture, and domestic and foreign trade. In addition, the volume explores the paradoxical linkages between the three Presidency Banks established and regulated by adequately defined legal contracts and the indigenous informal, family-based money institutions functioning on trust. It as well traces the various changes in India's external payments mechanism and the links created between the Indian and London money markets, the successive regimes of monetary standards in India before the First World War and the severe disturbances in the exchange rate in the wake of the War. The links between the global economy and Indian economy established through flows of trade in commodities and of capital, their impact on regional economies, and the mediation by the British by selectively adopting or giving up the *laissez faire* policy are elucidated in detail.

Chopra, Ajai *et al.*, *India: Economic Reform and Growth*, Occasional Paper 134, International Monetary Fund, Washington DC, December 1995; Pp. ix+74.

This report is prepared as background to the International Monetary Fund's 1995 consultation (under Article IV) with India. It is a case study prepared as input for research into the relationship between adjustment and growth conducted in the Fiscal Affairs Department and the Policy Development and Review Department. Long-term growth trends, not only in output, investment, etc., but also in social sectors like education, are analysed. The results of India-specific studies of total factor productivity (TFP) are discussed. The stabilisation and adjustment strategy adopted by India in the wake of the 1991 crisis, the magnitude of fiscal adjustment, taxation, etc., are reviewed. The behaviour of private investment, its response to reforms, and the then surge in capital inflows and its impact on the economy are some of the other issues attended to in the report. Structural reforms, like trade reform, deregulation of the industrial sector, public enterprise reform and financial market reform, and their implications for investment and growth are studied.

de Wit, Joop W., *Poverty, Policy and Politics in Madras Slums: Dynamics of Survival, Gender and Leadership*, Sage Publications, New Delhi, 1996; Pp. 305, Price: Rs 395 (cloth).

This book is a combination of a slum monograph and an urban policy impact study. Its first theme concerns the grass roots slum realities in Madras, the praxis, the cultural and socio-economic background of slum men and women who face daily survival problems. How and why slums proliferate rapidly is analysed as the second theme which also deals with the impact of slum heterogeneity - people of different castes, religions, ethnic backgrounds and political affiliations, forming uneasy emergent communities. The third issue pertains to the nature and role of the local slum leaders, acting as brokers between slum dwellers and the authorities as well as between slum dwellers as electoral clientele and politicians. Slum policies since 1971, like shelter policy, slum upgrading, slum relocation, etc., and the relationships between various actors involved- engineers, bureaucrats, community development workers, politicians and the World Bank- are discussed and their outcome and impact are evaluated, as the fourth major issue in this book. Politics and its history, political culture and praxis, and its impact both on local slum life and on slum policy implementation, particularly during the M.G. Ramachandran (MGR) rule, form the fifth theme in the book. The final theme is concerned with the impact of culture and tradition on slum life, also their influence on slum policy implementation. The book additionally provides the case study of the inner-city slum, Chitra Nagar.

Dikshit, Ramesh Dutta (Ed), *Developments in Political Geography: A Century of Progress*, Sage Publications, New Delhi, 1996, Pp. 367, Price: Rs. 425/.

This volume marks the centenary of the discipline of political geography as an autonomous branch of scientific learning. It provides a holistic treatment of the past theories, current practices and emerging trends. It is divided into five parts: tracing the developments and trends in the discipline in the hundred years, the first part stresses the significance of the nation-state-territory relationship for the discipline. The second part is devoted to the traditional concerns of the discipline, like state-formation, nation-building, plural societies, spatial implications of local and regional government, and boundary studies, with focus on the changing boundaries of Europe. The third part is devoted to post-quantitative revolutionary political geography inspired by political sociology, and political economy and, particularly, reviews electoral geography. It also discusses the role of political geography in political economy and comes to the conclusion that geography as the science of space and place is integral to the pursuit of social science, and that the central focus of political geography is the role of the state in the operation of society and economy. Part IV analyses political geography at the global level, with emphasis on uneven development, new geopolitical order and international relations. The last part presents a discourse on the progress and scope of political geography as a social science.

Harshé, Rajen, *Twentieth Century Imperialism: Shifting Contours and Changing Conceptions*, Sage Publications, New Delhi, 1997; Pp. 276, Price: Rs 350 (cloth).

This study provides a bird's eye-view, through a radical prism, of imperialism which, in order to perpetuate itself, assumed various forms in the last 95 years. Their complex and shifting nuances and the inextricable links of imperialism with capitalism, especially Wallerstein's world system theory of capitalism, are analysed here. Admitting the lack of any definitional precision and clarity, the author expounds the concept of imperialism as 'an asymmetrical relationship of interdependence between materially advanced and backward societies' (p. 10). A *mélange* of theoretical and empirical components have jointly shaped this exposition which is structured around the US-led imperialism, the apex of the imperial pyramid in the post-Second World War phase, but at the same time this exposition is oriented from the standpoint of the Third World states, the objects of imperialism. Glimpses of such aspects of imperialism as the following are provided: main theories and concepts- Marxist, neo-Marxist and radical liberal- that explain the ontology of imperialism in its diverse phases, such as colonialism, neo-colonialism, sub-imperialism, proto-second tier imperialism, Gramscian hegemony and social imperialism; mechanisms, such as International Monetary Fund, World Bank, Nuclear Non-Proliferation Treaty and several other international and regional organisations, adopted by imperialist forces to combat or co-opt its adversaries; legitimisation of the US-led imperialism through the ideology of transnational liberalism; possibility of existence of imperialism outside the world capitalist system and, if feasible, reinterpretation of the Soviet policy towards the East European and the Third World states; the Third World's confrontation with imperialism; the role of colonial, neo-colonial and sub-imperial powers functioning under the US hegemony as well as the protest movements, including the non-aligned movement (NAM) and anti-apartheid struggles in South Africa, against them led by the Soviet Union and the non-aligned states.

Lieten, G.K., *Development, Devolution and Democracy: Village Discourse in West Bengal*, in *Indo-Dutch Studies on Development Alternatives Series*, No. 18, Sage Publications, New Delhi, 1996; Pp. 252, Price: Rs 250 (cloth).

The success of the Left Front Government in West Bengal since 1977 in ensuring development in a decentralised way with the democratic participation of the poorest classes is assessed in this book. The appraisal is based on primary field research in four separate environments (panchayats) in two dissimilar regions of the state. The composition of the panchayats is analysed in terms of caste, class, gender and its ability to strike a balance between an interventionist state and the access to and involvement of local population in the overall decision-making process. The intervention in the sphere of production relations (tenancy legislation, land redistribution and wage levels), in the forces of production (agro-inputs and poverty alleviation strategies) and, especially, in the political and cultural attributes is taken up for detailed investigation.

Mehta, Shekhar, *et al.*, *Controlling Pollution : Incentives and Regulations*, Sage Publications, New Delhi, 1996; Pp. 153, Price: Rs 250.

The study reviews the macro goals of India's environmental policy, the micro nature of operational provisions for enforcement of that policy, and the status of pollution in the country. The issues examined in relation to the existing regulatory policy regime are: the ambient standards for air and water quality; and the source standards for polluters, like factories and transport vehicles. Both of them are laid down independently, unrelated in terms of the volume of pollution generating activities. The problem of compliance is also discussed. Yet, the central concern of the book is the choice of alternative instruments, like economic instruments and market incentives, for abatement of pollution. Thus, the study draws on both, the economics of regulation and the economics of environment. It is argued that the optimal level of pollution is that at which the social benefits of a pollution causing activity and the social costs of pollution are equalised at the margin. However, since the application of such social cost-benefit calculus is not presently feasible for operational policies, the study accepts the ambient standards as laid down by the environment experts and searches for the least cost means of achieving those standards. The pros and cons of four alternative pollution control schemes are weighed with the help of an illustration of waste water treatment in the pulp and paper industry.

Rajagopalan, R. (Ed), *Rediscovering Cooperation, Vol. I- Bases of Cooperation, Vol. II- Strategies for the Model of Tomorrow, Vol. III- Cooperative in the Emerging Context*, Institute of Rural Management, Anand, 1996, Pp. Vol. I- 320, Vol. II- 480, and Vol. III- 500; Price: Rs 1,000 (for the set).

This set commemorates the Golden Jubilee of AMUL. The first volume of 17 papers examines the relevance of cooperation as a mode of behaviour and of cooperatives as an organised form of actualising cooperation. The papers are drawn from life sciences, economics, sociology, anthropology, ethics and political science. The second volume contains 18 papers which identify, document and justify innovative possibilities for cooperatives in irrigation, rural finance, minor forest produce, sericulture and fisheries. The third volume comprising 24 papers explores the ways and means that cooperatives should adopt to maintain their spirit and viability, to respond well to the challenges posed by the economic reforms. Themes discussed include role of state patronage, role of cooperatives in promoting equity, discrimination as a strategy for building an internal culture and for achieving within a cooperative organisational cohesiveness and socio-economic homogeneity, assigning to cooperatives common or community property rights, organising cooperatives for development of natural resources, choice between cooperatives and private firms as an organisational form, and so on.

Wallerstein et al., *Open the Social Sciences : Report of the Gulbenkian Commission on the Restructuring of the Social Sciences*, Vistaar Publications, New Delhi, 1996,

This Report on the restructuring of the social sciences explores how social science was historically constructed as a form of knowledge, why it was divided into specific, relatively standard disciplines through a process which begun in the late eighteenth century and culminated in 1945, and how the global developments since 1945 have necessitated the reconceptualising of this intellectual division. It elucidates such basic issues pertaining to social sciences as the validity of the distinctions among them, universalism of any discipline, cultural parochialism of the social sciences, implications of developments in the natural sciences and mathematics for the social sciences, etc. Finally, the Report discusses the blueprint for a new kind of organisational structure of the social sciences, the need for a multi-disciplinary as well as quasi-disciplinary approaches, in view of the budgetary constraints faced by universities all over the world.

INSTRUCTIONS FOR AUTHORS

Please follow the instructions meticulously. It will greatly expedite the editorial process.

SUBMISSION

All manuscripts should have been proof-read before submission. Send (1+2 copies), preferably one ribbon copy and two xeroxes, to the Editor. Mimeographed copies are acceptable if clearly legible. With the manuscript, include a cover letter identifying the author with his present or past position, address and telephone number. Mention any special circumstance concerning the paper, such as its earlier presentation at a meeting or a conference. We will assume that papers submitted to this Journal are not under consideration elsewhere.

FORMAT

All text, including block quotations, footnotes, and table headings, should be double-spaced and typed on one side. Use medium-weight, opaque, bond paper. All pages should be of the same size, preferably 8-1/2" x 11", and unbound. Leave a minimum left-hand margin of one and a half inches, and a minimum right-hand margin of one inch. Number all pages, including footnotes and/or references, consecutively.

SUMMARY

In every paper, there should be a summary strictly not exceeding 100 words.

TEXTUAL DIVISIONS

If a paper is divided into major sections, the introductory section needs no heading. Subsequent sections should be given titles typed in capital letters and placed at the centre of the page. Do not use roman numerals. If there are sub-sections, the sub-titles should be underlined and placed justified with the left margin.

QUOTATIONS

All quotations should be checked carefully for accuracy, and should be unaltered except for ellipses and bracketed insertions. Block quotations should be double-spaced and set off from the text by indentation.

FOOTNOTES AND REFERENCES

All footnotes and references should be at the end, first footnotes, then references. In the text, footnotes should be numbered consecutively by superscripts following the punctuation. Reference citations in the text should be enclosed in square brackets, as follows: [Author, 1965, p. 9]. References listed at the end should be arranged alphabetically by author and should include the following information: for articles - author, year of publication, title, name of journal (underlined), volume and issue number; and for books - author, year of publication, title (underlined), and publisher, in the following format. We convert underlining into italics.

Maital, S., 1973; 'Public Goods and Income Distribution', *Econometrica*, Vol. XLI, May, 1973.

Chakravarty, S. 1987; *Development Planning: The Indian Experience*, Clarendon Press, Oxford, 1987.

If a Reference is cited in a Note, the Note may use the shortened reference form:

4. For a critique of recent industrial policy proposals, see Marshall [Marshall, 1983, Pp. 281-98].

The full name of any organization or government agency should be spelled out first if subsequent reference is to be by acronym.

MATHEMATICAL AND TABULAR MATERIAL

All tables, graphs, figures, and illustrations should be numbered and amply spaced on separate sheets of paper indicating in a marginal note in the text where such material is to be incorporated. Mathematical equations should be typed on separate lines and numbered consecutively at left margin, using Arabic numerals in parentheses. Use Greek letters only when essential. The word *per cent*, not the symbol %, should be used in the text and the tables.

COMPUTER DISK

If the manuscript is on a computer, send a copy of it on a disk covering text, tables, graphs, etc.