

**REPORT  
OF  
THE RBI WORKING GROUP  
ON  
PLANNED PARTICIPATION  
OF  
COMMERCIAL BANKS  
IN  
RURAL ELECTRIFICATION**

**(Report submitted by the Working Group to the Reserve Bank of India on 15th May, 1978).**

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## CHAPTER 1

### INTRODUCTION

1.1 In order that commercial banks may play an increasingly important part in helping to step up agricultural production and reduce regional imbalances, it is necessary, among other things, to facilitate their planned participation in schemes of rural electrification aimed at area development and/or energisation of pumpsets. This entails various steps including bringing about of more effective coordination between commercial banks and the relevant long-term financial institutions such as Agricultural Refinance & Development Corporation (ARDC) and Rural Electrification Corporation (REC). For examining this question and recommending further necessary steps, the Governor of the Reserve Bank of India appointed in August, 1977, the following Informal Working Group with a request to forward their suggestions as early as possible :

1. Dr. B. Venkatappiah  
Director  
Central Board of the RBI  
Chairman
  2. Shri H.C. Sarkar  
Managing Director  
State Bank of India  
(since appointed Chairman  
Bank of India)  
Member
  3. Shri M.A. Chidambaram  
Managing Director  
Agricultural Refinance & Development  
Corporation  
Member
  4. Shri Ghulam Ghouse  
Managing Director  
Agricultural Finance Corporation Ltd.  
Member
  5. Shri J.K. Jain  
Chief Engineer (Minor Irrigation)  
Department of Agriculture  
Government of India  
(since appointed Chairman  
Central Ground Water Board)  
Member
  6. Shri C.V. Nair  
Joint Chief Officer  
Reserve Bank of India
  7. Shri B.K.N. Murthy  
Chief of Consultancy Division,  
Rural Electrification Corporation Ltd.
  8. Shri D.G. Borkar  
Deputy Chief Officer  
Reserve Bank of India
- } Conveners

1.2 The Working Group submitted an Interim Report on 10th December, 1977, recommending a large programme of pumpset energisation during the Five-Year period, starting from 1978-79 through the integrated resources of the commercial banks, ARDC and REC. This programme has since been accepted in principle both by the Planning Commission and the Reserve Bank of India. In a letter dated 9th March, 1978, to the REC, supporting the proposed programme, the Planning Commission has expressed the hope that steps would be taken for an early start of the programme in 1978-79. The Reserve Bank of India, on its part, has sent a communication dated 20th January, 1978, to all the commercial banks endorsing the programme and suggesting to the banks to make necessary provision in their credit budgets for 1978-79. Copies of these two letters are given in Annexures 1 & 2.

1.3 The Working Group now presents its final report which gives further details of the proposed pumpset energisation programme and also suggests a plan for implementing it.

1.4 In accordance with a suggestion made at the bankers' meeting held by the Deputy Governor, RBI, on 28th November, 1977, the Indian Banks' Association constituted a Study Team to assist the Working Group in spelling out the details of implementation of the proposed programme. The Study Team held three meetings with the conveners of the Working Group and examined the organisation and procedures necessary for a smooth implementation, specifically with regard to project formulation, appraisal and monitoring. Details of the documentation involved were also discussed. The various suggestions that came up in these meetings (see Annexure 3 for details) have been kept in view in drawing up the implementation plan for the programme.

1.5 In this context, the Working Group has also taken into account the recent experience of REC in sanctioning projects under its new Special Project Agriculture (SPA) category of loan. The scope, terms and conditions of the SPA category of loan are similar to what is envisaged under the proposed programme.

1.6 The present report is in five sections. Following this introductory section, there is a section on 'Background' which points out the importance of rural electrification in stepping up and sustaining agricultural production as well as in reducing regional imbalances and traces the growth of rural electrification programmes in the past, with special reference to the institutional finances involved. Next, there is a section on 'Proposed Programme' which gives the Working Group's analysis of the situation and recommendations on a programme of assistance to the State Electricity Boards for giving agricultural service connections by the commercial banks in concert with the other agencies and programmes already in this field. It gives the various features of the proposed programme viz. types of projects to be sanctioned, some by the banks alone and some in participation with the REC (with ARDC refinance available in both cases) and some by REC alone; the lending terms and conditions, and the process of project appraisal and monitoring. The next section of the report describes the recommended Implementation Plan. The next and the final section summarises the various findings and recommendations of the Working Group.

#### *Acknowledgements*

1.7 The members of the Working Group are grateful to Shri M. Narasimhan, the then Governor, Reserve Bank of India, who appointed this Group and also held some initial

discussions with the Chairman and Conveners on the subject to be examined by the Group. We are also grateful to Dr. I.G. Patel, the present Governor, to whom the Interim Report was submitted soon after his assumption of office, for pursuing the matter with the Planning Commission and the Government of India vigorously. The Group thanks the Planning Commission and the Government of India for prompt action. The officers and the secretarial staff of the Credit Planning Cell in the Reserve Bank of India and of the Consultancy Division in the Rural Electrification Corporation have done commendable work in preparing the basic material and assisting the conveners. We are deeply grateful to them. The work done by the three Conveners, Shri C.V. Nair, Shri B.K.N. Murthy and Shri D.G. Borkar, at all stages of the deliberations of the Working Group, and in the drafting of the interim and the final reports is gratefully acknowledged. Thanks are also due to the Indian Banks' Association for constituting a special Study Team to assist us in our deliberations. We are grateful to the Rural Electrification Corporation, Agricultural Refinance & Development Corporation, Agricultural Finance Corporation and the several Commercial Banks and the State Electricity Boards who made their officers available for discussions with the Conveners of our Group.

## CHAPTER 2

### BACKGROUND

#### *Progress of Rural Electrification in the past*

2.1 The ultimate potential for major and medium irrigation schemes in the country is estimated to be 57 million hectares (m. ha.) and that for minor irrigation schemes 55 m. ha. The latter is made up of 15 m. ha. from surface water and the balance of 40 m. ha. from ground water development. As on date, only about 50% of the ground water potential has been exploited. 70% of the exploitable ground water resources are in the six States of Uttar Pradesh, Bihar, West Bengal, Orissa, Madhya Pradesh and Assam. Rural electrification forms the backbone of ground water development because it provides cheap power for pumping the water. Diesel pumping and animal-operated water lifting devices are alternatives but comparatively costly.

2.2 Rural electrification in a planned way started only with the launching of the First Five Year Plan in 1951 when considerable efforts were made to harness the vast hydro and fuel resources for power development to provide electricity as a major input needed for economic growth in the country. A sum of Rs. 302 crores was invested in the power sector during the First Plan period, of which rural electrification took a modest share of Rs. 8 crores resulting in the electrification of 5,200 villages and the energisation of 35,000 pumpsets. The total investment in the power sector during Second Five Year Plan was of the order of Rs. 525 crores of which Rs. 75 crores represented the investment in rural electrification. This resulted in about 15,000 additional villages getting electricity and about 1,43,000 additional pumpsets getting service connections. The Third Plan period witnessed a significant increase in the Plan allocation for rural electrification: the original outlay itself was of Rs. 105 crores but the actual investment exceeded Rs. 153 crores. Severe drought conditions in the country during this period necessitated launching of crash programmes for rural electrification in many states. The results achieved during the Third Plan period were also sizeable insofar as 23,000 villages were electrified and 3,14,000 pumpsets energised.

2.3 A major shift in the national policy on rural electrification took place sometime during the mid-sixties. The National Development Council decided that the focus of rural electrification should henceforth be on pumpsets energisation for attaining self-sufficiency in food production, rather than mere electrification of villages and domestic and street lighting. In pursuance of this policy, and as a result of the recommendation of the All India Rural Credit Review Committee, the Rural Electrification Corporation was set up in July, 1969, with the main object of promoting development oriented rural electrification schemes in the country.

2.4 In the Fourth Plan, an investment of Rs. 852 crores was made in rural electrification through the following three channels.

	(Rs. in crores)
State Plans	552
Central Plan, REC	171
Institutional Financing	129
	<hr/>
Total	852
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By the end of the Fourth Plan, nearly 1.58 lakh villages had been electrified and nearly 25 lakh pumpsets were operating in the country.

2.5 In line with the changed strategy necessitated by drought conditions, and in view of the fact that ground water was a controllable source of irrigation so very necessary for high-yielding varieties of crops and the adoption of other modern agricultural practices, the importance given to rural electrification continued to be high when the Fifth Plan was formulated. An outlay of Rs. 1,098 crores was envisaged in the Draft Plan which was scaled down to Rs. 685 crores in the revised plan. However, the actual investment during the four-year period of the fore-closed Fifth Plan, that is upto March, 1978 has been as low as about Rs. 500 crores (Rs. 331 crores was actual upto March, 1977 and the balance estimated). Severe resource constraints which resulted in such a steep fall in the investment in the rural electrification sector over the last four years has meant that we are starting the next Five Year Plan with a huge backlog.

2.6 In conclusion, the progress achieved so far in rural electrification, with reference to the number of pumpsets energised, is as given in the following table :

	Pumpsets energised
Position at the beginning of First Plan	21,008
During First Plan	35,050
During Second Plan	1,42,846
During Third Plan	3,13,827
During 1966-69	5,76,073
During Fourth Plan	13,30,001
<i>During Fifth Plan</i>	
First 3 years (1974-77)	6,10,358
Fourth year (1977-78) (Anticipated)	2,70,837
	<hr/>
Position as on 31.3.1978	33,00,000
	<hr/>

#### *Role of REC so far*

2.7 In fulfilling its twin objectives of promoting agricultural production on the one hand (where there is ground water potential) and of reducing disparities on the other (e.g. by giving specially favourable treatment to drought prone and similar backward areas), the Rural Electrification Corporation has assumed the role of a developmental financing institution comparable to that of ARDC and IDBI in agricultural and industrial development. The operations of the REC are project-oriented and area-based. The schemes sanctioned by it are appraised and subsequently monitored from time to time by teams which are interdisciplinary. The REC has, as on 31st March, 1978, sanctioned 1915 schemes with a

REC loan component of nearly Rs. 800 crores. These schemes, when fully implemented, will result in the electrification of 1.38 lakh villages, and energisation of 9.27 lakh pumpsets and 1.4 lakh rural industries. The schemes sanctioned vary in their scope and coverage; there are 24 categories of schemes REC has evolved so far corresponding to the diverse needs in different parts of the country.

2.8 There are schemes for advanced, backward and specially under-developed areas with an average interest rate upto 7.75% p.a. with repayment spread over a period of 15 to 30 years. There are loans for special transmission lines and system improvement at an annual rate of interest of 8%. Loans are also available for mini schemes-Mini-Growth, Mini-Health, Mini-Industry, Mini-Industrial Estate, Mini-Farm and Mini-Farm (Lift Irrigation), each for a specific need with a limited requirement of funds. Loans are available at concessional rate of interest of 6% p.a. for areas with relatively low level of electrification under the Minimum Needs Programme. The rate of interest is still lower at 5% p.a. for providing electrification to Harijan bastis.

2.9 In this process of sanctioning over 1900 schemes of different categories, REC has built up expertise in the fields of project formulation, project appraisal and project monitoring, in addition to expertise in specialised technical fields such as standardisation of materials, construction practices, training of technical, managerial and financial personnel in the field of rural electrification.

2.10 REC has sought to assist the States and the State Electricity Boards for getting their draft Plan proposals for rural electrification approved and resources properly arranged. The Corporation has, in addition to providing financial assistance through the resources provided by the Government of India, attempted to locate and coordinate additional finances for the State Electricity Boards in more than one instance.

2.11 Recognising that the funds provided by the Corporation are part of the larger programme of rural electrification of the State Electricity Boards, the Rural Electrification Corporation has sponsored schemes for the financing of some of the REC schemes conjointly with the people (including beneficiaries) of the area covered by particular projects. This is done by advising the SEBs to float rural electrification debentures to the extent of 40% of the cost of the scheme in the case of second and subsequent "advanced area" schemes from within the same district in such States where the electrification itself is above the All India average. In other words, where substantial progress in respect of electrification and rural development has already taken place, the Corporation limits direct loan assistance to the extent of 60% of the cost of the project and in the event of the SEB opting to raise rural electrification bonds towards the remaining portion of the project cost, the Corporation subscribes to those bonds on a matching basis in the ratio of 1 : 1 upto a limit of 20% of the cost of the project. If, on the other hand, the SEB prefers to raise funds from the public by accepting term deposits instead of raising rural electrification debentures, and is thus able to mobilise two-thirds of the 40% of the project cost, REC gives a further loan towards the remaining one-third cost.

2.12 The question of supplementing the resources of the SEBs for implementing the REC schemes in the wake of heavy escalation in the cost of material came up for discussion in a Seminar on "Rural Electrification and Rural Growth" held at Aurangabad in May, 1997



which was attended by representatives of the Central and State Governments, REC, SEBs, ARDC and Commercial Banks. The schemes sanctioned by the Corporation in the initial years of its operation (1970-72) had by this time undergone serious distortions in the cost component due to the unusual escalation in the cost of material that occurred during this period. The SEBs argued that the REC or Government of India should find out suitable avenues for meeting these extra costs in the implementation of the schemes. As suggested at this Seminar, REC agreed to give further loans to cover 50% of the increased cost of these schemes, with the SEBs meeting the balance 50% from their own resources. Several SEBs have taken advantage of this assistance from REC to complete their old schemes which had run into cost escalation. The Seminar also noted that there may be cases where SEBs may not be in a position to find their own resources for meeting their share of the cost increase and, therefore, suggested that SEBs may be allowed to float special rural debentures for subscription by Commercial Banks and Land Development Banks in addition to REC.

2.13 While this method of financing RE schemes in the context of cost escalation was discussed by the Chairman, REC, with Dr. Krishnaswamy, Deputy Governor, Reserve Bank of India, in September, 1976, the larger question of joint financing of all rural electrification schemes by REC and the Commercial Banks came up. It was agreed that this question merited careful consideration and that further detailed examination was accordingly necessary for the working of possible joint loans, with REC taking the longer maturities and the banks the shorter ones, similar to the arrangement between IDBI and the banks in the field of industry.

#### *Role of Institutions other than REC*

2.14 In addition to Plan allocations, rural electrification programmes have attracted finances from ARDC, AFC, Commercial Banks and State Land Development Banks from Fourth Plan period onwards.

#### *Commercial Banks*

2.15 The total loans sanctioned by the Commercial Banks upto March, 1977 were of the order of Rs. 136 crores to 12 State Electricity Boards to help energise 5.6 lakh pumpsets. State-wise amounts of limits sanctioned, amount outstanding and the number of pumpsets as on March, 1977, have been set out below :

Sl. No.	State	No. of pumpsets	Limits sanctioned	Amount outstanding
(Rs. in lakhs)				
1.	Maharashtra	1,60,834	6964.75	3869.52
2.	Uttar Pradesh	3,10,045	3255.53	2702.83
3.	Gujarat	61,348	1721.50	1294.01
4.	Madhya Pradesh	12,046	749.56	486.22
5.	West Bengal	11,257	422.40	178.85
6.	Bihar	4,381	160.00	106.73
7.	Rajasthan	2,514	126.76	52.00
8.	Orissa	1,844	115.50	55.57
9.	Karnataka	N.A.	9.92	9.92
10.	Punjab	174	7.41	7.03
11.	Andhra Pradesh	N.A.	1.82	2.22
12.	Haryana	500	20.00	0.43
<b>Total</b>		<b>5,64,943</b>	<b>13,555.15</b>	<b>8,765.33</b>

2.16 It would be observed that availability of commercial bank finance has been highly heterogeneous, being skewed in favour of two to three States. Of the total limits of Rs. 136 crores sanctioned, over Rs. 119 crores went to the States of Maharashtra, Uttar Pradesh and Gujarat.

2.17 The Commercial Banks have financed rural electrification, for the major part, on a consortium basis with AFC acting as a consultant. In two States, Haryana and Madhya Pradesh, the banks obtained refinance facility from ARDC upto a total limit of Rs. 6.27 crores.

#### *State Land Development Banks*

2.18 Funds have also been made available to the SEBs by the State Land Development Banks, which were in turn refinanced by ARDC. As at the end of cooperative year 1976-77 i.e. 30th June, 1977 against the commitment of Rs. 18.99 crores for 18 schemes, the actual disbursement has been of the order of Rs. 13.31 crores. Under this programme, 9 State Land Development Banks participated. The State-wise details of the number of schemes sanctioned, financial commitment and the actual disbursements may be seen in the following table :

Sl. No.	State	During 1975-76			During 1976-77			As on June 1977		
		No. of schemes	Commitment.	Disbursement	No. of Schemes	Commitment.	Disbursement	No. of schemes	Commitment	Disbursement
			(Rs. in lakhs)			(Rs. in lakhs)			Rs. in lakhs	
1.	Haryana	1	906	102	—	—	47	1	906	149
2.	Rajasthan	—	—	—	1	22	8	1	22	8
3.	Orissa	—	—	—	1	11	11	1	11	11
4.	M.P.	—	—	—	4	549	457	4	549	457
5.	U.P.	—	—	—	—	101	—	—	101	—
6.	Gujarat	—	—	—	3	40	—	3	40	—
7.	Maharashtra	—	—	—	5	140	140	5	140	140
8.	Karnataka	—	—	340	—	—	96	—	—	436
9.	Tamil Nadu	—	—	—	3	130	130	3	130	130
Total		1	906	442	17	993	889	18	1899	1331

2.19 A trend of uneven availability of funds to the SEBs, almost similar to the one noticed in the case of financing by Commercial Banks, could be seen in this case too. Three States i.e. Madhya Pradesh, Haryana and Maharashtra together account for Rs. 15.95 crores, representing some 84% of the total commitment of Rs. 18.99 crores. In the matter of

actual disbursement, Madhya Pradesh alone accounted for over one-third of the total amount disbursed.

#### *Agricultural Refinance & Development Corporation*

2.20 ARDC has started refinancing the energisation of pumpsets only recently. Under ARDC programme, the financing banks give loans to SEBs for energisation of pumpsets, subject to the present maximum of Rs. 4500 for each motor upto 5 HP installed on a well energised by SEB. ARDC, however, allows a higher loan at a rate not exceeding Rs. 1000 for every increase in the power of the motor(s) in slab(s) of 2.5 HP each. The refinance from ARDC is available upto 90% of the loans issued by Commercial Banks to SEBs, whereas in the case of State Land Development Banks, ARDC's contribution to special debentures is upto 90% of each debenture floated with the balance 10% being contributed by the State Government concerned.

2.21 The present rate of interest on refinance assistance from ARDC to the banks is 7½% per annum while the financing institutions are required to charge upto 10½% interest to the SEBs. The period of repayment does not exceed 7 years and the payment of interest is half-yearly.

2.22 ARDC refinance assistance for pumpset energisation was earlier available only when the wells and/or the pumps were covered under ARDC credit. It now includes energisation of all pumpsets even if installed with the farmer's own or other resources. The scope of refinance has also been extended to cover energisation of pumpsets in REC scheme areas provided the target of agricultural connections has been achieved in full. The loans given by the financing institutions for energisation of pumpsets, installed on lift irrigation units are also eligible for refinance assistance from ARDC.

2.23 As on 30th June, 1977, ARDC had sanctioned 38 schemes for energisation of pumpsets in 9 States, with a total commitment of Rs. 25.26 crores. The actual disbursement has been to the extent of Rs. 16.98 crores. For the most part, the refinancing has been done by ARDC through 9 State Land Development Banks, which had sanctioned 18 schemes with a total commitment of Rs. 18.99 crores and actual disbursement of Rs. 13.31 crores. The commercial banks in Haryana and Madhya Pradesh obtained the refinancing facilities for 20 schemes with a total commitment of Rs. 6.27 crores and actual disbursement of Rs. 3.67 crores, as on 30th June, 1977.

2.24 In the process of assisting rural electrification programmes, ARDC has gained experience in project appraisal with special reference to assessing ground water potential.

#### *Agricultural Finance Corporation*

2.25 AFC has the experience of arranging finance for energisation of pumpsets on a consortium basis which for the first time started in 1969-70. As of September, 1977, it had arranged for a total consortium finance to the tune of over Rs. 80 crores to help energise 2.67 lakh pumpsets in 7 States, i.e. Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh and Uttar Pradesh. Its own financial involvement in this programme has been of the order of Rs. 3.3 crores.

2.26 The rates of interest charged by different commercial banks have varied from 12½% to 14% per annum. The loans have been advanced for a period of 7 years and the repayment

in equal annual instalments; a moratorium of 2 years has been allowed in some cases.

2.27 Thus, it is seen that while an important role is already being played by the commercial banks and other financing institutions in the field of rural electrification, there have been several deficiencies in the utilisation of such institutional finances. Only a few of the State Electricity Boards, mostly in the advanced States, who happened to have good rapport with the commercial banks and State LDBs have utilised these finances. Most backward States, despite their needs for rural electrification for pumpset purposes being great, have not benefited from them. Thus, there has been a less than optimal use of non-Plan resources and also a possible aggravation of regional imbalances.

2.28 Secondly, the lending terms and conditions have often been different for different agencies, and also generally not conducive to the State Electricity Boards for reasons of viability in view of low agricultural tariffs.

2.29 There is, therefore, an urgent need to coordinate the flow of all institutional funds so as to ensure that the needs of the priority areas are appropriately met and regional imbalances reduced with a specific provision for softer terms and conditions of loans for more backward areas; and that there is an uniformity in approach with regard to project formulation, appraisal and implementation.

## CHAPTER 3

### PROPOSED PROGRAMME

#### *Physical and Financial Targets*

3.1 As mentioned earlier, the ultimate potential for development of minor irrigation from ground water resources is estimated at 40 million hectares; and the expected cumulative utilisation till the end of 1977-78 works out to 19.5 m.ha., that is about 50% of the potential. It is considered feasible to create an additional irrigation potential of the order of 7 m.ha. from ground water during the next five years. Thus the programme of energisation of pumpsets assumes great importance during the next five years. Secondly, with the growing involvement of commercial banks themselves in the agricultural and rural fields, it is now necessary to focus these efforts on certain well-defined sectors of which minor irrigation through ground water exploitation is one. Thirdly, rural electrification itself, as a programme, has not only achieved considerable progress but also promises to play an important role in the years to come both as a means of area development and as provider of an important input to agriculture and rural industry.

3.2 The Sixth Plan Working Groups had first suggested a target of 30 lakh pumpsets to be energised over the five-year period. This target was advocated as both practicable and appropriate on the basis of the following considerations :

- i) The target represents a simple rate of growth of about 20 per cent per annum over the five-year period. In the light of past performance, this may be regarded as realistic.
- ii) In terms of the proportion of power consumption in the agricultural sector, out of the total energy sold, the proposed target would only mean a small increase from 14.4 per cent during 1975-76 to 18.6 per cent during the year 1982-83.

3.3 Of this target of 30 lakhs, the normal programme of REC and the programme included under State Plans were expected to account for about one-third share each. The Working Group in its Interim Report had proposed that the balance one-third, or in other words 10 lakh pumpsets could be the five-year target for a new programme of institutional financing by the commercial banks, in conjunction with ARDC and REC. At an assumed average cost of Rs. 6,000 per pumpset, it was estimated that this programme would need Rs. 600 crores. The Working Group had further recommended that these funds should be equally shared by the three agencies as under:

	(Rs. in crores)
ARDC (through its function of refinancing to commercial banks)	200
Commercial banks (supplementary to the above, but from their own resources)	200
REC (supplementary to both the foregoing, and supplementary to its own normal programmes)	200
<b>Total</b>	<b>600</b>

3.4 Subsequent to the submission of our Interim Report, further discussions on the targets for the next five years have taken place in the Planning Commission. These discussions have endorsed the recommendations, made in our Interim Report regarding the scheme of joint financing by the commercial banks, ARDC and REC. However, the size of the total pumpset energisation programme has been somewhat scaled down. Against the 30 lakh pumpsets earlier suggested over the next five-year period, the new target now proposed is only 20 lakhs to be met through the following three types of programmes :

	Target for pumpset energisation
REC Normal Programme	7 lakhs
State Plans	7 lakhs
Programmes with joint financing by banks/ARDC/REC	6 lakhs
<b>Total</b>	<b>20 lakhs*</b>

3.5 It was felt that although the ground water potential was adequate to sustain a much larger programme, there would be some constraints in respect of the organisational and implementational capability of the SEBs, power availability and also financial resources. It is estimated that the supplementary budgetary support that could be provided to REC for this programme, would be of the order of only Rs. 120 crores (REC had requested for Rs. 200 crores).

3.6 The financial outlay required for the programme of joint financing, corresponding to a target of 6 lakh pumpsets, again on the basis of an assumed average cost of Rs. 6,000/-per pumpset, would be Rs 360 crores. The Working Group suggests that, as before the participating agencies take an equal share in this Programme. Thus, the outlay of Rs. 360 crores can be met in the following way

Commercial Banks' own resources	Rs. 120 crores
ARDC's refinance to commercial banks	Rs. 120 crores
REC's resources	Rs. 120 crores
<b>Total</b>	<b>Rs. 360 crores</b>

3.7 Although the suggested target for the new programme is 6 lakh pumpsets, it became clear in the discussions at the Planning Commission that we need not confine the programme to this limit. Depending on the progress achieved in the initial stages, and after the yearly reviews contemplated under the rolling plan concept, the budgetary support to the REC may be enhanced as felt necessary. In view of this, and taking into account the earlier indications

\*This figure of 20 lakhs although much less than the 30 lakhs figure earlier thought of is nevertheless significantly higher than the targets of the previous Five Year Plans. It is almost equal to two-thirds of the cumulative total of all the pumpsets that have been energised so far in the country upto the end of the foreclosed 5th Plan period.

from the commercial banks and ARDC, that each would be able to contribute to the extent of Rs.200 crores, the programme may well acquire the same dimension of Rs. 600 crores mentioned by us in our Interim Report.

3.8 Against this background of the programme dimensions for the next five years, the Working Group feels that the current year's (1978-79) programme should be a fairly modest one, with an outlay of about Rs. 60 crores; each of the three participating agencies taking a share of Rs.20 crores. We feel that it is quite practicable for them (particularly REC) to raise resources of this order, for the current year. It is also felt that from the implementation point of view, such a programme, to start with, will be well within manageable limits. The implementation plan suggested in the next section of this report is related to the organisation and procedure required for a programme of this size. After a systematic review of the performance during the current year, the programme itself can be suitably enlarged and an appropriate coordinating machinery evolved.

3.9 The loans disbursed by commercial banks from their own resources for energisation of pumpsets during 1969-70 to 1976-77 were of the order of Rs. 100 crores, the annual average rate of disbursement being about Rs. 14 crores. The bulk of these loans was granted on a consortium basis under different programmes of AFC. Subsequently, some of the banks took to financing SEBs directly under what has been called the Intensive Rural Electrification Programme. The period of loan was generally upto 7 years although a few banks extended loans upto 10 years with a moratorium period of 1 to 2 years. The rate of interest charged on these loans generally ranged between 12% and 16%. However, RBI later stipulated a ceiling rate of interest of 12½% for loans beyond 3 years.

3.10 The outstanding level of bank credit to SEBs out of their own resources for energisation of pumpsets at the end of March, 1977, was about Rs. 80 crores, which formed hardly 0.66% of the total bank credit as on that date. Even taking into consideration the fact that commercial banks have been subscribing to the debentures of SEBs, the share of bank credit for energisation of pumpsets is admittedly very low. In the context of the greater accent now being placed on minor irrigation projects including energisation of pumpsets and rural development in general, commercial banks would obviously have to step up the scale of assistance for energisation of pumpsets. Moreover, according to the Government guidelines, commercial banks are required to ensure that at the end of March, 1979, at least 33.3% (present ratio is 27%) of bank credit is extended to the priority sector which includes credit provided for energisation of pumpsets.

3.11 Bearing in mind these various considerations, it is expected that banks will make vigorous efforts to extend credit for energisation of pumpsets. It is, therefore, assumed that the proportion of bank credit would be stepped up gradually from 0.66% at present to at least 1% by the end of the next Five Year Plan period, i.e. March, 1983. Assuming, on the basis of the current trends, that the level of total bank credit by 1983 would be around Rs. 22, 500 crores, the share of bank credit for the purpose of energisation of pumpsets would be Rs. 225 crores by March, 1983. Therefore, the prospect of getting resources from the commercial banks to the extent envisaged for the proposed programme appears to be quite reasonable.

**3.12** It was expressed at the meeting of the banks held in RBI in November, 1977, that the State Bank of India by itself might be able to take at least a third of the proposed investment. The balance, when distributed amongst the remaining banks, would mean a relatively small burden for each individual bank.

**3.13** It was also felt in this connection that, apart from the public sector banks at least the top few non-nationalised banks should be invited to participate in this programme. We are glad to know that some of these non-nationalised banks have already shown their eagerness to do so.

#### *Priorities*

**3.14** The focus of the proposed programme will be in the most unexploited but promising area in the six States of U.P., Bihar, Madhya Pradesh, West Bengal, Orissa and Assam. Other States too will be included in the programme to the extent of some of their areas being presently important or potentially significant.

**3.15** The very large dimensions of the problem make it essential for appropriate priorities to be followed in the selection of the areas where practical programmes of manageable size can be handled.

**3.16** The first set of factors which should be considered in determining the priorities will be availability of ground water and the readiness for energisation signified by wells already constructed and pumpsets already acquired. An assessment of the number of applications for energisation of pumpsets pending with the Electricity Boards would be useful in this connection.

**3.17** Availability of power and the adequacy of the distribution system would be the next set of considerations.

**3.18** Equally important are factors concerning the soil condition, cropping pattern and agricultural practices obtaining in the area, and the relative backwardness of the area.

**3.19** The state of development of the credit infrastructure, especially co-operative credit, branch net-work of the commercial banks and the soundness of the land development banks would also influence the priorities.

**3.20** On the basis of these factors, it should be possible to identify (a) the areas which can usefully be given immediate attention and will, therefore, have to be taken up on high priority basis, and (b) the areas to be taken thereafter in successive phases.

**3.21** Serious doubts were raised at the bankers' meeting regarding the power availability position. It was agreed that, in drawing up annual programme of pumpset energisation, the year-by-year power position of individual States should be carefully considered, taking into account their on-going and proposed programmes for power generation.

#### *Types of Schemes*

**3.22** The methods of deployment of bank finance and REC finance should be determined by actual project needs which vary from area to area. Hence different types of schemes have to be evolved after taking into account a number of factors.



3.23 The number of pumpsets or wells to be energised would differ from area to area as also the degree of their concentration or dispersal (scatter) from a notional central point of the area. It is clear that the closer the concentration the lesser the investment on infra-structure, just as the wider the dispersal the larger investment the area would require.

3.24 But concentration or dispersal cluster or scatter do not constitute the only factor. Another important consideration is whether the area is already electrified in the sense that the type of infra-structure (including 33 KV lines, 33/11 KV sub-station, etc.) required for rural distribution is already available. The investment would have to be all the more in the event of infra-structure of this nature being absent or thinly spread or distantly located. Other things being equal the larger the investment the less the return on capital and the greater the need for spreading repayment over a relatively longer period.

3.25 Implied in the fore-going is the important consideration of the revenue yielding potential of the project. The revenue to the State Electricity Board is proportional to the load growth in the project area, the number of hours of utilisation of ground-water among others.

3.26 While cost benefit considerations are certainly of great significance for the programme as a whole, it needs to be emphasised—in the context of the relative financial “viability” of individual projects — that financial investment and financial return are to be calculated from the point of view of the State Electricity Boards. From this angle, the lesser the return on capital the more the difficulty of repayment and the greater, therefore, the need for a longer repayment period.

3.27 Taking into account all these considerations, the Working Group suggests that there should be two broad types of projects one corresponding to an area with the coverage of the villages and the number of pumpsets to be energised being such that the project can be completed within two years. Most of the villages in this area will be already electrified and therefore the investment on electrical infra-structure would not either arise or would be marginal, say, not more than 10% of the project cost. The ground water availability and production potential will be high in this type of area and the pumpsets to be energised would be covered wholly or largely by applications pending with the State Electricity Board for service connections. Thus, the project would yield fairly quick returns to the SEB. It is proposed that an 8-year loan can be offered to this type of project with a moratorium for a period of upto two years for repayment of the principal. The loan amount may be upto Rs. 30 lakhs.

3.28 The other broad type of project will have a project duration of more than two years but only upto four years, because of an element of electrical infrastructure being involved or the number of pumpsets being relatively large. The project area in this case will not entirely be already electrified, but within reasonable access to the main line; or with a thin-spread electrical infra-structure; consequently, the investment on the infrastructural component would be higher than in the first situation, but it is proposed that this investment should be within 33-1/3% of the total project cost.\* The project will take a relatively longer time to generate adequate revenues and therefore a long maturing loan is called for. It is proposed that a 14-year loan again with a moratorium

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\*This limit may be enhanced in the case of major lift irrigation schemes sponsored by the Government and other special circumstances.

period of upto two years for the repayment of principal, be offered to this type of project. The loan amount may be upto Rs. 50 lakhs.

3.29 Under each of the above two broad types of projects, three modes of financing are possible : by Banks alone by REC alone and by Banks and REC in participation. Thus, the total number of alternative schemes possible are six as given below

*Non-Participative*

- |                 |      |
|-----------------|------|
| 1. 8-year loan  | Bank |
| 2. 8-year loan  | REC  |
| 3. 14-year loan | Bank |
| 4. 14-year loan | REC  |

*Participative*

- |                 |              |
|-----------------|--------------|
| 5. 8-year loan  | Bank and REC |
| 6. 14-year loan | Bank and REC |

3.30 The third type of scheme from the above list, where the banks alone finance a 14-year loan is not of much practical significance though it is desirable to keep such an option open. This was the view expressed by the Study Team of the Indian Banks Association when the matter was discussed with them.

3.31 The Working Group recommends that ARDC refinance should be available to banks in all the above types of schemes, wherever bank financing is involved and it may be upto the extent of 50%. Similarly, the Working Group suggests that all participative schemes should be on the basis of 2:1 between the commercial banks and the REC. In other words, REC's share in each participative project would be one-third of the total cost.

3.32 The Working Group in its Interim Report, had assumed that REC participation was required only in the case of the long maturity loans. However, on further examination it has become clear that it is desirable to let the REC have the option for participation, both in the 8 year as well as the 14-year loans to lend flexibility to the programme. Similarly, there is some merit in allowing REC alone to finance the medium-term 8-year loans also in certain cases, where because of the economic backwardness of the areas concerned, the relatively softer loans from REC may be more appropriate.

3.33 Thus, in addition to classifying the loan as either 8-year or 14-year, depending mainly on the project duration (2 or 4 years) certain other parameters should be taken into account in the choice of the exact type of financing. The following guidelines are suggested in this context:

*Banks alone* — Corresponds to an OA (Ordinary Advanced) area according to REC's method of area classification; area is agriculturally advanced; level of village electrification high; immediate and heavy demand for pumpset connections; SEB can bear relatively higher interest rate.

*Banks in participation with REC* Corresponds to an OB (Ordinary Backward) area according to REC classification; less advanced than in the first case regarding both agricultural development and level of electrification; interest rate should be lower.

**REC alone** — Corresponds to an SU (Specially Under-developed) area according to REC classification; or OB areas with low level of electrification; deserves the lowest possible interest rate.

**3.34 The Study Team of Indian Banks Association** which discussed the guidelines outlined above felt that the possibility of REC financing schemes in OA areas and banks financing the last category need not be ruled out.

#### *Interest Rates*

**3.35** There is a Reserve Bank stipulation that the lending rates by commercial banks, on loans given to farmers, for purposes eligible for refinance from ARDC would be pegged at 10½% p.a., and since pumpset energisation is an eligible purpose, the banks will have to lend at not higher than 10½% under this programme. The RBI may, however, clarify to the banks that the loans given to the State Electricity Boards for pumpset energisation would also be covered by this stipulation. REC finance will carry a lower rate of interest ranging between 8½% and 9%,\* and this will go to the specially under-developed (SU) areas. Participative loans going to the backward areas (OB) will carry an average interest rate of upto 10% to the SEB.

**3.36** There would be a moratorium period of up to 2 years in the repayment of principal. As far as repayment in the case of participative loans is concerned while the total period would be either 8 or 14 years, the earlier maturities of the first 3 to 6 years (after the moratorium period) would go to the commercial banks and the latter maturities to the REC. Thus, the banks and ARDC would have their loans fully repaid by the 5th year in the case of a 8-year loan, and 8th year in the case of a 14-year loan. REC will get its repayments from the 6th to the 8th year in first case, and 9th to 14th year in the latter case. In all cases, finance from both the commercial banks and REC would be available to the SEB from the beginning of the project itself.

**3.37** The impact on profitability of banks in financing the proposed pumpset energisation programme is appreciated. This, however, is an overall issue which the Reserve Bank may have to sort out with the banks in an appropriate manner.

#### *Viability Criteria*

**3.38** Since it is proposed that, otherwise bank finance whether in participation with REC or not, would ordinarily be made available for pumpset energisation only on a project-wise basis, it is necessary that the project parameters are laid-down and suitable viability criteria prescribed so as to judge the viability of schemes to attract financial assistance. REC has recently introduced a special category of loan known as Special Project Agriculture (SPA) with similar objectives, terms and conditions as the loans under the proposed programme. This loan category stipulates individual project yielding a gross revenue return of 10% on the investment. It is proposed that the loans under the new programme may carry the same viability criteria of 10% gross return attainable at the end of two years in the case of an 8-year loan and four years in the case of a 14-year loan.

**3.39** A summary picture of the types of schemes, modes of financing, interest rates and repayment terms applicable and the corresponding broad definitions of the area characteristics

\*Interest rates chargeable by REC for this purpose are under discussion with the RBI.

**LOAN CATEGORIES**

Item	Non Participative loans either from Banks or REC				Participative Loans : 2/3rd Banks, 1/3rd REC	
	SPA-8 NP Banks (1)	SPA-8 NP REC (2)	SPA-14 NP Banks* (3)	SPA-14 NP REC (4)	SPA-8-P  (5)	SPA-14-P  (6)
Project duration (yrs.)	2	2	upto 4	upto 4	2	upto 4
Loan period (yrs.)	8	8	14	14	8	14
Moratorium (yrs.)	upto 2	upto 2	upto 2	upto 2	upto 2	upto 2
Repayment (yrs.)	6	6	12	12	3rd-5th to Banks  6th-8th to REC	3rd-8th to Banks  9th-14th to REC
Interest rate (%)	10½	8½—9	10½	8½—9	Banks—10½, REC—8½ to 9	Bank—10½, REC—8½ to 9
Project area characteristics (According to REC classification) @	Corr. to OA	Corr. to SU/OB with low level of vill. electri- fication	Corr. to OA	Corr. to SU/OB with low level of vill. electri- fication	Corr. to OB	Corr. to OB

is given in the enclosed chart. For convenience, the proposed programme is called "Special Project Agriculture", or "SPA" for short. Similarly, participative and non-participative schemes are denoted by "P" and "NP" respectively followed by "B" where bank financing only is involved and "REC" for REC-financed schemes.

#### *Project Formulation*

3.40 In a programme of project-wise financing, the critical factors are proper project formulation by the project sponsoring authority (in the present case, the State Electricity Board), project appraisal by the lending institution (in the present case the commercial banks through the AFC or independently or the ARDC or the REC as the case may be) and project monitoring by commercial banks or REC or ARDC or combination of two or more of them with a view to ensuring that project goals are achieved. It is first necessary to consider what is an appropriate unit for the purpose of project formulation and implementation. It has to be remembered in this context that it is the State Electricity Board that borrows the money and executes the pumpset energisation programme. The basic administrative unit in respect of construction, operation and maintenance of the electrical system in an Electricity Board is a sub-division or a division, which therefore would seem to be the most appropriate unit for project formulation so that implementation of the project will fall within the responsibility of a single authority viz. the officer-in-charge of a Sub-division or a Division as the case may be.

3.41 In connection with a query raised at the bankers' meeting whether a 'district' could be convenient unit for formulating a project, it was clarified that while district level coordination was essential, but a smaller and more compact unit such as an electrical Sub-division/Division (which, moreover, would conform to the organisational pattern of SEBs) would be more suitable for project formulation to start with, and for project management and project control thereafter.

3.42 The broad parameters governing the appropriate identification of projects suitable for financing under this programme were discussed by the Working Group at the time of their Interim Report. Having regard to the various points brought out in the course of these discussions, it is suggested that the proposed programme (which may be called "Special Project Agriculture" as mentioned earlier) should be for providing service connections to wells/tubewells/lift irrigation pumpsets whether owned privately by the State or a sponsored Corporation or a Co-operative. Incidental non-agricultural loads may also be included to the extent of 10% of the connected load. The selection of the project area should be based on the potential available for energisation of pumpsets indicated by the number of pending applications and/or other relevant factors in electrified or un-electrified villages. Such villages, as have been covered under normal REC schemes, but have achieved or exceeded the agricultural targets, could also be covered under this programme. The project area should have no difficulty regarding the availability of power and ground water.

3.43 The guidelines to be issued to the State Electricity Boards for a proper formulation of the scheme under this programme are given in Annexure-4 entitled "Suggested Format of a Project Proposal". This consists of a general section giving (a) a brief economic profile of the project area and the existing status of electrification, (b) data on ground water,

(c) project coverage in terms of number of villages and pumpsets, (d) details of other developmental programmes and credit structure, (e) SEB's organisational arrangements for implementing the project, (f) details of works proposed, their phasing and their cost, (g) power supply position and (h) estimated gross revenue and rate of return. The Annexure shows the various formats to be used for supplying most of the above information. Compiling all this information for a given scheme and presenting it systematically in the form of a structured project report imposes a salutary discipline on the Electricity Board. This way the project will be well conceived and planned, which in turn will assist in smooth implementation. A project report thus presented also facilitates the appraisal and monitoring to be done by the lending institutions.

#### *Project Appraisal*

3.44 The main purpose of appraisal is to ensure that the engineering, economic, financial and other features of the project are drawn up realistically so as to permit the project to have a successful implementation. The actual details to be scrutinised vary between the SEBs and the regions. A broad outline of how the appraisal should be done in a generalised situation is given in Annexure-5. It is conceded that commercial banks, by and large, presently do not have the expertise either in terms of personnel or otherwise to take up project appraisal. However, REC has over the past few years, as a specialised development financing institution, built up both in terms of techniques and personnel the requisite expertise in project appraisal and project monitoring. It has 12 regional offices (including two being set up and one in each of the six main States in our programme) which are staffed by multi-disciplinary appraisal and monitoring teams. In the bulk of the cases, therefore, it should be possible for the REC to take up this responsibility. ARDC started refinance assistance to pumpset energisation programme a couple of years ago. It has since gained considerable expertise in appraising projects somewhat analogous to the schemes envisaged under this programme. Consequently, it can undertake appraisal responsibilities in some cases through its various regional offices. Agricultural Finance Corporation (AFC) also has a role to play in this situation especially in respect of the agricultural and rural development. It has acted as a consultant to various commercial banks in the past on their rural electrification schemes and has, in addition, been active in several other fields related to agriculture. AFC's expertise can be used wherever it has established contacts with SEBs and can make available adequate field staff to appraise projects from an overall agricultural and rural development point of view.

#### *Project Monitoring*

3.45 Each project should be monitored continually not only to verify the utilisation of funds but to assist in the meeting of the programme objectives. The field personnel required for monitoring will have to come, by and large, from the commercial banks themselves, from out of their branch staff or special agricultural finance staff they may have in their regional offices. Additional monitoring responsibility may perhaps be taken to a limited extent by the regional offices of REC., ARDC and AFC.

3.46 Monitoring is to be done both through a scrutiny of the quarterly progress reports submitted by the States and by field visits. Release of second and subsequent instalments of loan will have to be linked with monitoring. A brief set of guidelines for

monitoring and loan disbursal, as well as the suggested formats to be used by the SEBs for the Quarterly Progress Reports are given in Annexure-6.

3.47 The Working Group suggests that REC should organise appropriate training programmes for the concerned personnel of the commercial banks, specially with regard to the specific type of technical monitoring involved in pumpset energisation projects.

#### *Documentation*

3.48 The Study Team of the Indian Banks' Association examined various documents that may have to be executed between the SEBs on the one hand and the banks/ARDC/REC on the other for giving loans under this programme. The legal advisors of IBA, Central Bank, ARDC and REC were also consulted on this matter. A set of these documents in an outline form is given in Annexure-7. The Working Group recommends that these be adopted.

#### *SEBs*

3.49 It is needless to emphasise that the success of the programme depends greatly on the capability of the State Electricity Boards in implementing the projects. The Chairmen of the banks at the meeting held on 28.11.77 were unanimous that there was considerable room for reorganisation, reform and rectification in this regard. It is hoped that the Central Government for its part, no less than the State Governments and the SEBs, will take immediate steps to bring about—through statutory, structural, financial and other appropriate measures—the considerable degree of improvement that has to be effected in this context.

## CHAPTER 4

### IMPLEMENTATION PLAN

4.1 As briefly suggested earlier, the implementation of the proposed programme is best considered in two phases. The immediate phase would be in respect of launching the programme in the next month or so, and managing it for the rest of the current year (1978-79). For this purpose, a flexible set of organisational arrangements and procedures may be agreed upon between the banks, ARDC and REC. The second phase of implementation would be concerned with the programme over the remaining four years of the five-year Plan period, for which a formal coordinating machinery between the lending agencies and a routinised set of procedures would be required. It would be realistic to work out these final arrangements after a proper review of the progress achieved and problems encountered in the current year's implementation.

#### *Current Year's Programme*

4.2 The suggested disbursal of Rs. 60 crores during the current year implies sanctioning of about Rs. 150 crores worth of projects or 450-500 individual projects. When completed, these projects would have accounted for the energisation of about 2.5 lakh pumpsets.

#### *Organisation & Procedures*

4.3 The magnitude of the current year's task makes it imperative that the programme should start without much delay. Hence, it is suggested that the organisational arrangements and procedures for implementing the current year's programme should be as flexible as possible.

4.4 What may ultimately be required would be a coordinating machinery consisting of representatives from RBI, ARDC, REC, commercial banks, AFC, etc. with REC providing the Secretariat. This machinery, however, will only review from time to time the policy issues arising in the course of implementation of the programme, actual arrangements for appraisal, sanction etc. being handled by committees consisting of the representatives of relevant institutions at the state level. Pending suitable arrangements in this regard both at the national level and at the state level, which would have to be established after mutual consultations between the agencies concerned and common agreement, REC may be asked to initiate steps in respect of all these matters so that, having regard to the dimensions of the current year's programme, avoidable delays do not occur. An appropriate working arrangement will have to be evolved from out of experience and not necessarily legislated in detail at this stage. It is also necessary to ensure that the documentation and legal requirements involved in participative arrangements are uniform. We recommend that these may be adopted.



4.5 The following steps are suggested for the current year's programme :

a) On the basis of the broad principles spelt out earlier regarding the two types of projects, REC will draw up detailed guidelines for project formulation and communicate to the concerned State Electricity Boards in the priority States.

b) Concurrently with (a) above, REC will prepare a list of electrical sub-divisions/divisions in each State which can absorb this programme. This will have to be done in close collaboration with the SEBs, taking into account the data on pending applications, ground water availability, existing infra-structure etc.

c) From the above list, which will also show taluks/districts corresponding to the sub-divisions/divisions identified, the commercial banks should indicate their preferred areas for participation taking into account their lead bank responsibilities, existing branch network and their agricultural banking business.

d) SEBs will formulate projects and forward them as and when they are ready in a continuous stream to the concerned regional offices of REC with a copy to the SPA Secretariat proposed to be located in REC at New Delhi.

e) REC will then appraise the projects through their multi-disciplinary teams, also involving ARDC personnel (either of their regional offices or of their head office, as decided by ARDC) so that the process of ARDC sanction is hastened. They will also keep in touch with the regional offices of the participating banks at this stage, and to the extent feasible associate the banks' representatives in the appraisal process. Regional offices of REC will keep the SPA Secretariat informed of the schemes received and their status every month.

Project appraisal has both engineering and non-engineering elements. While REC can be expected to take responsibility for the engineering appraisal in all cases, it should also be prepared to take suitable responsibility in the appraisal of the non-engineering areas also involving other participating institutions to the extent desired by them.

f) While it is expected that SEBs will be submitting ground water certificates along with the project proposals, the appraisal teams will check up ground water data with the State ground water boards (and this will be counter-checked with the data available with the ground water divisions of REC and ARDC). The appraisal team would also in any case ascertain the ground water availability, particularly during lean seasons in the course of the field visits.

g) Copies of the project report along with the appraisal report will then be sent by the REC regional offices to the participating agencies (with one set to the SPA Secretariat) for due consideration and sanction in the following way

*Where bank finances alone are involved :*

One set to the participating bank and another to ARDC. The participating banks will identify in advance, for this purpose, their particular branches/offices in each State to which loan sanctioning powers would have been delegated by them under this programme.

*Where finances from both banks and REC are involved :*

The first and second sets will go to the banks and ARDC as in the first case, a third set will go to the REC head office for sanction of the scheme

*Wehre REC finances alone are involved :*

One set will go to the REC head office for sanction.

REC is proposing to delegate to its Managing Director due powers for sanctioning schemes under this programme.

h) After sanctioning the projects, the participating institutions will get the appropriate documents executed by the State Electricity Boards under intimation to the SPA Secretariat which on sanction of schemes and completion of papers by all the participating institutions will request them to release the first instalment to the concerned SEBs as advance.

i) REC's regional offices will work out a monitoring schedule in consultation with the banks' regional offices and the SEBs. The actual field monitoring, which will be due only about six months after the release of first instalment, will be done by the banks' personnel identified for the purpose, with such assistance as is needed from REC regional office, details of which were described in the previous section of the report.

j) The State Electricity Boards will submit quarterly progress reports (QPRs) to the participating institutions (under intimation to SPA Secretariat) which will form the basis of second and subsequent instalments. In addition, an appropriate information system will be built up to keep the regional offices/head offices of the participating commercial banks, ARDC, REC and SPA Secretariat informed of any problem in execution of the projects for suggestion from the Secretariat and suitable remedial action in time to avoid slippages.

4.6 The above, in brief, is the procedure suggested for the implementation of the immediate phase of the proposed programme. Although REC is expected to undertake the responsibility for most of the action steps mentioned above, it will doubtlessly need the assistance of personnel in the field offices of ARDC, participating banks and possibly AFC. This collaboration will have to be discussed further and also allowed to evolve over a period of time.

*Training*

4.7 In the proposed plan for implementing the current year's programme, REC would be shouldering the major responsibility in coordinating the receipt of projects from the SEBs, their processing and final approval. It will be carrying out the appraisal of projects on behalf of the banks and also assisting the banks' branch personnel in monitoring the execution of the projects. The Working Group, however, feels that the commercial banks should gradually take over many of these responsibilities so that the programme in the long run becomes a smooth on-going proposition. In order to enable the banks to do so, the Working Group suggests that REC should organise appropriate training programmes for bank's personnel\* The physical and other facilities already existing at the College of Agriculture Banking and other training resources available with the Agricultural Refinance & Development Corporation, Agricultural Finance Corporation and some SEBs may also be suitably used for this purpose.

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\*Such ARDC personnel as are likely to be involved in this programme may also benefit from these training programmes.

## CHAPTER 5

### SUMMARY OF RECOMMENDATIONS

5.1 Several recommendations have been made in the foregoing sections at various stages of the discussion of the proposed programme and its implementation. For the sake of convenience, despite some repetition being involved, we give a summary of the recommendations in this final section of our report.

5.2 We have been asked to suggest measures by which commercial banks can play an increasingly important part in helping to step up agricultural production and reduce regional imbalances. It is our considered view that one of the most important means by which these objectives can be achieved is by a country-wide programme of financing by commercial banks, of pumpset energisation schemes of the various State Electricity Boards. Such a programme should have the following, among other, features:

(a) It should be planned in such a way as to be complementary to the other on-going programmes for the same purpose, in particular (i) REC's normal programmes, (ii) programmes financed by LDBs and ARDC, (iii) schemes financed by commercial banks, outside this programme, and (iv) programmes through resources included in State Plans.

(b) While the total target for all the programmes, presently fixed by the Planning Commission cover some 20 lakhs pumpsets the particular programme here proposed should aim at energising about 6 lakhs pumpsets during the five year period, starting from current financial year.

(c) While the main focus should be on the six States of U.P., Bihar, Madhya Pradesh, West Bengal, Orissa and Assam, the programme should also cover those areas in other States, i.e. in the rest of the country, which are presently important or potentially significant. Certain factors which have to be taken into account in selecting priority areas for formulation of projects have been indicated earlier in the report.

5.3 The total amount involved in financing the proposed programme of energisation of 6 lakh pumpsets would be Rs. 360 crores (at roughly Rs. 6,000/-per pumpset on an average). For mobilising these resources, the broad pattern should be:

	<i>(Rs. in crores)</i>
i) Commercial Banks' own resources	120
ii) ARDC's refinance to commercial banks	120
iii) R.E.C.	120

5.4 However, the commercial banks have indicated that they may be able to provide more funds than indicated above. An upper limit of Rs. 200 crores, over a 5-year period,

has been mentioned. Assuming that ARDC will also be able to match its refinancing to the same extent, and that REC too is able to raise the same amount of resources (through Government's budgetary support and other resources), the overall dimensions of the programme may well reach Rs. 600 crores, earlier indicated by us in our Interim Report. The corresponding pumpset target too will go up from 6 lakhs to about 10 lakhs. Although the need for so many more pumpsets and the availability of ground water to sustain such a large programme are beyond any doubt, the Working Group recommends that the current year's (1978-79) programme, while substantial should, in perspective, be a relatively modest one. An outlay of Rs. 60 crores (Banks 20, ARDC 20, and REC 20) for the current year has been suggested taking into account the firm Plan allocations so far made for R.E.C., and the extent of funds that can be easily set apart for this purpose by the banks and the ARDC. The decision on the total size of the 5-year programme may be deferred till after a review is made of the current year's performance.

5.5 In order to derive optimum results from so massive a programme, it is essential to adopt a systematic project approach. Each project should be formulated on the basis of a contiguous geographical area, e.g. sub-division/division of an Electricity Board, as the unit. Certain viability criteria, mentioned in an earlier section of this report, have to be applied in appraising the schemes submitted by the State Electricity Boards.

5.6 In following this project approach, two broad categories of schemes are suggested for providing finance to the pumpset energisation programme :

One will have a medium term loan, viz. 8 years, corresponding to a 2-year project duration. This type of scheme will be in respect of a project area which already has an adequate system capacity to cater to the additional loads envisaged, and therefore, the question of investment on electrical infra-structure (33 KV lines, 33/11KV sub-stations, etc.) would not arise or such investment would be marginal, say, not more than 10% of the total project cost. The project would yield fairly quick returns to the State Electricity Board.

The other category of scheme will correspond to a project duration of upto 4 years and therefore will necessarily carry a longer term loan, viz. 14 years. The project in this case will need an investment in infra-structure higher than in the first case, but not exceeding 33 $\frac{1}{3}$ % of the project cost. The project will take time to generate adequate returns to the SEB.

5.7 Under each of the two broad types of projects, three modes of financing are possible: by banks alone, by REC alone, and by banks and REC in participation. Thus, there will be six possible alternative schemes of financing under this programme. However, the alternative under which banks alone finance a 14-year loan will not be of much practical significance. Certain criteria have been specified to select the type of scheme and the mode of financing for a given project area.

5.8 In case of participative loans, it is suggested that the banks and the REC take a two-thirds share and one-third share respectively.

5.9 All commercial bank loans under this programme should be eligible for a 50% refinancing from ARDC.

5.10 Under the scheme of ARDC refinance mentioned above, the commercial banks' lending rate will not exceed a limit fixed by the ARDC (presently 10½%). Where REC's finances are involved, the interest rate on the REC portion of a participation loan will be lower, between 8½% to 9% so that the net burden to the SEB is reasonably low. It is suggested that there should be a moratorium period of upto 2 years for the repayment of principal. These loans are to be guaranteed by the State Government concerned.

5.11 As far as repayment is concerned in the case of participative loans, the earlier maturities of the first 3 to 5 years in the case of 8-year loan and 3 to 8 years in the case of 14-year loan would go to the commercial banks, and the latter maturities to REC.

5.12 For the purpose of appraising the viability of the first type of schemes for financial assistance, it may be stipulated that the project should be in a position to earn a gross return of 10% on its capital base at the end of two years. The viability criteria for the second type of schemes, where financial assistance will be on long-term basis, may be 10% gross return at the end of fourth year.

5.13 The Working Group recommends that the banks' finance to pumpset energisation programme should be in the form of term credit and not subscription to the debentures floated by the SEBs.

5.14 The following action steps are suggested so that the programme starts without much delay :

(i) The Reserve Bank of India should impress upon banks the need for making adequate provision in their annual budgets for the proposed pumpset energisation programme.

(ii) The advances by the commercial banks for the SPA programme as detailed in the report may be treated as priority advance by the Reserve Bank.

(iii) The Agricultural Refinance and Development Corporation should refinance all the advances made by the commercial banks for SPA programme to the extent of 50% of the loans. Such refinance should cover the first instalment which will be given as an advance and the subsequent instalments which will be on the basis of reimbursement for the work done.

(iv) The commercial banks should delegate powers to their State level representatives for sanctioning the schemes under this programme, entering into agreement with the SEBs (and REC wherever necessary), financing the schemes and releasing instalments as and when required.

REC should similarly authorise its Managing Director for sanctioning the schemes, entering into agreement with the SEBs (and the banks wherever necessary) and releasing the instalments as and when necessary.

(v) REC should be authorised to initiate action on all matters concerning the implementation of the current year's programme, particularly with regard to :

a) issuing guidelines to the SEBs for project formulation ;

b) assisting the SEBs in identifying project areas ;

c) organising the functioning of the SPA Secretariat at REC headquarters at New Delhi ;

d) arranging for the REC regional offices to function as team leader at the State level in receiving projects from the SEBs, getting them appraised and in coordinating with the banks, ARDC regional offices and the state ground water boards.

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(vi) REC and ARDC should arrange for continuing coordination between their respective ground water staff for clearing the projects from the ground water point of view.

Dr. B. Venkatappiah

H.C. Sarkar

M. A. Chidambaram

Ghulam Ghouse

J. K. Jain

C. V. Nair

B.K.N. Murthy

D.G. Borkar

Bombay

Dated 9th May 1978.

## ANNEXURE 1

Copy of letter No. 1-23 (2)78-R&E dated 9th March 1978 received from Shri D.M. Saxena, Joint Director, Govt. of India, Planning Commission (Power and Energy Division) addressed to Secretary, Rural Electrification Corporation Limited, New Delhi.

Sub:—Reserve Bank of India Interim Working Group Report on participation of commercial banks in Rural Electrification Schemes

Sir,

The Governor, Reserve Bank of India, had forwarded to the Planning Commission the Interim Report of the Informal Working Group set up by the Bank under the Chairmanship of Dr. B. Venkatappiah to go into the question of increased participation by commercial banks in the financing of rural electrification programmes.

2. The Interim Report has been examined in the Planning Commission. As seen from the report, several issues involved in the programme had been discussed at a meeting of bankers, such as priority in the selection of areas, availability of power, adequacy of the distribution system in the States, criteria of financial investment on return, etc. Based on the consensus arrived at in these discussions, the Working Group had made recommendations in the Interim Report. The procedural details necessary for implementation of the scheme were in the process of being worked out. Operationally, the thrust of the new scheme will be on non-REC areas which have already been energised and have good potential for further energisation of pumpsets, Special attention will be paid to the States of U.P., Bihar, Madhya Pradesh, West Bengal, Orissa and Assam, which have maximum underground water potential. The programme would also cover areas in other States which are presently important or potentially significant. Under the new scheme, projects will be financed jointly by REC, ARDC and commercial banks. This approach has also been supported by the Working Group on Power Development, 1978-83, which had been constituted in the context of the preparation of the next Five Year Plan.

3. The Planning Commission endorses the approach suggested in the report of the Working Group set up by Reserve Bank of India. In order to enable a start being made on the new scheme in 1978-79, the Commission is agreeable to the Rural Electrification Corporation contributing upto Rs. 10 crores as its share of financing under the new scheme out of the total outlay of Rs. 90 crores provided for the normal programme of REC in the coming year. It is suggested that effort may be made through an appropriate mix of projects under the new scheme to attract a more than matching share from ARDC and commercial banks.

Yours faithfully,  
Sd/-  
D.M. Saxena  
Joint Director

TELEGRAM : "RESERVBANK"

TELEPHONE : 268311

TELEX NO. 0112318

0112455

Reference No. CPC. 1607/338

P. Box 406  
RESERVE BANK OF INDIA  
CENTRAL OFFICE  
CREDIT PLANNING CELL  
BOMBAY No. 400 001.  
January 20, 1978  
Pausa 30, 1899 (S)

To

All Scheduled Commercial Banks

Dear Sirs,

As you are aware, the Reserve Bank of India had set up in August 1977, an Informal Working Group under the Chairmanship of Dr. B. Venkatappiah, to go into the question of increased participation by commercial banks in the financing of rural electrification programme. The Working Group has submitted its Interim Report, a copy of which is enclosed. The recommendations of the Working Group are given on pages 20-22 of the Report.

2. The Group has recommended that a programme of energisation of 10 lakh pumpsets, involving financial assistance to the State Electricity Boards of the order of Rs. 600 crores over the Sixth Plan period could be financed with the combined resources of the commercial banks on the one hand and the two long-term financial institutions, namely, Agricultural Refinance and Development Corporation (ARDC) and Rural Electrification Corporation (REC) on the other, the contribution of each of the three agencies being Rs. 200 crores. Thus, the contribution of commercial banks from out of their own resources, for this programme of energisation of pumpsets during the Sixth Plan Period would be of the order of Rs. 200 crores. The annual provision for this programme could be Rs. 30 crores in the first year (1978-79) rising to Rs. 50 crores in the last year of the Five Year Period (1982-83). These loans would be eligible for refinance by the ARDC and will be subject to the ceiling rate of 10½% per annum.

3. As suggested in the Report, loans for energisation of pumpsets with a medium repayment period (say 7 to 9 years) may be financed by commercial banks themselves either singly or through consortium arrangements. Loans involving longer repayment period (say 12 to 15 years) may be financed in participation with the REC, the earlier maturities being taken by the commercial banks and the later maturities by REC.

4. The Working Group would be giving, in its final Report, details regarding project appraisal and monitoring, documentation procedures, etc. In the meantime, bearing in mind the greater emphasis now being placed on agricultural development, we shall be glad if you will kindly make suitable provision in your credit budgets, for the proposed pumpsets energisation programme. In making the provision, apart from the resources position, due note may be taken of your bank's present scale of assistance to priority sectors, rural areas, etc.

5. Kindly acknowledge receipt.

Yours faithfully,  
Sd/-  
Nalini Ambegaokar  
Adviser



## ANNEXURE 3

**Proceedings of the First Meeting of the IBA Study Team**

The first meeting of the Indian Banks' Association Study Team constituted to work out details regarding appraisal and monitoring of projects for pumpset energisation, documentation, functional role of the Coordination Committee, etc. was held on 17th February 1978. The general approach and consensus of the Study Team on these issues was as follows:

The Study Team was of the opinion that the REC should select the areas which afford adequate scope for rural electrification/pumpset energisation and the SEBs should primarily be responsible for identification of the projects in these areas and preparation of the project reports on the basis of the guidelines furnished by REC.

The technical and economic appraisal of the projects should be undertaken jointly by REC and ARDC in their various regional offices and representatives of banks should be associated with the appraisal so that, in course of time, the bank staff can develop some expertise in this field. A suggestion was also made that projects could be graded and relatively small projects involving minimum technical appraisal could be appraised by banks. In any case, at least in the current year (1978-79) banks should concentrate on taking up projects on the basis of the large number of pending applications with SEBs in the various States. The financial appraisal of the project would be undertaken by the banks themselves. Such an appraisal should necessarily ensure the proper end-use of credit for which suitable cash flow statements should be devised.

The allocation of projects between banks depending upon their lead bank responsibility, involvement in development of the areas in which the project is located, etc. should be done by the Coordination Committee. The role of AFC by virtue of their contacts with the commercial banks would be particularly useful for this purpose.

From the point of view of operational convenience, the Study Team was in favour of one bank financing one project and an additional bank may be brought in only for large projects involving a credit limit of Rs. 1 crore and above.

It was agreed that follow-up and monitoring of the projects would be undertaken by commercial banks through their regional/branch offices. It was felt that branch managers should be provided with a check-list to enable them to properly monitor the progress of the project. Also, a proper information system should be built up which would enable regional office/head office to monitor the projects from time to time. A suitable proforma should be devised for this purpose.

It was felt that since the major responsibility for appraisal and follow-up of the project would fall on the regional offices of banks, REC should organise a training programme, with greater emphasis on in-plant training for the staff of these banks.

The Study Team was keen that in the case of participation loans in particular, documentation should clearly indicate the terms and conditions of advance, schedule of disbursement of loans, etc. Shri Halasyam, Legal Adviser, Indian Banks' Association, has been requested to take up this job.

From the point of view of maximising revenue earnings, and also making the best use of extension of electrification, the investment will undoubtedly include other incidental loads also, i. e. loads other than for pumpset energisation. In view of this, total credit provided for the project should be allowed to be treated as priority advance for the purpose of guidelines issued by Government of India/RBI.

### Suggested Format of a Project Proposal

Electrical sub-division.....

Electrical division.....

Block (s).....

District..... State.....

#### I. GENERAL

1. Broad economic profile of the area (rainfall, soil, productivity, means of irrigation, cropping pattern, number of diesel and electric pumpsets, etc.)
2. Status of electrification in the area
3. No. of villages covered in the scheme, out of the total number of villages in block/district/electrical sub-div./electrical div.
4. Need for the scheme and its purposes
5. Broad outline of the scheme
6. Sources of power supply, including existing capacities of sub-stations
7. Availability and suitability of ground/surface water (certificate to be attached)
8. Agricultural and other developmental programmes in operation in the scheme area (SFDA/MFAL, DPAP, CADP, State Water Development Programme, etc.)
9. Organisational set-up, arrangement and proposal for implementing the project
10. Economic benefits likely to accrue on implementation of the project

#### II. SALIENT FEATURES OF THE SCHEME : CATEGORY

1. No. of villages covered (electrified and unelectrified)
2. Estimated cost of the scheme
  - a) Sub-transmission cost
  - b) Distribution cost
  - c) Service connection charges
  - d) Total cost of the scheme.
3. Project duration
4. Service connections proposed:  
No. of agricultural and other connections and total load
5. 33 KV Line and/or 33/11 KV sub-stations
6. 11 KV Line
7. L. T. Line
8. 11/0.4 KV distribution transformers (Number and KVA capacity)
9. Estimated revenue
10. Gross revenue return at the end of project duration

**III. DETAILS OF THE SCHEME**

1. Details of villages, works and connections	—Format in Encl.	1
2. Abstract of works and cost relating to 33 KV lines and 33/11 KV sub-stations	—Format in Encl.	2
3. Abstract of works and cost relating to 11 KV lines & below	—Format in Encl.	2
4. Sources of finance	—Format in Encl.	2
5. Year-wise phasing of works & connections	—Format in Encl.	3
6. Load factor	—Format in Encl.	4
7. Gross revenue & return	—Format in Encl.	5
8. Voltage regulation charts	—Format in Encl.	6
9. Deployment of staff in the project area	—Format in Encl.	7

District \_\_\_\_\_

## Details of villages, works and connections

Encl : 1

Block \_\_\_\_\_

S.No.	Name of village	Census code No.	Date of electrification, if electrified	Population (1971)	Households (1971)	Cultivated area (ha.)	Irrigated area (ha.)	Wells Nos.	Borings Nos.	Diesel Pumpsets No. HP
1	2	3	4	5	6	7	8	9	10	11 12

Existing connections				Pending agrl. applications		Connections proposed							
Agricultural No.	Industrial No.	Domestic No.	Commercial No.	No.	H.P.	Agricultural No.	Industrial No.	Domestic No.	Commercial No.				
13	14	15	16	17	18	19	20	21	22	23	24	25	26

Existing Dis. 100 KVA	Dis. 63 KVA	Trans. 25 KVA	Proposed 11 KV line (in Kms.)	Proposed L.T. lines			Proposed 11/.4 KV Dis. 100 KVA	Dis. 63 KVA	Trans. 25 KVA	Remarks including enhancement proposed, if any, in works
27	28	29	30	31	32	33	34	35	36	37

**A. Abstract of works and cost in respect of 33 KV lines & 33/11 KV sub-stations**

Encl : 2

**I. 33 KV LINES**

S. No.	Name of Feeder	Works (Qty.)	Unit cost (Rs.)	Amount (Rs.)	Remarks
1.					
2.					
3.					
4.					
5.					

**II. 33/11 KV SUB-STATIONS****Civil Structures :**

1. Ground

2. Buildings

3. Quarters

**III. ELECTRICAL EQUIPMENT**

1. Switch gears

2. Power Transformers

3. Station Auxiliaries

4. Others

**B. Abstract of Works & cost in respect of 11 KV lines and below**

Encl : 2 Contd.

Sl.No.	Item	Works	Unit cost (Rs.)	Amount (Rs.)	Remarks
<b>I. H.T. Line</b>					
	11 KV line ACSR Weasel on.....pole				
	11 KV line ASCR Squirrel on.....pole				
<b>II. L.T. Line</b>					
i)	3 $\phi$ 5 W line on.....Pole				
ii)	3 $\phi$ 4 W line on.....Pole				
iii)	1 $\phi$ 3 W line on.....Pole				
<b>III. Distribution Transformers</b>					
i)	11/.4 KV 100 KVA				
ii)	11/.4 KV 63 KVA				
iii)	11/.4 KV 25 KVA				
iv)	Enhancement from.....KV to.....KV.				
<b>IV. Services</b>					
	Agricultural	STWs			
		Private Pumpsets			
	Industrial				
	Domestic				
	Commercial				
<b>V. Improvements/Augmentations, if any</b>					
<b>VI. Total in respect of B</b>					

**C. Total Cost of assets to be created in respect of A and B**

Item	A	B	Total	
Total as above				
T & P & Contingencies				
Others				
Total cost of scheme				
<b>Sources of Finance :</b>				
	Ist Stage		2nd Stage*	
	<u>Ist Yr.</u>	<u>2nd Yr.</u>	<u>3rd Yr.</u>	<u>4th Yr.</u>
1. Total cost				
2. Consumers' contribution				
3. Capital subsidy by State Govt. or other agencies, if any				
4. Loan required				
<b>Total for each stage</b>				

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\*Strike out whatever is not relevant.





**Load Factor : Agriculture—Feeder/Sub-division—pl. specify**

Year	No. of connections	CL in KW	Consumption of energy during year	Load factor during the year	Average load factor for three years
1975-76					}
1976-77					
1977-78					

Any reasons for variation between the load factor, obtaining in and/or around the project area and the one adopted for the scheme

1.

2.

3.

4.

Encl : 5

**Gross Revenue & Return**

Item	Agricultural	Industrial	D & C	Total
Additional connections (No.)				
Total load.....(KW)				
Assuming.....load factor (%)				
Units (kwh)				
Revenue (H)				
Miscellaneous Revenue				
1. Meter Rent				
2. Fuse off-call charges				
3. S. C. levy @ Rs.....per month				
Per H.P./pumpset @ Rs.....per pumpset				
			Capital base = Cost less grant/subsidy	
4. Total (Misc.) : I				
5. Total Revenue : (H + I)				= Rs.....
6. Gross return Total : $\frac{\text{Revenue} \times 100}{\text{Total cost}}$				= Gross return
Details of tariff				
<b>Note 1</b> In case the State Govt./SEB has given any concessions in tariff in the initial stages as an incentive for better materialisation of load, the amount of such incentive may be included while calculating revenue for purpose of gross return.				
<b>Note 2</b> In Case the State Govt. had given any grant or capital subsidy for part of the work in respect of the project, such cost may be deducted from the project cost for calculation of gross return.				

**Voltage Regulation Chart**

The details of the voltage regulations may be given for 3 most heavily loaded feeders, feeding the project area.



**Parameters of  
Techno-Economic Appraisal of Pumpsets Energisation Schemes  
Under Participative Finance Programme**

**General :**

The main purpose of appraisal is to ensure that the technical, economic and other parameters of the project are such as to permit a successful implementation of the project. The actual details to be examined vary from SEB to SEB, from region to region, depending on the organisational/procedural arrangements obtaining in SEBs, the agro-climatic, geo-hydrological, socio-economic characteristics and the developmental level of the area. The following paragraphs give an indicative outline of how the appraisal would have to be done in a generalised situation.

**Technical Parameters :**

The technical feasibility of a project is a basic consideration for not only adjudging its feasibility but also in arriving at the cost parameters. Therefore, it is necessary that the technical plan of the project is properly evolved taking into account not only the best engineering alternative but also the principle of least cost/maximum benefit. In particular, the aspects to be considered in this connection are sources of power, system design and the construction programme itself. Rural Electrification Corporation has developed standards for equipment, material and construction practices, in association with ISI and SEBs. These have to be taken into account in developing the technical plan, system design, construction plan, etc.

**Economic and General Issues :**

The economic justification of a project relates to establishing its soundness from the point of view of (a) its target attainability and (b) the attainment of load factors and connected load envisaged in the light of the prevailing agricultural practices in the area and the improvements likely to be brought about with the implementation of the programme. For arriving at these conclusions, various factors such as the existing wells/borings/lift irrigation points as well as those proposed in each of these categories through developmental and credit programmes; the number of diesel pumpsets operating in the area and the possibilities of converting them to electric connections; the pattern of land holdings; the extent of irrigation facilities already available through tanks and canals; soil characteristics; credit worthiness of the cultivators and performance and standing of financial institutions; rainfall and its variations from year to year; the number of live applications pending for release of service connections alongwith their age are to be examined. In addition, the level of infrastructural development in the area and the social and economic backwardness are required to be studied with a view to arriving at the reliability of load forecast and the effect of externalities on load materialisation possibilities.

The field organisation of the State Electricity Board and the machinery for coordination in the field also need to be examined. The existing work-load of the project implementing agency and the arrangement they propose to make for meeting the additional work-load

imposed by the project also need to be reviewed. In addition to examining the information supplied by the SEB in the scheme report and the secondary data relating to the socio-economic and agricultural productivity parameters of the area, field visits will be required for interviewing the farmers and obtaining a first-hand knowledge of the field for the purpose of the area classification, load materialisation and the coordinational arrangements in the area.

**Procedure for Loan disbursal and monitoring**

(1) *Quarterly Progress Reports (QPR) :*

The State Electricity Board will be required to submit quarterly progress report every quarter as per QPRs 1-4 enclosed.

(2) *Components of loans :*

There will be two components in a loan under this programme. Part (A) relates to the cost of electrical infrastructure and Part (B) relates to the distribution part of the scheme.

(3) *Loan disbursal*

*Part (A)*

40% of the cost will be given in advance, as first instalment, for meeting the initial expenditure for electrical infra-structure like acquisition of land, civil works, and placing of order for power transformers etc.

The release of subsequent instalments will be worked out as equal to 60% of the value of work done by the SEB every quarter (Please see QPR 2). In case of power transformers, as the documents are generally released through banks for which advance payment is required, the value will be treated as earned soon after receipt of shipping advice either through bank or direct from the supplier.

*Part (B)*

40% of the total cost in respect of the distribution works is to be released on the sanction of the scheme and completion of formalities like ground water certificate, execution of loan documents, State Government guarantee etc.

The release of subsequent instalments will depend on number of pumpsets for which connections are released as per QPR submitted by the SEB (QPR 1). The actual amount to be released will be equivalent to 60% of the average loan per pumpset, multiplied by the number of pumpsets energised during a quarter. The total loan amount in respect of distribution (Part B) will be divided by the number of pumpsets proposed to be energised to arrive at the average cost of energisation of pumpsets.

*Monitoring*

It will be the responsibility of the financing institution(s) to ensure that :—

(1) The information submitted in the form of Quarterly Progress Report is correct and authentic.

(2) The various other formalities required are properly complied with.

(3) Such electrical infra-structure, including those to be provided by S.E.B. from the State Plan resources, as is necessary, is created to ensure regular and adequate power supply.

Field visits are essential at certain intervals during which sample field check should be made to ensure that the number of connections reported are correct. Similarly, check should also be made regarding the validity of statements relating to electrical infra-structure and distribution net-work.





ANNEXURE 6 Contd.  
QPR-2

Value earned in respect of 33 KV Lines & 33/11 KV S/Ss

Sl. No.	Item erected/ installed in the present quarter	Quantity		Average rate as assumed in scheme report (Rs.)	Value earned (Rs.)		Progress expected in next Quarter		Remarks/ Difficulties
		Upto the beginning of this quarter	During this quarter		Upto the beginning of this quarter (3) × (5)	During this quarter (4) × (5)	Qty.	Amount	
1	2	3	4	5	6	7	8	9	10

In respect of power transformers only, the value will be treated as earned on production of shipment advice either through Bank or direct and not necessarily on installation.

**Organisational arrangements made so far**

Sl. No.	Designation	No. of officers expected to be in position as per scheme report	Actual in position	Remarks explaining the variation

## Variation Report of Overall Performance

Sl. No.	Item	Total target as per scheme report	Scheduled target for the present quarter	Achievement at the end of present quarter	Programme for next quarter	Remarks, [Reasons for variation/ suggestions]
1.	33 KV lines					
2.	33/11 KV S/Ss					
3.	11 KV lines					
4.	LT lines					
5.	DTC (Specify capacity wise)					
6.	Services					
	(a) Agricultural					
	(b) Industrial					
	(c) Domestic					
	(d) Commercial					

### **Documentation Requirements**

The proposed programme would be financed under three patterns viz. (i) by banks alone, (ii) by REC alone, and (iii) by banks and REC in participation. As regards category (i) and (iii) the projects will be financed either by individual banks or a consortium of banks. In case of projects financed by the banks, ARDC would provide refinance facility upto 50% of the project loan. Loans under all categories will be backed by the concerned State Government's guarantee as to payment of interest and/or principal, on due dates. The scheme of documentation on the above basis would be broadly as under :

**(i) Projects to be financed by Banks alone**

*Loan Agreement between banks and SEB*

In the case of projects financed by the banks either individually or in participation, they would enter into a loan agreement with the SEBs. In the case of loans provided by the consortium of banks, there would be a single loan agreement to be signed by all financing banks on the one hand and the SEB on the other. However, the banks would either (a) enter into an interse agreement containing certain covenants, regarding their claim, supervision arrangements, recovery of loans, procedure for taking legal action in case of defaults, etc. or (b) introduce necessary clauses in the agreement to enable them to press their claim on the SEB in respect of the loan, supervision of arrangements, recovery of loans, procedures for taking legal action in case of default, etc.

*Government Guarantee*

In the case of bank consortium, the State Government guarantee would be issued either in favour of individual banks or in a single document in favour of consortium banks as may be convenient to banks/SEBs. Appropriate clauses in this behalf would be incorporated in the interse agreement.

**(ii) Projects to be financed by REC alone**

Under the arrangement, SEBs would enter into a loan agreement with REC broadly on the existing pattern. The loan agreement would, among others, provide for furnishing information regarding the progress of the projects, supervision by REC, etc. REC has already evolved a Guarantee form for its existing schemes which would be adopted for the purposes of this scheme.

**(iii) Projects to be financed by banks and REC in participation**

In the case of projects in this category, the banks and REC jointly would enter into a loan agreement with SEB. The individual/consortium banks and REC would enter into an interse agreement or other arrangements on the lines as in case of category (i). The form of Government guarantee would be broadly the same as in the case of category (i).

**Loan documents and Government guarantee either for individual schemes or group of schemes**

It may be possible that the same banks, individually or on consortium basis, would finance more than one scheme in one State. It would be possible for the banks/SEB to cover a group of schemes by a single set of documents and a bulk guarantee by State Government.

**ARDC Refinance**

ARDC would provide refinance to commercial banks under the existing General Agreement executed by them in favour of ARDC. There would be no need to enter into separate Refinance Agreement or Tripartite Agreement by the banks and SEB with ARDC. However, the participating banks would address a letter to ARDC indicating their participation in the projects and intention to draw refinance facility. ARDC refinance would be on the basis of the terms and conditions of the General Agreement already entered into by the banks and those stipulated by ARDC in the relative sanction letters.

**Content of Loan Agreements**

The Loan Agreements to be entered into by the banks and REC as the case may be, would by and large provide the loan amount to be disbursed under individual projects, the number of instalments in which the loan would be disbursed, the manner in which the instalment amounts would be determined, the documents/progress reports, which should be provided to the commercial banks and REC for drawal of loan amounts, the usual financial covenants regarding re-payment of loan according to the schedule stipulated by the banks/REC, the requirement/periodicity of the progress report to be furnished by SEBs, powers to the financing banks and REC to inspect the project sites and materials procured from the loans disbursed under the project. A broad outline of the documents would be circulated to the banks separately after these are finalised by the sub-working group set up by the Indian Banks' Association for the purpose.