INDIA - Credit 526 IN
Vol. II

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FORM NO. 635
(7–74)

This file is closed as of Oct 30, 74.

For further correspondence, please see Vol III.

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RECORDS MANAGEMENT SECTION

India - Drought Prone Areas

Mr. Robert Picciotto (through Mr. Parsons) October 30, 1974

Jacques Loup JL

INDIA - Drought Prone Areas Project
Economic Justification

1. In the white cover version of this project report, I had to make an assumption on the shadow price of unskilled labor for working out the economic rates of return of the various activities of the project. Since no method exists that would give a definite and universally accepted value for this shadow price, I chose to retain the financial prices, i.e. zero for family labor and full wage for paid labor. My argument was that the ensuing underestimation of the economic price of family labor and the overestimation of the economic price of paid labor would average out.

2. Commenting on the yellow cover, you asked me to use the alternative assumption of one lone shadow price for both family and paid labor. Mr. Baneth, on the other hand, wanted me to use another assumption i.e. family labor cost at the market price for labor and paid labor under Famine Relief Work cost at zero. For the green cover version of the report, I followed your advice and added an alternative computation using a shadow price of one rupee per man-day, for both family and paid unskilled labor.

3. Following review of the draft green cover report by Mr. Baneth early this month, Mr. Baneth wrote you a memo, appended here, explaining his position. We decided at this time to wait for Mr. Baneth to discuss it with you before I made any change in the economic annex of the report.

4. Since then, Mr. Ray from C.P.S. wrote another memo also appended, advocating another position, i.e. to use the shadow price of Rs. one per man-day as a base assumption and higher estimates for sensitivity analysis.

5. I discussed the whole question with Mr. Baneth this morning. I pointed out to him that (a) I was confronted with conflicting demands, (b) the project had been already negotiated and (c) I was leaving next week for an appraisal mission in Pakistan. Mr. Baneth agreed that in this case it was better to leave the economic justification of DPAP as it is. He insisted, however, that the methodology set forth in his memo be followed in the future for economic justification of projects.

Attachments

cc: Messrs. Baneth
Thornley

JLoup:ej

OFFICE MEMORANDUM

TO: Mr. Robert Picciotto

DATE: October 11, 1974

FROM: Jean Baneth

SUBJECT: INDIA - Drought Prone Areas Project

1. We discussed the economics of this project with Messrs. Loup, Pilvin, Hansen and Gil Brown yesterday. Certain methodological problems of quite broad relevance arise in connection with it. These problems relate to the estimation of the proper wage rate, including the shadow wage rate for family labor, and to the question whether and in what sense one can say that the project shows high rates of economic return if it does not allow any returns actually to be paid to capital, while it gives only the barest minimum standard of living for those who work on it. I suggested, and I believe the meeting agreed, that the proper treatment of the project would consist in examining it from two points of view. One question is whether the project, and each of the subprojects which compose it, are properly replicable and could thus form part of a long-term development strategy. Would India be able to develop if a very substantial part of the Government's resources were put into projects of this type? To answer this question, it is necessary to impute to labor a wage rate at least equal to what it actually requires in order to perform the necessary work. Then, if such an imputed wage cost shows reasonable rates of return, this means either that the Government will be able to recoup (directly or indirectly) the cost of its investment and suitable returns from the beneficiaries, or that the beneficiaries will acquire a living standard substantially above the bare minimum represented by their reservation wage; most likely a combination of the two. Such projects are replicable and form a proper part of long-term development strategy. Conversely, if the rate of return is found to be inadequate, then the project would not be replicable in the long run; it would not be a proper part of long-term development strategy.

2. This does not necessarily mean that the project should be rejected. A separate examination is to be made in answer to a different question. If there are no alternatives in Rajasthan, and if it is impossible to provide for a substantial fraction of the rural Rajasthan's population in other parts of India, then in the absence of the project the only means for ensuring survival is the Government's famine relief program. Ordinary famine works are notoriously ineffective, and very likely the proposed project constitutes a preferable alternative. This examination would consist in seeing whether the proposed project is the least costly alternative for ensuring the survival of the Rajasthan population. Because in the other alternative reservation wages would also be paid, they can be considered to be costless from the point of view of this project. Finding a high rate of return in this examination would mean that the proposed project, i.e., the provision of a substantial investment soon, is preferable to the alternative of paying famine relief in subsequent years.

3. In fact, I suspect that some of the works provided under the project, notably tank irrigation and dairy development, will appear economically justified even in the first examination. In other terms, where there are physical

facilities for tank irrigation, where dairy development is possible, agriculture in Rajasthan will remain a paying proposition in the long run, is part of a development strategy. On the other hand, I am quite sure that moisture conservation works and possibly sericulture will not appear to be economically justified in the first examination. This is not altogether surprising; anybody who has visited Rajasthan can have little doubt that it is not very suitable to unirrigated agriculture. Nevertheless, the proposed moisture conservation may be justified, but merely in the absence of other productive possibilities, as a substitute for mere famine relief. Nobody should be under the illusion that these works are actually a way of obtaining suitable economic returns to capital investment and that if replicated in a suitable scale they will lead to the development of India.

4. I would wish to discuss this idea with you as soon as possible.

cc: Messrs. Weiner
van der Tak
Chenery/Stern
van der Meer
Parsons
Pilvin/Kavalsky
Hansen
Gil Brown
Loup ✓

JBaneth/ylc

OFFICE MEMORANDUM

TO: Mr. Herman G. van der Tak

DATE: October 18, 1974

FROM: Anandarup Ray

SUBJECT: INDIA: Drought Prone Areas Project

1. After reading Mr. Baneth's memo to Mr. Piccioto (Oct. 11), I reviewed the economic analysis in the Green Cover Report. I share some of Mr. Baneth's concerns and would like to recommend a few changes in the report as described below.

SWR

2. The project components are very sensitive to the estimates of the shadow wage rates (SWR) used. Normally there are three elements in the valuation of labor:

(i) opportunity cost or foregone output,

(ii) disutility of labor,

(iii) the net social cost (may be negative) of the increased consumption of the labor force brought about by the project.

3. The valuation of the last element involves considerations relating to both income distribution and the scarcity of savings in the country, and is beyond the scope of the methodology being used in the project. We will return to this point later.

4. The estimates of the SWR in the report appear to be based only on item (i) above, although I fail to find a definitive statement to that effect. There are two sets of estimates:

(a) Rs. 1 per day for both hired and family labor,

(b) market wage rate for hired labor (should be, but is not, specified in the Annex 18) and zero wage rate for family labor. This has been used in the best estimates of the ROR.

5. The first set (a) conceptually makes sense (para. 3, Annex 18). The second set (b) is questionable with respect to the valuation of family labor. Let us split this set (b) in two parts:

(i) hired labor: the use of the market wage rate may be regarded as an alternative estimate of the opportunity cost. It may also be construed as an attempt to allow for the disutility of increased effort,

(ii) family labor: its valuation as zero on the grounds that "its financial costs are zero" is an absurdity. Zero is not the best estimate of the opportunity cost of labor, the latter being Rs. 1 per day. It is also objectionable if we wish to take into account the disutility of effort. Finally, its combination with the market wage rate for hired labor cannot be construed as a meaningful sensitivity test as it mixes biases of two opposite kinds.

6. I would therefore recommend that we use:

(i) the assumption (a) in para. 4 in our base ROR calculations,

(ii) use higher estimates for sensitivity testing, and/or to allow for the disutility of increased effort.

The Distribution of Benefits

7. Conceptually we should compute the increased private consumption brought about by the project and evaluate it in the light of the poverty of the people concerned, and the scarcity of public savings. This evaluation would be a part of the computation of the social rates of return of the project components. Since in this case we do not have the inputs for this evaluation a separate analysis of the consumption and fiscal effects of the project is called for.

8. The impact of the project, as presently set up, on the fiscal resources of the government should be indicated fully; the cost savings on alternative Famine Relief programs being only a part of the picture. We would then be better able to judge whether the incremental consumption being brought about by the project is too costly in terms of the public savings being sacrificed. This bears on the replicability and cost recovery issues.

9. For this purpose, it might also have been an useful exercise to compute the maximum favorable impact on public savings that could have been attained. This would have involved allowing the beneficiaries no increases in consumption over and above what would be necessary to compensate them for their extra effort, i.e., to induce them to carry out the project.

10. A very simple example might help. Assuming that production costs consist only of labor, consider the following data:

Example[1/]

	Payment to Labor by Govt.	Value of Output Produced (Rs.)	Total Private Income	Total Govt. Income
Without Project ("Relief") Case	10	2	12	-10
With Project	10 + 1[a/]	8	19	-11
Net Project Effects:				
(i) Economic Costs/Benefits	1 Costs	6 Benefits		
(ii) Private Income			+7[b/]	
(iii) Govt. Income				-1

a/ The additional 1 represent compensation for extra effort.
b/ Net gain in benefit is 7 - 1 = 6, following footnote above.

11. In this example, private benefits are 6 = 7 - 1, and Government benefits are -10. The replicability issue is: (i) whether the basic assumption of higher productivity due to the project is reasonable, and (ii) whether the distribution of benefits between the Government and the private sector is reasonable in the light of the scarcity of savings and the poverty of the people affected. Depending on our judgments of these factors the optimal distribution may involve increased private income and consumption of anywhere between 1 and 7, in terms of this example. Similar considerations will arise when the project is compared with a "do nothing" alternative, as it should be. Incidentally, the Annex 18 does not quite make it clear exactly what has been assumed for the "without" project case.

cc: Messrs. Weiner, Baneth, Piccioto, Hansen, Yudelman, Bruce
Anandarup Ray/mm

1/ Assumes that project labor will come only from the discontinuation of the Relief Program. If it comes also from other activities, then the foregone output will need to be costed and there may also be additional income effects.

India - Drought Prone Areas

October 25, 1974

Mr. P. Chopra
Deputy Secretary of Agriculture
Special Schemes
Government of Rajasthan
JAIPUR, India

Re: Drought Prone Areas Project
Guaranteed Payments to Sheep Producers

Dear Pawan:

As you state in your letter of October 22 the objective in proposing that the income to participants in the Sheep Scheme be guaranteed is to provide an incentive to participate. It is not intended that the guaranteed payments should provide insurance cover. When drafting bylaws for the growers cooperative societies you should therefore include a force majeure clause. This should except the payment of the guaranteed income where a shortfall in a societies income results from a natural disaster outside the control of management.

We look forward to the opportunity to comment on your proposed draft bylaws for the sheep growers societies in due course. I am copying this letter to the other participants in the negotiations since I believe all states should include a force majeure clause when drafting sheep growers societies bylaws.

I hope that you had a pleasant journey home and look forward to working with you again on future missions.

With best regards.

Yours sincerely,

Frank Thornley
Agriculturalist
General Agriculture Division
South Asia Projects Department

cc: Mr. D. Aurora
Director (DPAP)
Ministry of Agriculture
Government of India

Mr. B.C. Gangopadhyay
Secretary, Forests and Rural Development
Department
Government of Andhra Pradesh

Mr. S.K. Hajra
Deputy Commissioner
Bijapur District
Karnataka

Mr. V. Subramanian
Secretary, Planning Department and
Additional Development Commissioner
Government of Maharashtra

Attachments

FThornley:ej

India Drought Poor Areas

Mr. Dennis J. Parsons October 22, 1974

Frank Thornley

INDIA - DPAP Negotiations

1. We discussed procurement procedures for DPAP. The proposed revised wording of Schedule 3, Procurement, of the Credit Agreement for which I would like approval is as follows:

A. General Procedures

1. No change.

2. (a) Contracts estimated to cost $12,500 or more for the construction of tanks and for the procurement of machinery, equipment and vehicles, shall be let after competitive bidding based on local advertising.

(b) Contracts estimated to cost less than $12,500 for the procurement of machinery, equipment and vehicles, shall be let on the basis of prudent shopping.

(c) No change.

(d) Civil works to be executed by the States (other than tank construction) shall be by force account or, at the option of a state by competitive bidding based on local advertising.

No change thereafter.

FThornley:ej

India - Drought Prone Areas

October 22, 1974

From: P. Chopra,
Deputy Secretary(Agriculture)
(Special Schemes)
Government of Rajasthan,
JAIPUR, India

To: Mr. Dennis J. Parsons,
Division Chief,
South Asia Department,
I.B.R.D., Washington D.C.

Dear Sir:

Regarding: Drought Prone Area Programme Guaranteed Payments by Sheep Cooperative Units- Section 2.05(b) of draft Project Agreement with Rajasthan.

From discussions, during the negotiations, my understanding is that these guaranteed payments are meant for the purpose of providing an incentive to the sheep growers for joining the proposed cooperatives. There is no intention of providing insurance cover through this arrangement and in the eventuality of epidemics leading to large sheep mortality among sheeps, the cooperatives will have the right to set off their losses against these guaranteed payments to the extent of each member's liability on his share holding.

This position may please be confirmed.

Yours truly,

(P. Chopra)

File DPAP
Central
cc Div

23 OCT

Memo of Understanding
23 Oct 78

India-Drought Prone Areas

India- Drought prone Areas

October 23, 1974

INDIA

DROUGHT PRONE AREAS PROJECT

MEMORANDUM OF UNDERSTANDING

1. This has reference to the negotiations held in Washington, D.C., regarding the proposed Credit for the Drought Prone Areas Project.

2. With reference to the Drought Prone Areas Program (DPAP), covering about 70 districts throughout India, the Association confirmed that the proposed Project would cover only part of the DPAP activities in the six selected project districts.

3. With reference to Schedule 2 (Description of the Project) of the draft Development Credit Agreement, the Association confirmed that to ensure flexibility in attaining Project objectives and in recognition of possible price differences beyond those implied under the Project, the physical targets of this Schedule may need adjustment and amendment as the Project progresses; such changes to be made in consultation between the Government of India, the States involved, and the Association.

4. With reference to Section 3.05 of the draft Development Credit Agreement, the Association confirmed that the proceeds of the Credit would be confined to financing part of the public sector outlay, thus excluding financing of on-farm development and cooperative activities. It is, however, understood that activities for which institutional credit is required would be eligible for ARC lending in project areas either under existing credit projects or under a separate ARC credit project now under appraisal by the Association, provided that participating banks in these areas satisfy such ARC lending criteria as may be agreed with the Association.

5. With reference to Section 3.03 of the draft Development Credit Agreement, and Section 2.02 of the respective draft Project Agreements, the Association defined, and the Indian delegation accepted, the qualifications and experience of candidates for the positions referred to in the above sections, which would be satisfactory to the Association. These are detailed in the attached Annex I.

6. With reference to Section 2.10(a) of the draft Andhra Pradesh, Karnataka, and Maharashtra Project Agreements and Section 2.09(a) of the draft Rajasthan Project Agreement, the Indian delegation expressed concern at the potentially onerous burden of reporting implied therein. In response, it was pointed out that the Association would not ask for more reports or other information than would be needed internally for prudent management. It was further pointed out that final reporting requirements would be determined only after consultation between the Borrower and the Association.

Mr. M. A. Quraishi
Secretary to the Government of India
Ministry of Agriculture
New Delhi

Karl H. Willen
South Asia Department

Mr. D. Aurora
Director (DPAP)
Ministry of Agriculture
New Delhi

28/10/94.

Mr. V. N. Rajagopalan
Director
Ministry of Finance
Department of Economic Affairs
New Delhi

Mr. B. C. Gangopadhyay
Secretary, Forests and Rural Development
Department
Government of Andhra Pradesh
Hyderabad

Mr. S. K. Hajra
Deputy Commissioner
Bijapur District
Karnataka

Mr. V. Subramanian
Secretary, Planning Department and
Additional Development Commissioner
Government of Maharashtra
Bombay

Mr. Pawan Chopra
Deputy Secretary, Agriculture
(Special Schemes)
Jaipur
Rajasthan

ANNEX I

INDIA

DROUGHT PRONE AREAS PROJECT

Qualifications and Experience of Candidates Referred to in Section 3.03 of the Draft Development Credit Agreement, and Section 2.02 of the Draft Project Agreements:

1. Senior Agricultural Economist

As outlined in Annex 10, Appendix 2, of the draft Green Cover Appraisal Report.

2. Specialist in Soil Conservation and Dry Farming

a. A Master's Degree or its equivalent in a related discipline;

b. At least seven years of field experience in agricultural and/or rural development, preferably in semi-arid areas;

c. Experience in the planning and implementation of staff and farmer training programs, including extension programs;

d. An ability to communicate with officials at all levels and to motivate staff; and,

e. An ability and willingness to travel extensively.

3. Specialist in Irrigation

a. A Master's Degree or its equivalent in a related discipline;

b. At least seven years of field experience in minor irrigation development covering both surface and groundwater exploitation;

c. A proven concern for the sound utilization of irrigation water including experience of command area development;

d. An ability to communicate to officials at all levels and to motivate staff; and,

e. An ability and willingness to travel extensively.

4. Specialist in Economics

a. A Master's Degree in Agricultural Economics or Economics with preference given to candidates with a good agricultural background;

b. Experience in the formulation of agricultural and/or rural development projects and related financial and economic analyses;

c. Experience in the design and implementation of programs for the evaluation and monitoring of agricultural and rural development programs;

d. Experience in the planning and implementation of training programs;

e. An ability to communicate with officials at all levels and to motivate staff; and,

f. An ability and willingness to travel extensively.

5. Project Managers

a. A degree or its equivalent in an appropriate discipline;

b. At least four years of field experience in an administrative capacity closely connected with agricultural and/or rural development programs, preferably in semi-arid areas. The candidate should have a demonstrated ability to coordinate multisectorial development activities; and,

c. An ability to communicate with officials at all levels and to motivate staff.

India - Drought Prone Areas Project

Files October 25, 1974

Mrs. M. Robbin

Drought Prone Areas Project

Negotiations have been substantially completed for a proposed IDA Credit of US$35.0 million equivalent.

Borrower: Government of India

Project: Drought Prone Areas Project

Estimated Board Presentation: End November 1974

Closing Date: June 30, 1980

Payment Dates: May 1 and November 1, Commencing May 1, 1985 and Ending November 1, 2024

Financing: The proposed project is designed to increase and stabilize the production from agriculture and related activities in six drought prone districts of Western and Central India. The project would consist of minor irrigation works, command area development, watershed management, a dry farming development program, improved sheep and wool production, dairy development, fodder banking, diversification projects in sericulture, horticulture and inland fisheries, research and training and improvement in the flow of agricultural credit. IDA's share of the total project cost of US$101.5 million would finance all of the foreign exchange expenditures and the balance toward local currency expenditures.

Disbursement Discussion: Disbursement Discussions were held by Mr. von Busse and Mrs. Robbin with Messrs. D. Aurora, Ministry of Agriculture, V. Subramanian, Secretary, Planning, Government of Maharashtra, A. Bordia, Special Secretary, Rajasthan, B.C. Canogopadhyay, Secretary, Department of Rural Development, Andhra Pradesh, S.K. Hajra, Deputy Commissioner, Bijapur, Government of Karnataka and V.N. Rajagopalan, Director, Ministry of Finance, Government of India. All of our Disbursement Procedures were explained in detail and sample copies given. The importance of receiving evidence of the authority of persons designated to sign withdrawal applications and their authenticated specimen signatures was stressed.

cc: Messrs. Davies
Deely
von Busse

MRobbin/gm

File: Background Forms and Procedures
Asia Files

No 8

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Mervyn L. Weiner (through Mr. C. G. Helmoth) DATE: October 22, 1974

FROM: K. H. Willen

SUBJECT: INDIA - Drought Prone Areas Project - Negotiations

1. We are in the process of concluding negotiations of the draft legal documents for this project. The Indian delegation has raised the following issues related to the Development Credit Agreement (DCA), in addition to minor points that have been resolved by appropriate adjustments of the draft legal documents.

2. DCA, Section 4(a) of Schedule 1, Withdrawal of the Proceeds of the Credit. This is a standard covenant, providing that no withdrawals shall be made prior to the date of the Agreement. Assuming that this date would be around mid-December, the Indian delegation has suggested that the cutoff date be October 1, 1974. The amount thus retroactively financed would be about US$300,000 equivalent, mainly relating to operating costs. The Indians have pointed out that as the quarter is their normal accounting unit, problems would arise if they, within that period, had to establish cutoff dates for various expenditure streams eligible for IDA financing.

3. I recommend, with Project's concurrence, that we do not accept retroactive financing. The amount involved is too small to justify a deviation from standard Bank policy. The best part of the October 1 quarter will have passed at the estimated date of the Agreement, and brings it close to the January 1 quarter. The commencement of IDA financed civil works or other physical activities would not be delayed by our insisting on the date of the Agreement as the cutoff point.

4. DCA, Same Schedule, Section 4(b). This refers to a condition for disbursement. In the six project districts, command area development (CAD) will take place based on a total of 29 tanks, the construction of which will be financed under the credit. The State Governments have agreed to furnish to IDA for its comments the master plan for integrated tank construction and CAD before starting the construction of the first tank in each district. In order to further stress the concept of integrated development, Section 4(b) as drafted lays down the stipulation that IDA would not disburse against tank construction until satisfactory evidence had been furnished that CAD had actually started.

5. The Indians strongly opposed this covenant, and our discussions reached an impasse. They argue that while completion of a tank will take two years, related CAD activities would require much less time. It would not be realistic to expect farmers to take an active interest in CAD until they see the tank completed. Therefore, in adhering to this covenant, the State Governments and GOI would have to advance about US$3 million equivalent over two years against this component without reimbursement under the credit.

6. We have pointed to the risk that CAD may not take place in spite of the completion of a tank, and to the fact that IDA must be prudent in investing scarce IDA funds. They, the Indians, feel that we are too cautious, and that the risk is minimal. Acknowledging the purpose of this covenant, however, they would accept sharing with the Association the possible risk involved.

Negotiations have been stuck for a couple of days on this PSA issue since convinced that we shall have to compromise, I agree that the 50-50 proposal is acceptable.

7. I recommend, with the concurrence of Projects, that we accept risk-sharing of this component on a 50-50 basis. This would be accomplished by prescribing in this covenant that IDA will disburse no more than 50% of the eligible amounts of each disbursement claim for each tank until satisfactory evidence has been received that CAD related to that tank has started.

8. DCA, Schedule 3, Procurement, Section 2(a). This covenant establishes Rs. 50,000 (US$6,250) as the cutoff point between local competitive bidding and prudent shopping for locally procured machinery, equipment and vehicles. The Indian delegation has requested that this amount be raised to US$25,000 (Rs. 200,000) to bring it more in line with current praxis in India, and to reduce paper work.

+/ One crore of Rupees is a round figure.

9. I feel that this suggestion has some merit. The cutoff point suggested by the mission might incur procedures too cumbersome, without significant benefits. On the other hand, stretching the limit too far would abrogate the purpose of this covenant, namely to restrict prudent shopping to minor items. Therefore, I recommend, in concurrence with Projects, that the cutoff point be US$12,500 (Rs. 100,000).

10. If you agree to the above recommendations, we will finalize the negotiations accordingly. Further, I suggest that we explain these issues and their resolution in our memorandum to the Senior Vice President when requesting final clearance of the Grey Cover documents.

Ok

KHWillen:ao

Cleared with and cc: Messrs. van der Meer
Parsons
Cunningham
Awunyo
Mrs. Robbin

Mlw 10/23

+/ I sincerely hope Mr. Goodman had lakhs in mind!

KHWillen

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL FINANCE CORPORATION

Mr. Knapp.

India - Drought Prone Area Negotiations

I endorse the proposed amendments (attached) to the negotiating position approved by the Loan Committee, ~~(illegible)~~ and we shall proceed accordingly unless we hear from you to the contrary.

Because the delegation hopes to leave tomorrow Mr. Willen is pursuing this matter in parallel with Ray Goodman this morning.

Mr. Knapp

Per. see my marginal comments.

RPS.

OK

10/23

1100

Record Removal Notice

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File Title	Barcode No.
Drought Prone Areas Project - India - Credit 0526 - P009692 - Correspondence - Volume 2	30305772

Document Date	Document Type	
October 18, 1974	Memorandum	

Correspondents / Participants
To: Mr. Arvind Pande, Office of Executive Director
From: Karl H. Willen, South Asia Projects

Subject / Title
Invitation to Negotiate

Exception(s)

Additional Comments
Declassification review of this record may be initiated upon request.

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INCOMING TELEX From Rome

South Asia
India - Drought Prone Areas

VERAART 306

Distribution:
Agric. & Rural Dev.
Mr. Parsons
Mr. Spall
Mr. Kraske

ONE FOR PARSONS AND BROWN DPAP INDIA REURTELCON GROENEWOLD 16 OCTOBER CONCLUSIONS GROENEWOLD VISIT MAHARASHTRA AS FOLLOWS

AAA GOVERNMENT MILK SCHEMES WORKING FULL CAPACITY DUE INCREASED FARM PRICE AND GOOD RAIN STOP ADDITIONAL INVESTMENT REQUIREMENTS LIKELY FOR CHILLING AND PASTEURIZATION STOP LONG TERM MILK PRICE POLICY NEED ATTENTION

BBB OUR MISSION ESTIMATES CATTLE PERFORMANCES AND COST STILL VALID

CC DAIRY EXTENSION NEEDS STRENTHENING

DDDTRAINING LOCAL PERSONNEL MUST BE FIRST ACTION SHEEP DEVELOPMENT

EEE100 HA AVERAGE BLOCK SIZE LIKELY TOO LARGE AND EMPHASIS ALSO ON PRIVATE SECTOR SHEEP DEVELOPMENTS FROM BEGINNING OF PROJECT STOP GROENEWOLD FIELD NOTES RAJASTHAN HANDCARRIED SOONEST BUT SUMMARIZED AS FOLLOWS

AAA DROUGHT CONDITIONS COMMA HIGH FARM PRICES PAID BY PRIVATE MILK COLLECTORS BUT PREVIOUS PRICES STILL OFFERED BY GOVERNMENT HAVE REDUCED VOLUMES OF MILK COLLECTED BY GOVERNMENT SCHEMES STOP HIGH LEVEL INTERVENTION SEEMS NECESSARY

BBB GOVERNMENT RAJASTHAN AGREES OUR MISSION ESTIMATES CATTLE PER FORMANCES

CCC DAIRY SPEARHEAD TEAM WORKING UNTIL NOW IN AJMER CAN BECOME TRAINING CADRE RAJASTHAN

DDD NO DEVELOPMENTS SO FAR IN SHEEP SECTOR SPEARHEAD TEAMS WILL HAV E TO BE ESTABLISHED FIRST

EEE DISCUSSIONS CONCENRING BYLAWS REVEALED GOVERNMENT DESIRE TO PROTECT WEAKER STOCKOWNERS BY INSITING ON PAYMENT IN KIND AND ON STIPULATING MINIMUM AS WELL AS MAXIMUM NUMBERS

[illegible] NUMBERS PER ON PAYMENT IN KIND AND ON

STIPULATING MINIMUM AS WELL AS MAXIMUM NUMBERS PER PARTICIPANTS

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INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

India - Drought Prone Areas

OFFICE MEMORANDUM

TO: Files

DATE: October 16, 1974

FROM: Karl H. Willen

SUBJECT: INDIA - Drought Prone Areas Project

1. The extended period for the Loan Committee's review of this project ended at the close of business on October 15, 1974. The following comments were received, none of which affect the amount or the terms and conditions of this credit.

2. Mr. Knapp queried the lack of any reference in the Loan Committee documents to the recovery of public sector funding under the project. As further explained in the attached memorandum, only a minor part of these costs would be recovered through certain betterment levies, and water charges on irrigation tanks. For the majority of project beneficiaries, the income upon completion of the project would still be too marginal to enable their paying any direct levies or taxes. The public expenditures will be justified by the positive indirect effects on revenues that will be realized by the improvement in the productivity of the beneficiaries. A small group of beneficiaries, however, would get substantial income increases, benefiting from irrigation tanks. During the negotiations, the possibility to raise the water charges and betterment levies for these farmers will be explored with the four state governments concerned.

3. A paragraph will be added to the final version of the Appraisal and President's reports dealing with the question of cost recovery, and with the outcome of the above discussions.

4. Mr. Goodman (on behalf of Mr. Knapp) and Mr. van der Tak pointed to the need for clarifications in and conformity between the Appraisal and President's reports referring to, inter alia, procurement, project financing, and economic justification. These matters will also be dealt with in the final versions of the two reports.

KHWillen:ao

cc (w/attach): Messrs.

Knapp	Picciotto
Cargill	Baneth
Goodman	Kraske
Baum	Parsons
Weiner	Brown, J.
Broches	Thornley
Rotberg	von Gontard
van der Tak	Loup
Melmoth	Awunyo
van der Meer	Lithgow
	Mrs. Robbin

India - Drought Prone Areas

IDA/SecM74-294

FROM: The Secretary

October 16, 1974

NOTICE OF INTENTION TO NEGOTIATE

INDIA - DROUGHT PRONE AREAS PROJECT

The Association is planning to invite the Government of India to send representatives to Washington to negotiate a proposed development credit of $35 million to India to finance the Drought Prone Areas Project.

Distribution:

Executive Directors and Alternates
President
Senior Vice President, Operations
Executive Vice President and Vice President, IFC
President's Council
Directors and Department Heads, Bank and IFC

OFFICE MEMORANDUM

TO: Mr. J. Burke Knapp

DATE: October 14, 1974

FROM: Jochen Kraske

SUBJECT: INDIA - Drought Prone Areas Project

1. I understand that you queried the lack of any reference to the recovery of public investments in the reports relating to the DPAP project. Considering the nature and the objectives of the Government's program and of the project, this omission was only partly the result of an oversight. A principal objective of the Government's program is to turn non-productive expenditures for famine and employment relief into investments with lasting effect on the productivity of the beneficiaries. In this sense, savings in public expenditures on relief, conservatively estimated at Rs 5 million per year, are included among the benefits of the project. These savings would offset only a small portion of the total public investment; for the remainder it must be assumed that the improvement in the productivity of the 225,000 rural families directly benefiting from the project would have positive indirect effects on revenues sufficient to justify the public expenditures. However, this effect is too remote and too uncertain to permit quantification. The average income of the beneficiaries, approximately Rs 1,500 per annum, including the addition resulting from the public investment, would be very low and preclude as unreasonable any direct levies or taxes to recover the public investments. The only exceptions would be expenditures on soil conservation on private lands and on tank irrigation.

2. The position regarding the major categories of public expenditures is as follows:

i) Expenditures on establishing new and improving existing agricultural extension and veterinary services totalling about US$11 million equivalent would **not** be recovered. I believe this is normal practice in all agricultural projects.

ii) Livestock development expenditures totalling approximately US$10 million equivalent would be in the form of grants.

iii) Expenditures on soil conservation, including forestry and pasture development, would total about US$18.5 million equivalent. This includes approximately US$12 million spent on public lands which would not be recovered and US$6.5 million on private farms of which about US$3.5 million would be recovered through betterment levies, which is reasonable.

/2....

Tank my

iv) A total of approximately US$4 million equivalent would be spent on the construction of 29 irrigation tanks. Combined with on-farm investment by the beneficiaries themselves, these expenditures would result in a substantial increase of the net income of 2,500 families from about Rs 1,000 to Rs 5,000 per annum. Water charges paid by the farmers would cover the costs of operation and maintenance. Betterment levies, which vary from state to state, would be sufficient to recover about 10-15% of the public investment over a ten-year period. The increase in farmers income resulting from this investment should be sufficient to permit a higher rate of recovery. It would, therefore, be appropriate during negotiations to point out the desirability of increased betterment levies and to explore the possibility for the four State Governments to raise these charges. It would be difficult, however, to insist on a firm commitment to this effect. Tank irrigation is only a small component of our project and the State Governments would be reluctant to commit themselves to changing financial policies which have implications going far beyond the programs in the selected districts.

3. If you agree, we will include in the final version of the Appraisal and President's Reports a paragraph dealing with the question of cost recovery, including a reference to the outcome of our discussions relating to the recovery of investments on irrigation tanks.

cc: Messrs. Baum
Goodman
Weiner
van der Meer
Parsons
Melmoth

JKraske:ebc

Econ analysis

India - Drought Prone Areas Project

Mr. Robert Picciotto October 11, 1974

Jean Baneth

INDIA - Drought Prone Areas Project

1. We discussed the economics of this project with Messrs. Loup, Pilvin, Hansen and Gil Brown yesterday. Certain methodological problems of quite broad relevance arise in connection with it. These problems relate to the estimation of the proper wage rate, including the shadow wage rate for family labor, and to the question whether and in what sense one can say that the project shows high rates of economic return if it does not allow any returns actually to be paid to capital, while it gives only the barest minimum standard of living for those who work on it. I suggested, and I believe the meeting agreed, that the proper treatment of the project would consist in examining it from two points of view. One question is whether the project, and each of the subprojects which compose it, are properly replicable and could thus form part of a long-term development strategy. Would India be able to develop if a very substantial part of the Government's resources were put into projects of this type? To answer this question, it is necessary to impute to labor a wage rate at least equal to what it actually requires in order to perform the necessary work. Then, if such an imputed wage cost shows reasonable rates of return, this means either that the Government will be able to recoup (directly or indirectly) the cost of its investment and suitable returns from the beneficiaries, or that the beneficiaries will acquire a living standard substantially above the bare minimum represented by their reservation wage; most likely a combination of the two. Such projects are replicable and form a proper part of long-term development strategy. Conversely, if the rate of return is found to be inadequate, then the project would not be replicable in the long run; it would not be a proper part of long-term development strategy.

2. This does not necessarily mean that the project should be rejected. A separate examination is to be made in answer to a different question. If there are no alternatives in Rajasthan, and if it is impossible to provide for a substantial fraction of the rural Rajasthan's population in other parts of India, then in the absence of the project the only means for ensuring survival is the Government's famine relief program. Ordinary famine works are notoriously ineffective, and very likely the proposed project constitutes a preferable alternative. This examination would consist in seeing whether the proposed project is the least costly alternative for ensuring the survival of the Rajasthan population. Because in the other alternative reservation wages would also be paid, they can be considered to be costless from the point of view of this project. Finding a high rate of return in this examination would mean that the proposed project, i.e., the provision of a substantial investment soon, is preferable to the alternative of paying famine relief in subsequent years.

3. In fact, I suspect that some of the works provided under the project, notably tank irrigation and dairy development, will appear economically justified even in the first examination. In other terms, where there are physical

facilities for tank irrigation, where dairy development is possible, agriculture in Rajasthan will remain a paying proposition in the long run, is part of a development strategy. On the other hand, I am quite sure that moisture conservation works and possibly sericulture will not appear to be economically justified in the first examination. This is not altogether surprising; anybody who has visited Rajasthan can have little doubt that it is not very suitable to unirrigated agriculture. Nevertheless, the proposed moisture conservation may be justified, but merely in the absence of other productive possibilities, as a substitute for mere famine relief. Nobody should be under the illusion that these works are actually a way of obtaining suitable economic returns to capital investment and that if replicated in a suitable scale they will lead to the development of India.

4. I would wish to discuss this idea with you as soon as possible.

cc: Messrs. Weiner
van der Tak
Chenery/Stern
van der Meers
Parsons
Pilvin/Kavalsky
Hansen
Gil Brown
Loup

JBaneth/ylc

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Dear Karl

TO: Mr. Karl Willen

DATE: October 9, 1974

FROM: Frank Thornley

SUBJECT: INDIA: Drought Prone Areas Project

1. In my opinion we should respond to the cable to Mr. Pande on DPAP negotiations.

2. Reworking the appraisal before the currently scheduled negotiating date is not possible. In any event no specifics have been given as a base for any "reworking", nor do we agree at this stage that any modifications in the appraisal proposals are necessary.

3. It should be made clear to GOI that whilst the detail of the dairy program, the Rajasthan tubewell program and indeed the detail of other components can be discussed during negotiations, there is no question of our reconsidering the basic concept of the dairy component, namely that it be based on indigenous cows. This issue was exhaustively discussed by the appraisal mission and the appraisal report reflects their final judgement on the matter. There is an element in the dairy program which would permit crossbreeding on a pilot scale. If, contrary to the judgement of the appraisal mission, the program should arouse widespread farmer interest and prove capable of viable expansion there would be ample flexibility in the project design to permit this.

cc: Messrs Brown, Loup

Division File (with copy of cable)

FThornley/geg

India - Drought Prone Areas

Mr. Warren C. Baum October 9, 1974

G.F. Darnell

INDIA - Drought Prone Areas Project, Green Cover Appraisal Report

1. With the exception of those noted below, the report takes account of the substantive comments of the Agriculture and Rural Development Department and PAS. Proposed activities are in line with the overall recommendations for the sector.

2. The project has some 12 different components; it is located in six drought prone districts of four states; it forms part of an ongoing program initiated by the Government of India some four years ago; it is innovative, technically and organizationally complex and, almost axiomatically, risky. It is nevertheless highly relevant to the districts selected and has the potential for replication in drought prone areas elsewhere in India.

3. The report is very long, but it has been reduced by 30% from the yellow cover version to its present 34 pages. The region has thus gone some way to meeting CPS criticisms on this score, however, it has been unable to make much of an impact on the numbers of assurances, which run to four full pages, apparently considered necessary.

4. The report is still less than fully clear on aspects, relating to projected increased agricultural production, para 6.04, and numbers of beneficiaries. In the latter case, a figure of some 225,000 rural households is given in para xi of the Summary. It does not appear elsewhere in the main report and some form of cross reference is needed to Annex 18 where the total is synthesized and the rationale for its derivation is explained.

5. Paragraph 6.04 lists estimated production increases by volume and value but neither this section nor the cross references cited enable the reader to establish rapidly how these figures are derived. A summary table in the appropriate annex would be helpful in this respect.

6. The report issued before your memorandum dated September 16 on description of procurement procedures in appraisal reports. The wording of paragraphs vi and 4.54 should be amended to comply with this memorandum when the gray cover version is prepared.

DCPickering:hrv

cc: Messrs. Yudelman
van der Tak
Picciotto

V.B.L. Mathur
Special Secretary to Govt.

Deptt. of Personnel

जयपुर
राजस्थान

No.F.5(58)Pers(A-I)/74 Dated- 12th ~~Sept~~ Oct.,1974

The Secretary,
International Development-
Association,
1818 H Street N.W.,
Washington DC,
U.S.A.

Sub:- Drought Prone Area Projects of
authorisation for signing the agreement.

*****

Dear Sir,

By order and in the name of the Governor of Rajasthan (India), I am directed to state that the Ambassador of India to the United States of America, or, in his absence, India's Charge D' Affairs at Washington, is hereby authorised to sign the Rajasthan agreement (Drought Prone Area Projects of Jodhpur and Nagaur Districts) and all other appurtenant documents with the International Development Association, on behalf of the Government of Rajasthan.

Yours faithfully,

(V.B.L. Mathur)
विशिष्ट शासन सचिव,
कार्मिक विभाग, राजस्थान
जयपुर

NOTIFICATION

Law and Judiciary Department,
Sachivalaya,
Bombay-400032, 17th December 1974.

Constitution of India.

No. DCA-1074-J.- In exercise of the powers conferred by clause (1) of article 299 read with article 258A of the Constitution of India, the Governor of Maharashtra hereby directs that the contracts mentioned in column (1) of the Schedule hereto appended, made in the exercise of the executive power of the State of Maharashtra, may be executed on his behalf by either of the two officers mentioned against it in column (2) of that Schedule; and for that purpose amends Government Notification, Law and Judiciary Department, No. DCA.1068-J, dated the 26th June 1971, as follows, namely:-

In the said notification, after entry 154, the following shall be added, namely:-

"PLANNING DEPARTMENT

155.	Maharashtra Project Agreement (Drought Prone Areas Project) to be entered into with International Development Association.	By the Ambassador of India to the United States of America, or the Charge 'D' Affaires of India at Washington."

SCHEDULE

Contract	Officers authorised to execute.
(1)	(2)
Maharashtra Project Agreement (Drought Prone Areas Project) to be entered into with International Development Association.	By the Ambassador of India to the United States of America, or the Charge 'D' Affaires of India at Washington.

By order and in the name of the Governor of Maharashtra,

C D'Souza

(Kum. C. D'Souza)
Under Secretary to Government.

P.T.O.

To
The Secretary to the Governor of Maharashtra,
The Prothonotary and Senior Master, High Court (Original Side), Bombay (by letter),
The Registrar, High Court (Appellate Side), Bombay (by letter),
All Departments of Sachivalaya,
All Heads of Departments,
The Accountant General, Maharashtra I, Bombay,
The Accountant General, Maharashtra II, Nagpur,
The Pay and Accounts Officer, Bombay,
The Resident Audit Officer, Bombay,
The Law and Judiciary Department (Branch E),
The Law and Judiciary Department (Branch B),

No. DCA.1074-J,
Law and Judiciary Department,
Sachivalaya, Bombay-400032,
Dated:- 17th December 1974.

Copy forwarded with compliments to the Manager, Government Central Press, Charni Road, Bombay-4, with a request to publish the above ~~work~~ notification in Maharashtra Government Gazette, Part IV-A, and forward 1,000 copies of the Notification to this Department.

C.D'Souza

(Kum. C. D' Souza)
Under Secretary to Government.

PPS/
17xii74/L.

5 loan Counter Oct 7 74

India Credit 526 Rehm
Oct. 8, 1974

Country	Loan # / Credit # 526 / Investment #	Project
INDIA		

Title and Description

Jodhpur and Nagaur Districts
Implementation During Fifth Plan Period -
Constitution of District Development Agencies

Form No. 114 (1-73)

Document Date Oct. 8/74	Prepared By Govt. of Rajasthan	
Transmittal Letter No. / Date	From	Document # 14,441

No Letter-Copy Card for File ☒

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: The Loan Committee **DATE:** October 7, 1974

FROM: Mervyn L. Weiner

SUBJECT: INDIA - Drought Prone Areas Project

1. The Committee is requested to consider the attached draft President's and Appraisal reports and legal documents for the proposed "Drought Prone Areas Project." These drafts were submitted to me under cover of the attached memorandum from Mr. William Diamond. Questions should be directed to Mr. Karl Willen (Ext. 2796).

2. In the absence of objections by the close of business on Thursday, October 10, 1974, I plan to inform the Executive Directors of the Association's intention to invite negotiators for the proposed credit, on the terms and conditions set out in the attached drafts.

Attachments

KHWillen:ao

Distribution:

Mr. J. Burke Knapp, Chairman (3)
Mr. I.P.M. Cargill
Mr. W. C. Baum (3)
Mr. A. Broches
Mr. E. Rotberg
Mr. van der Tak (3)

INDIA - Drought Prone Areas Project

1. Mr. Weiner had the following comments, when signing the Loan Committee Memorandum on this project today.

For the Grey Cover Appraisal and President's Reports

2. Considering the large staff effort invested in project preparation, and the considerable supervision effort required, he felt that this should be brought out better in the reports. These efforts are justified in view of the path-breaking/pilot nature of the project, and of prospects that successful components will be replicated elsewhere under the DPAP.

3. Reasons for IDA's assuming of operating and staff expenses should be explained (incremental expenditures during the five-year period).

For the President's Report

4. Explain better that

(i) conditions for disbursement apply individually to each State (paragraph 44);

(ii) IDA is taking a "time slice" of an on-going program;

(iii) GOI is passing the proceeds of the credit on as a grant (Annex III).

Karl H. Willen
October 7, 1974

cc: Messrs. J. Brown (o/r), Thornley, von Gontard

KHWillen:is

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

India Drought Prone Areas

OFFICE MEMORANDUM

TO: Files **DATE:** October 3, 1974

FROM: Karl H. Willen, South Asia Programs KHWillen

SUBJECT: INDIA - Drought Prone Areas Project

1. The Indian negotiating team for this project will consist of the following:

Mr. M. A. Qureshi Secretary, CDEC	Mr. Anil Bordia Special Secretary, Rajasthan
Mr. D. Aurora Director, CDEC	Mr. B. C. Canogopadhyay Secretary, Dept. of Rural Development
Mr. C. H. Krishnamoorthy Assistant Director General-cum- Project Director	Mr. S. K. Hajra Deputy Commissioner Bijapur, Govt. of Karnataka, Bijapur
Mr. V. Subramanian Secretary, Planning Government of Maharashtra	Mr. V. N. Rajagopalan Director, Ministry of Finance Department of Economic Affairs GOI

2. Negotiations are scheduled to commence on October 14, 1974. Information about further arrangements will follow.

KHWillen:ao

cc: Messrs. Kraske
Parsons
J. Brown
Thornley
Forget
Mrs. Robbin
Mr. von Gontard

OFFICE MEMORANDUM

TO: Mr. Dennis Parsons

DATE: October 3, 1974

FROM: F. Thornley

SUBJECT: INDIA - Drought Prone Areas Program

1. Following our recent discussion of DPAP with GOI officials Jim Brown and I sent a cable to you which said, inter alia, "Anticipate some discussions during negotiations alpha magnitude of dairy component."

2. This was an ambiguous statement which was understandably misinterpreted during the drafting of paragraph five of the Area Memorandum to the Loan Committee. Inter alia this says, "We expect the Indian negotiators to press for an increase in the size of this component..."

3. In fact the concern expressed to Brown and myself by GOI, deriving mainly from comment from Maharashtra officials, was this. That the appraisal mission had used technical performance parameters for indigenous dairy cows which were too optimistic and that farmers were unlikely to desire to borrow, or banks to lend, for indigenous cattle purchases at the scale envisaged. It was thus felt that the proposed funding of the dairy component would exceed requirements.

4. Our response was that the appraisal mission had used its best judgement on these issues and we felt that there were no grounds for changing it at this time. We pointed out that a key feature of DPAP was flexibility to react to changing circumstances, hence the emphasis on district planning to permit reaction to any such changes. Thus should it be indicated by experience funds could be reallocated amongst components.

5. Since our view concurs with the recommendation in paragraph five of the Area Memorandum that .... "we keep this component at its present size," I would suggest that the misunderstanding on which the paragraph is based requires no other action than to apprise those immediately concerned of the situation and have copied this memo accordingly.

Mr Thornley
Good. FT
file.

F. Thornley/gs

cc: Messrs. Picciotto, Krashe, Willen, Brown, Loup

Green Cover Memo

OFFICE MEMORANDUM

TO: Mr. Mervyn L. Weiner DATE: September 30, 1974

FROM: William Diamond

SUBJECT: INDIA - Drought Prone Areas Project

1. I attach a draft Appraisal Report entitled, "India - Appraisal of Drought Prone Areas Project" recommending a US$35 million credit. Also attached is a draft President's Report, draft legal documents, and a copy of the current five-year lending program. The draft legal documents comprise, apart from the Development Credit Agreement with the Government, four separate project agreements with the States of Andhra Pradesh, Karnataka, Rajasthan, and Maharashtra.

2. The attached reports contain a description of the Drought Prone Areas Program (DPAP), the proposed project, which covers six districts included in the program, and the institutional arrangements existing and proposed for the project period. The DPAP is an important element of the Government's efforts to promote social justice with economic development. The program was selected two years ago in consultation with the Government as a promising and suitable candidate for the Bank's support and participation. For a representative selection of drought prone districts, the proposed project includes a wide range of components, while it strengthens existing institutions at the Center, State and district levels. The nature of the project reflects the complexity of rural development problems in India, and it is not surprising that preparation required considerable time and effort by the Central Government, the four State governments concerned, and by our staff. The proper implementation and supervision of the project will require considerable effort if the objective, the improvement of agricultural productivity and economic conditions in the six participating districts, is to be realized; and if practical and economic solutions are to be developed which can be used in rural development elsewhere.

3. The DPAP had its origin in a number of public employment and relief programs in drought areas initiated at various times going as far back as the 1950's. These programs were inadequate palliatives and had little or no long-term effect on agricultural productivity. The DPAP, initiated in 1971, attempted to use the provision of employment relief more effectively as a vehicle for lasting and sustained development of the agricultural potential. The effort has been hampered by a succession of monsoon failures; the 1972 drought, in particular, played havoc with the program. The urgent need for relief employment resulted in inadequate planning of works and the sanctioning of substantial expenditures with little regard to the technical quality and developmental relevance of individual schemes. The experience of the last four years has revealed shortcomings on the program's institutional framework and the inadequacy of the technology on which program schemes have been based. The Government is now planning to change the administrative structure of the program by giving special responsibility to district development authorities, and by strengthening the technical staff and the supervision of the State and Central Governments. The proposed project would support the proposed changes; indeed, the most important of these would be conditions of effectiveness of disbursement for our credit. The proposed project also includes provision for relevant research and technical assistance to speed the identification and adoption of suitable new technologies. The institutional changes and the link with technological innovation which the proposed project

envisages, and which will be covered by assurances in the legal documents, provide adequate grounds for expecting that the project will be successful, and justify our financial support. Nevertheless, it must be emphasized that the risks associated with this proposal are greater than in the case of other, more conventional projects. I believe this risk to be justified in the interest of gaining a better understanding of the causes and cures for rural backwardness and poverty.

Issues

4. The contents of the project, its organization and the various assurances which we will require from the Central and State Governments have been discussed with the Indian authorities at length and substantially agreed so that I do not foresee any major difficulties during negotiations. The following issues may, however, still give rise to some disagreement or deserve the Loan Committee's special attention.

Dairy Development

5. The Appraisal Mission received proposals for a large-scale development of dairying. Since this activity had not been tried on any scale, we decreased the size of this component with a view to obtaining results before encouraging increased expenditures. We expect the Indian negotiators to press for an increase in size of this component, but I recommend that we keep this component at its present size.

Financing of On-Farm Development

6. The total cost of the project is estimated at about US$101 million. Of this amount, the cost of the Government investment under the DPAP is about US$70 million shared equally between the Central and State Governments. The remaining US$31 million constitute the cost of on-farm development to be financed by farmers, primarily by means of short, medium and long-term agricultural credit. The proposed IDA credit would cover the Central Government's contribution, or 50% of total public-sector investment. Some refinancing of on-farm development by IDA is expected in three of the four participating states with credit funds available out of existing agricultural credit projects. Furthermore, the ARC project, which will come up for consideration later this fiscal year, will make special provision for covering on a priority basis the credit needs of the districts included in the proposed project.

Specialists for Central Unit

7. It is proposed in the credit document that it be a condition of credit effectiveness that candidates whose qualifications were acceptable to IDA had been appointed as senior specialists in soil conservation and dry farming, irrigation and economics in the Central DPAP Unit, and had taken up their respective duties. We expect that this point will be the object of discussions in the course of the negotiations. In view of the importance of the project of having well-qualified people in the Central DPAP Unit, we intend to insist on the preservation of this standard.

Consultants

8. The project provides for five internationally-recruited consultants, and

there may be as usual opposition to the recruitment of foreign experts. Provided qualified local experts can be identified and made available for the project, we would of course not object. However, we believe that at least in two areas - pasture development and dryland pasture research - India lacks suitable expertise and in all probability the successful candidates would be ex-patriates.

Procurement

9. The very nature of the proposed project precludes international competitive bidding of any significant scale. Indeed, with the exceptions of well-drilling rigs (US$0.3 million), which would be procured on the basis of international competitive bidding and exotic bulls (US$0.1 million) all procurement would be local. Civil works, which would be small and scattered, are to be either bid locally (about US$3.5 million) or executed by Government departments on force account (US$6.2 million). Numerous items of equipment and vehicles, spares and also some live-stock (total US$2.2 million), orders for which could not be bulked, and the individual value of which is not expected to exceed US$20,000, would be contracted locally or purchased directly through normal commercial channels. US$6.9 million included in the credit would cover staff and operating expenditures of Government departments and agencies, and a further US$1.3 million would cover technical assistance and project evaluation. US$14.5 million is unallocated.

Recommendation

10. I recommend that the Government of India be invited to negotiate the proposed credit of US$35 million on the basis of the recommendations set out in paragraphs 7.01 through 7.06 of the draft Appraisal Report.

Attachments

KHWillen/JKraske/JLoup:ao

cc: Messrs. van der Meer, Picciotto, Baneth, Kraske, Cunningham, Willen, Parsons, J. Brown, Thornley, Loup, Forget, von Busse, Rao, Bowron, Lithgow

61248 FOODAGRI (Telex Nr.)

INCOMING TELEX

Indonesia-Barani Sofie
Indonesia-Rural Credit
Thailand-Forestry
India - Drought Prone Area

RECEIVED

Sept. 26, 1974

Distribution:

SEP 26 1 50 PM 1974

COMMUNICATIONS SECTION

Agriculture & Rural Dev.

VERAART 282

THIS IS A REPEAT OF OUR CABLE 254

ONE NIGERIA RUBBER MIDWEST APPRAISAL REYRCAB 164 WE HAVE NO CONNECTION WITH HASTINGS BUT UNDERSTAND HE MAY BE CONTACTED CARE OF HONGKONG AND SHANGAI BANL KULALUMPUR

R Rowe
Bevan

TWO INDIA DPAP GROENEWOLD WITH TOR AS PROPOSED YRCAB 165 WILL BE IN DELHI AND RAJASTHAN TEN TO FIFTEEN SEPTEMBER AND IN MAHARASHTRA TEN TO FIFTEEN OCTOBER STOP PLEASE CONFIRM DEPSTACH YELLOW COVER APPRAISAL TO GROENEWOLD CARE OF POHLAND NEWDELHI OFFICE

Brown
Parsons
Kraske

THREE REYURCAB 16 163 ITEM SEVEN REGRET EFFORTS TO LOCATE AGRO NOMIST UNSUCCESSFUL

R.E. Rowe

FOUR INDONESIA TRANSMIGRATION RECENT MISSION RETURNED 25 AUGUST COMPLETED ROADS COMPONENT AND PHYSICAL PLANNING ALSO MODIFIED BUDGETS STOP GROENEWOLD WILL FOLLOW UP LIVESTOCK ASPECTS MID SEPTEMBER AND OVERLAP WITH FINAL PREPARATION MISSION AGRONOMIST FIRST WEEK OCTOBER STOP THIS MISSION WILL UPDATE COSTS AND EVALUATE SOIL AND LAND USE DATA CURRENTLY BEING COLLECTED STOP BOTH MISSION AND GOVERNMENT NOT IN AGREEMENT YOUR LARGE SCALE MECHANICAL CLEARING AND PLANTING PROPOSALS DUE HIGH COST AND NEED FOR AN APPROACH REPLICABLE FOR FURTHER TRANSMIGRATION PROJECTS STOP FULLY SUPPORT INCLUSION OF MINOR IRRIGATION COMPONENT AND THIS IS DESCRIBED IN OUR DRAFT REPORT STOPBTO WILL ENLARGE ON CURRENT STATUS PREPARATION

Sutherland
Sandberg
Seaman

FIVE INDONESIA CREDIT DRAFT IDENTIFICATION REPORT WILL BE FOR WARDED NEXT WEEK STOP HOPEFUL WE CAN HAVE YOUR COMMENTS IN TIME TO

Powell
Sandberg

PERMIT PINEAU TO FOLLOWUP IN CONJUCTION WITH CREDIT ASPECTS OF TRANSMIGRATION PROJECT IN OCTOBER

SIX CAMEROUN EDUCATION GRATEFUL YOUR CONFIRMATION SOONEST AVAI LABILITY ECONOMIST AND ARCHITECT AS DISCUSSED ON TELEPHONE STOP PLEAS E ADVISE BANK VIEWS ON POINTS D COMMA E COMMA AND H AS REFERRED TO IN PARAGRAPH THREE OF BREWINS UNDATED PREPARATION MISSION REPORT STOP EMPHASIZE DESIRABILITY OF BANK LETTER TO GOC AS PROPOSED OUR LETTER 00169 28 JUNE AND REPEATED TLCOM BEAL HUBERT 16 JULY TO STIMULARE DECISIONS BEFORE ARRIVAL PPM

Bethem Stedman

SEVEN KOREA EDUCATION REYRCABS 169 REQUESTS WILL BE MAILED 2 SEPTEMBER TOGETHER WITH DRAFT WORKING PAPER

Burt Doos

EIGHT INDIA REFERENCE CRAWFORD MISSION YOUR 169 VIEW CAMPBELLS HEAV Y WORKLOAD PROPOSE DELETE ORISSA FROM CAMPBELL TIBOR PROGRAMME TO PER MIT HIM RETURN HERE FIRST NOVEMBER FOR ORIENTATION FURTHER PREPARATIO N POCHAMPAD NAGARJUNAGASR FOLLOWING OUTCOME MEETINGS GOI AND STATE 16 OCTOBER STOPWILL SIR HOHN ELEVEN NOVEMBER REMAINING THROUGH FIRST DECEMBER INCORPORATING PRE PREPARATION VISITS ANANDPUR/ORISSA AND GANDAH/BIHAR

Picciotto Tibor

NINE THAILAND FORESTRY URCAB 187 ITEM SIX DUE TO DELAY IN FINAL PREPARATION ZAMBIA PROJECT SPEARS COULD BE MADE AVAILABLE IMME DIATELY TO INITIATE LAND USE STUDY AND SELECTION OF PROJECT AREA STOP HAVE CONSULTED FAO REP THAILAND WHO OF OPINION THAT LOCAL CANADIAN OF FAO STAFF WOULD BE ABLE TO ASSIST PART TIME IN LAND USE STUDY BUT SUGGETS WE MAKE AVAILABLE OUTSIDE CONSULTANT IF POSSIBLE TO REMAIN IN FIELD FOR TWO MONTHS ALSO TO COLLECT DATA FOR SULL SCALE PROJECT PREPARATION MISSION EARLY 1975 STOP PROPOSE SENDING SPEARS WASHINGTON 2 OCTOBER TO DISCUSS THIS PROPOSAL AND ECUADOR FORESTRY UNTIL 4 OCTOBER PROCEEDING TO THAILAND VIA VANCOUVER DURING WEEK 7 OCTOBER TOGETHER WITH LANDUSE CONSULTANT IF CONSIDERED NECESSARY +

Oberlander RDH Row

INCOMING CABLE Asia Files

India DPAP

Distribution:

Mr. Parsons
Mr. Kraske
Mr. Picciotto

India - Drought Prone Areas

INTFRAD 64145

WUI007 NEWDELHI 116/111 26 2310

LT INTBAFRAD WASHDC Sept. 26, 1974

FOR PERSONS REF MY INSTRUCTIONS FROM PICCOTTO SEPT 19 TODAY HAD DISCUSSIONS WITH QURAISHI AND DRAP STAFF WHICH CONFIRMED GENERAL ACCEPTANCE PROJECT PROPOSASLS STOP ANTICIPATE SOME DISCUSSION DURING NEGOTIATIONS ALPHA MAGNITUDE OF DAIRY COMOPONSNT BETA RECRUITMENT OF EXPATRIATE REPEAT EXPATRIATE CALF REARING ADVISER GAMA CLARIFICATION OF IDA POSITION RE POSSIBILITY OF FINANCING OF CREDIT COMPONENT THRU OTHER PROJECT AND DELTA QUALIFICATIONS OF SPEALISTS FOR CENTERAL UNIT STOP RE LATTER ALREAY HAVE INDICATED WOULD NOT RECOMMEND IDA ACCEPTANCE OF LOW STANDARDS CURRENTLY CIRCULATED STOP NOTWITHSTANDING FOREGOING ISSUES FOR NEGOTIATION RECOMMEND PROCEED WITH PROCESSING OF GREEN COVER STOP THORNLY ARRIVING SEPT 30 BA 521 PLEASE INFORM WIFE REGARDS

BROWN AND THORNLEY

2 Mr Lamp. We have already done so

1 Barbara. Please do so

9/26 left message with son Mark Thornley BR

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Dear Ellas

TO: Mr. R. Picciotto

DATE: September 25, 1974

FROM: D.J. Parsons

SUBJECT: INDIA - Drought Prone Areas Project

Mr. van der Meer

I attach a draft covering letter, President's Report, legal documents and draft Green Cover Appraisal report for clearance by Mr. van der Meer before submission to Mr. Weiner.

Pls look OK by me

Attachments

DJParsons:br

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

cc PHI-Loan 833 adm
cc PHI-Livestock (2)
cc PHI-Forestry
cc PHI-Terms of Ref
cc Malaysia-Loan 673

DATE: September 19, 1974

TO: Mr. J. Brown

FROM: D.N. Sutherland

SUBJECT: PHILIPPINES - Supervision of Livestock Development Project I (823-PH)
- Preparation of Livestock Development Project II and Forestry Project

MALAYSIA - Supervision of Jengka Forestry Project (673-MA)
- Preparation of Kelantan Minimum Package Project, Forestry Plantation Project and the Land Settlement Project for Sarawak
Terms of Reference

cc Malaysia-Kelantan
cc Malaysia-Sarawak
cc Malaysia-Terms of Ref
cc India-Drought Bone
cc Asia

1. On September 22 you will depart Washington to undertake the following assignment:

PHILIPPINES (September 26-29)

- Livestock I (823-PH). Review with DBP officials the sub-loan application of RMI Inc.

cc India-Terms of Ref

- Livestock II. Review project proposals submitted to the Bank and provide an outline of additional information required to complete project preparation.

- In addition, you will meet with representatives of the Department of Natural Resources to discuss salient features of the proposed Forestry Project.

MALAYSIA (October 1 - 11)

- Jengka Forestry Project (673-MA). Review with Government the findings of Mr. S. Draper with respect to the adequacy of timber resources for the Jengka Forestry complex, and discuss pending joint venture negotiations between Government and UAC Unilever for the management of the forestry complex.

- Kelantan Minimum Package Project. Together with staff of the Resident Mission, Bangkok, visit the proposed project area and provide guidelines to Government on project preparation.

- In addition you should review the status of the proposed Forestry Plantation Project for W. Malaysia and the Land Settlement Project for Sarawak.

2. Enroute you will visit:

- London, for discussions with UAC Unilever on their preliminary findings in respect of joint venture participation in the Jengka Forestry complex.

- New Delhi, together with Mr. Thornley, to discuss with Government the findings in the Green Cover Appraisal Report, Drought Prone Areas Project with a view to clarification prior to negotiation.

3. Upon your return to Washington about October 15, you will prepare separate Back-to-Office reports for the Indian, Malaysian and Philippine assingments.

Cleared with and cc: Messrs. Parsons
Kraske
Humphrey
Helmers
cc: Messrs. Vergin
Laing

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

DPAP

TO: Mr. Karl H.Willen

DATE: September 18, 1974

India-Drought Bone Ideas

FROM: Arvind Pande AP.

SUBJECT: INDIA - DPAP Project

This is to confirm that the Indian negotiating team comprising of the following will be here to begin negotiations on October 14:

1. Mr. M.A.Qureshi
   Secretary, CDEC

2. Mr. D.Aurora
   Director, CDEC

3. Mr. C.H.Krishnamoorthy
   Assistant Director General-cum-Project Director

4. Mr. V.Subramanian
   Secretary, Planning
   Government of Maharashtra

5. Mr. Anil Bordia
   Special Secretary, Rajasthan

6. Mr. B.C. Gangopadhyay
   Secretary, Dept. of Rural Development
   Andhra Pradesh, Hyderabad

7. Mr. S.K.Hajra
   Deputy Commissioner
   Bijapur, Govt. of Karnataka, Bijapur

8. Mr. V.N.Rajagopalan
   Director, Ministry of Finance
   Department of Economic Affairs, GOI.

DPAP Project

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Mr Kraske

TO: Mr. R. Picciotto (through D. Parsons) **DATE:** September 6, 1974

FROM: J. Brown

SUBJECT: INDIA - DPAP
- Recent Article in Economic Times

There are a number of factual errors in this article which suggest that not only is the author unfamiliar with the project, but is of very parochial experience. Furthermore, there is nothing in the article which would support the claim of a "rift" a that the Bank and GOI are "sharply divided over the programs to be undertaken". In short this article is a bad reflection on the author and alludes to nothing which will give rise to an unexpected dispute during negotiations.

JBrown:prs

India - Drought Prone Areas

KHWillen:ao
Cleared with in substance
and cc: Messrs. Parsons,
Brown
Forget

September 4, 1974

Mr. G. V. Ramakrishna
Minister (Economics)
Embassy of India
Washington, D.C. 20008

Dear G.V.:

Re: INDIA - Drought Prone Areas Project (DPAP)

As you know, we had suggested the commencement of negotiations on this project starting on September 23, at the earliest. Because of the complexity of the project, however, we have found that we need additional time for our internal review of the project documents before presenting them to the Loan Committee. Therefore, I now suggest that negotiations be rescheduled to start on October 14, which I hope will be convenient for the Indian negotiators.

Attached is a summary of the mission's recommendations, which you may wish to transmit to DEA. This is, of course, with the understanding that the Loan Committee has yet to consider the proposed project. It should be noted that many of the recommendations only reflect measures that DPAP officials at the Center and State levels have already decided to implement within the framework of the DPAP. We would appreciate it if any evidence to this effect on the various points could be brought by the Indian delegation. For example, we have in mind the filling of positions referred to in Para. 5(b), the establishment of an Interdepartmental Coordination Committee referred to in Para. 5(d), and the establishment of District Development Authorities referred to in Para. 6(a) of the attached summary.

As it also appears from the attached summary, there would be four different Project Agreements; one with each state government involved. We see no great difficulty in having the state representatives' presence at the negotiations staggered if it is convenient for the Indian delegation. Finally, we see no need for ARC being represented in the negotiations if they can provide a proxy to the effect that they will undertake the preparation of district banking plans as per the recommendation of Para. 5(c).

Sincerely,

Jochen Kraske

Attachment
cc: Mr. Pande
Mr. von Busse

Recm for Nej

SUMMARY OF RECOMMENDATIONS

DROUGHT PRONE AREAS PROJECT (DPAP)

1. The mission has recommended a US$35 million credit in support of DPAP activities in the following districts: Anantapur (Andhra Pradesh), Bijapur (Karnataka), Jodhpur, Nagaur (Rajasthan), and Ahmednagar, Sholapur (Maharashtra). In addition to the Development Credit Agreement (DCA) there would be separate Project Agreements with the four states involved.

2. The mission has recommended the following project components: construction of minor irrigation works, command area development, watershed management, improvement of dryland farming, and sheep and dairy development. In addition, it has also recommended a fodder banking scheme, the conversion of cane bagasse to digestible fodder, and diversification schemes in fisheries, sericulture, and horticulture. Finally, in order to strengthen available support to farmers in arid and semiarid areas, there would be a training program and applied research on dryland farming, pasture development, and agrometeorology.

3. The proceeds of the credit would be used to finance public sector investments under the project (civil works, equipment, vehicles and livestock); operating and staff expenses of project units; technical assistance and project evaluation; and contingencies. Items for international competitive bidding would comprise well-drilling rigs and imported bulls.

4. The mission has recommended a number of covenants to be agreed upon during negotiations. They have also identified several items for discussion during negotiations dealing with technical aspects of the proposed project. In the following paragraphs, major points have been summarized, leaving out in the interest of brevity, such items that in our judgment and to the best of our experience should be considered as standard (for instance, items related to procurement procedures, accounting, auditing, and reporting).

The Development Credit Agreement

5. The recommendations include agreement on the following covenants:

a. The engagement, for varying periods of time, of internationally recruited consultants in the following fields: pasture development (one advisor and one agronomist), agrometeorology, calf rearing, and bagasse treatment;

b. The continuous filling of the following positions with persons with qualifications and experience acceptable to IDA: a Senior Agricultural Economist, All India Coordinated Dryland Farming Research Project, ICAR, Hyderabad; and Senior Specialists in: (i) soil conservation and dry farming; (ii) irrigation; and, (iii) economics, for the central DPAP Unit;

c. The preparation of district banking plans for each project district by ARC; and,

d. The establishment of an Interdepartmental Coordination Committee for DPAP under the chairmanship of the Secretary, Cooperatives and Community Development.

The Project Agreements

6. The recommendations include agreements on the following covenants with the state governments as identified:

a. That the four state governments shall establish and maintain a District Development Authority (DDA) in each project district with Board membership, powers and organization satisfactory to IDA;

b. That the four state governments, in order to facilitate the expansion of agricultural credit in project districts:

(i) assist leadbanks to establish not less than two Farmers' Service Societies in each district;

(ii) appoint the DDA project manager and the subdivision revenue officer of each project district to the district credit coordination committee;

(iii) carry out short-term agricultural credit surveys on terms of reference prepared in cooperation with the Central DPAP Unit in each project district for IDA's comments; and,

(iv) that Rajasthan and Andhra Pradesh initiate a program to update land records in the districts of Jodhpur, Nagaur, and Anantapur.

c. That Maharashtra and Andhra Pradesh would undertake semi-detailed groundwater surveys in all project areas in which groundwater development is to take place;

d. That Maharashtra, Andhra Pradesh, and Karnataka would submit to IDA for comment the first master plan for the integrated development of a tank and command area in each district;

e. That the four state governments would take necessary steps on their parts to ensure that the fertilizer requirements of the dry farming component of the project be met; and,

f. That the four state governments would furnish to IDA for comments the draft model bylaws of sheep growers primary cooperative societies. In the case of dairy producer cooperatives, the mission has recommended that such unions be established only if they would be financially viable, and that the four state governments would

furnish to IDA for comments the draft model bylaws and projected cash flows of the proposed unions before registering them.

Suggested Additional Conditions for Credit Effectiveness

7. Evidence that:

a. the three senior specialists in soil conservation and dry farming, irrigation, and economics have been appointed; and,

b. a DDA has been duly established in each district of the project area, and that a Project Manager with the rank of Additional Collector has been appointed to each such DDA.

Suggested Condition for Disbursement

8. As a condition for disbursement against the construction of tanks, the mission has suggested that state governments should submit to IDA certification of the commencement of command area development in accordance with approved technical and financial plans (reference para. 6(d) above).

Suggested Items for Discussion During Negotiations

9. The mission has suggested the following items for discussion during negotiations:

a. Technical, economic and cost criteria to be adopted for groundwater and surface irrigation works under the project, including the need for stream flow data for tank design;

b. Means of promoting command area development within existing minor irrigation schemes and the provision of technical services for CAD;

c. Need to enforce existing legislation to control cropping patterns in public irrigation schemes;

d. Technical standards for soil and moisture conservation works;

e. Draft bylaws for primary sheep growers' societies;

f. Proposed qualifications and terms of reference for senior specialists in soil conservation and dry farming, irrigation, and economics in the Central DPAP unit; and,

g. Cabinet orders of state governments establishing DDAs, and rules pursuant thereto.

Dw file
DPAP

August 23, 1974

Mr. H. Groenewold
FAO/IBRD Cooperative Program
Via Delle Terma Di Caracalla
00100 Rome
Italy

Dear Huge:

I'm sending copies of the Yellow Cover Appraisal to you in Rome and New Delhi in the hope that at least one gets to you on time. Internal clearance delays have forced several postponements of green cover and negotiation, but the livestock components of the project remain essentially as described in the yellow cover. Of course, this is a confidential report.

The sheep society bylaws are based on a joint farming society since that appears to be the only form of organization under current cooperative acts which permits the payment of dividends and bonuses. We have included cash equity participation in the bylaws, but clearly the emphasis and priority must be given to those contributing sheep.

Regards,

James Brown

cc: Mr. D. Parsons

JBrown:prs

w. file.

DPAP

HUYSER
FOODAGRI
ROME

XHX AUGUST 22, 1974.

TELEX
(Ext. 5320)

ITALY

165

ONE LIBERIA FORESTRY STOP HAS REPORT BEEN SENT TO GOVERNMENT ALONG WITH TERMS OF REFERENCE FOR THE STUDY AND IF SO WHEN STOP WHEN CAN THE BANK EXPECT TO RECEIVE THE DRAFT TERMS OF REFERENCE FOR THE REORGANIZATION STUDY

TWO INDIA DPAP STOP ALTHOUGH PROJECT WILL NOT BE NEGOTIATED UNTIL LATE SEPTEMBER AT EARLIEST AGREE THAT VISIT OF GROENWOLD AS PROPOSED WOULD BE USEFUL STOP SUGGEST TORS SHOULD BE TO DISCUSS PROGRESS OF AAA ORGANIZATION FOR SHEEP DEVELOPMENT ESPECIALLY SOCIETY BYLAWS BBB SELECTION OF SPEARHEAD TEAMS (DAIRY AND TRAINING SCHEDULES) CCC OTHER INITIAL XX STEPS TO BE TAKEN FOR LIVESTOCK COMPONENTS STOP WILL SEND CONFIDENTIAL COPIES APPRAISAL YELLOW COVER TO GROENWOLD IN ROME AND C/O POHLAND COMMA NEW DELHI OFFICE

THREE FURTHER MYCAB 162 ITEM 3 VISIT SCHEBECK STOP HE WILL REPORT YOUR OFFICE TEN AM SEPTEMBER SIX

FOUR SYRIA LIVESTOCK STOP AGREE REVISED TOR

FIVE GREECE IRRIGATION III STOP FURTHER OUR TELCON HAVE DISCUSSED LE MOIGNE WHO AGREES REASONS YOU MENTIONED JUSTIFY POSTPONEMENT STOP PROJECTS DIVISION HOPES HOWEVER YOU WILL KEEP SITUATION UNDER CONSTANT REVIEW AND RESCHEDULE MISSION AS SOON AS SITUATION WARRANTS

VERAART
INTBAFRAD

Mr. Marius Veraart

Ag. & Rural Dev. Dept., CPS

(1) - cc: Messrs. Wadsworth, Blinkhorn
(2) - cc: Messrs. Brown, Parsons, Kraske
(3) - cc: Mr. Schebeck
(4) - cc: Messrs. ffrench-Mullen, El Darwish
(5) - cc: Messrs. Le Moigne, Thys, El Darwish

MVeraart:cms

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IBRD ND3150 (Telex No.)

India - Drought Prone Areas Proj.

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~~Mr. Spali~~ Mr. J. Brown

Mr. Picciotto

Mr. Kraske

AUGUST 21, 1974

INTBAFRAD

WASHINGTON DC

354 FOR BROWN, PROJECTS ASIA

RE DPAP AURORA ADVISES ME CONFIDENTIALLY THAT FINANCE THUS FAR HAS SANCTIONED POSTS FOR SENIOR SPECIALISTS UNDER PARA 502 FOR ONE YEAR ONLY AND HE FEELS IT WOULD BE DIFFICULT TO ATTRACT QUALIFIED PERSONNEL FOR SUCH AN INSECURE TENURE. YOU MIGHT CONSIDER TIGHTENING OF 502 SO THAT APPOINTMENTS COULD BE OFFERED FOR LONGER PERIODS REGARDS

POHLAND

India - Drought Prone Areas Project

Good suggestions but not taken up yet

Mr. J. G. Brown

August 19, 1974

B. Kanchanalak

INDIA - Drought Prone Area Project

I propose for your consideration items which might be raised during negotiations as conditions of IDA in addition to those listed in Section VIII - Recommendations (Page 43 of the Appraisal Report - Yellow).

Operation and Maintenance (O&M)

1. After the completion of a scheme or of any component part of the program, its operation and maintenance henceforth would rest with agencies under whose jurisdiction a work of the kind is administered under normal established procedures. In the case of tank irrigation, Irrigation/Public Works Department 1/ would operate and maintain the dam, main canals and distribution system down to the 1 cusec (30 lit/sec) capacity. Beyond this capacity, the system, which practically serves the on-farm irrigation -- CAD, would be operated and maintained by farmers themselves. In the case of tube wells, Ground Water Board would be responsible for technical maintenance service; it charges Rs300 yearly for the service. Apparently, schemes other than tube wells have suffered badly from lack of maintenance, especially the canal and drainage systems. This is due mainly to the shortcomings of funds and management weakness. Execution and supervision of the work are carried out by different agencies -- Irrigation, Agriculture, Public Works, Agro-Industries Corps, Farmer Associations. Therefore, assurances should be sought that the project structures' O&M be properly vested in those responsible agencies and that each state government ensures efficient execution of the task for the entire DPAP program within its states.

2. .Concerning O&M on the CAD areas, farmers have been expected to carry out the work, in theory, with the assistance of extension officers. It can seldom be the case where the work has been carried out effectively. This type of work needs to be executed on a collective basis. I, therefore, propose that a farm association type of organization be formed up among the farmers in the project CAD area, especially under the tank command where large tracts are to be irrigated. The association would be a body entrusted with O&M. This concern should be discussed during negotiation.

Project Components' Viability

3. On the basis that an individual scheme should be economically viable per se, assurances should be obtained that in the case where the investment exceeds its norm set by the Bank as a guidance, the responsible agency -- State DPAP Unit -- would review the cost/benefit to confirm its viability.

1/ To be confirmed by GOI during negotiations.

Side Letters

4. Detailed technical norms for wells and tank schemes should be transmitted to the Borrower by a side letter, to confirm that the scheme would be planned, designed and constructed with adequate engineering standards. The letter should explicitly request that:

Wells

i. The responsible agency would execute the work based on the prepared network design of the group of proposed project wells which are fed by the same aquifer, indicating: safe yield, actual commanded acreage, overall density and spacing which also account for the existing wells as well as those outside the project coverage.

ii. The responsible agency would undertake CAD based on the prepared command area development plans of operation, which include execution of land leveling, siting of water courses and field channels to be built for distribution of irrigation water from the project wells.

Tanks

iii. Tank schemes under the project would follow at least the local standards for method of construction, which are adequate, but there would be improvements which are critical in the area of hydrology and irrigation planning in order to achieve the optimum utilization of the limited water available. These improvements include:

a. The century-old regional criteria which have been used for estimating tank inflow would be replaced by the actual rainfall-run-off correlation whereby the inflow data could be more accurately assessed (already mentioned in the main report, but included here for completeness).

b. The old global concept adopting 75% reliable flow for project water supply would be changed to 50%, which is considered applicable to the DPAP areas. This improvement would result in commanding more areas with the same source of supply.

c. The old concept allowing total sedimentation accumulation in the dead storage reservoir would be corrected and proper design of the sediment accumulation in the live storage would be adopted instead. This correction would help prolong the operating life of the scheme.

d. The inherited practice of beginning with dam and reservoir sizing without prior knowledge of the command area to be irrigated would be removed and replaced by a new way which, in effect, reverses the old. This alteration would bring the reservoir and dam to the size required to meet the irrigation demand.

BKanchanalak:mam
cc: Messrs. Darnell
Kuiper

Headquarters:
Washington, D.C., U.S.A.

Fi : INDIA - PAPP

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

RESIDENT REPRESENTATIVE IN INDIA
53 Lodi Estate, New Delhi 3
Telephone 617241 . Cable Address - INTBAFRAD NEW DELHI . Postal Address - P.O. Box 416

August 12, 1974

Mr. James G. Brown
Asia Projects
International Bank for Reconstruction
and Development
1818 H Street NW
Washington DC 20433

Dear Jim:

I suppose you are just fighting that deadline including MT/ST, printshop and the like.

I have passed the annex material on to Aurora and Shroff. Their comments were attached to the letter I wrote to Bob.

In Sunday's Economic Times appeared a rather strong article - which nobody in the Ministry could explain! The timing to present the April discussions is somewhat puzzling. There are guesses that the ground was to be prepared to make a strong plea on behalf of the States at negotiations. The alternative theory is that this has been leaked by the States to extract more assistance from the Center. Whatever the case may be, you will have some bargaining sessions in front of you. Incidentally, no other papers carried this item.

With best personal regards,

Yours sincerely,

Pohl

P.K. Pohland

PKP:ml

The Economic Times
August 11, 1974.

IBRD-ministry rift over drought assistance

BY A SPECIAL CORRESPONDENTS

The World Bank and the Union agriculture ministry are sharply divided over the programmes to be undertaken in the drought prone areas of the four districts, namely, Ahmednagar, Sholapur and Bijapur of Maharashtra and Anantpur of Andhra Pradesh.

After protracted discussions the World Bank agreed to finance these projects in a big way, but the conditions which it is trying to impose have made many of the schemes suggested by the agriculture ministry infructuous. A World Bank mission visited India in April last and had detailed discussions on the project reports prepared by the ministry and during the course of these discussions, differences in approach cropped up over many vital aspects of the programme.

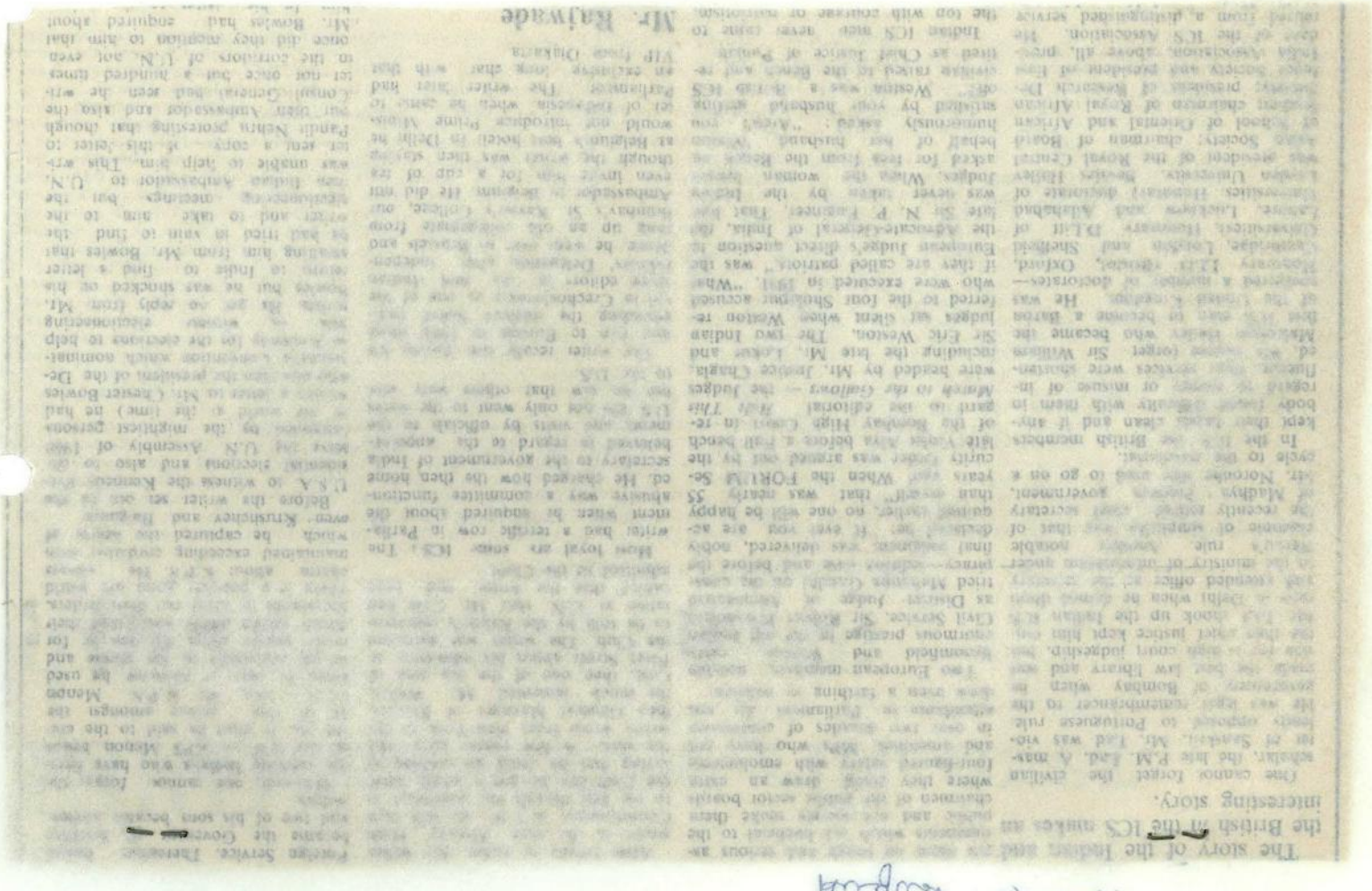
In irrigation, the mission did not accept the financing of any medium irrigation schemes. Officials of the bank bluntly turned down financing of three medium irrigation schemes, one in Ahmednagar and two in Anantpur. They, however, accepted all the minor irrigation works. The other proposal was the construction of dug wells and provision of pump sets in the above districts. In this case, though the programme was accepted by the mission, this was reduced by 50 per cent, on the plea that these would be adequate for small farmers and since there was no subsidy elements involved for such schemes for other farmers, there was no need to include these in the project report.

The mission initially did not include dry land farming in their programme but in the April talks they indicated that it would be possible for them to take up this programme in two catchments in each district. This would be mainly confined to the cropping development of these areas.

Soil conservation and afforestation programmes were accepted by the bank as part of conservation practices in the districts but the mission favoured graded bunds against contour bunds suggested by the Indian side. However, the area proposed by the Indian side has been accepted. A programme of 40,000 hectare in Ahmednagar, 50,000 in Sholapur, 80,000 hectares in Bijapur and 32,000 hectares in Anantpur have been accepted by the bank at a cost of Rs. 150 per hectare. In addition the bank would also provide a programme of repair of the bund system limited to 60,000 hectares in Ahmednagar and 75,000 hectares in Sholapur. One soil conservation division and five sub-divisions have been recommended for carrying out the topographical survey, the planning and conservation programme survey and planning in excess of project work requirements to prepare a shelf of good quality works for use in future famine relief programmes. The bank would also finance the water harvesting programme in these districts but they have, however, not agreed to check dam nalla flooding proposed by the Indian side in the Ahmednagar and Sholapur districts.

A fairly large programme of dairy development has been proposed for the districts. The programme was designed to promote milk production and improve cattle through cross-breeding with exotic breeds and construction of infrastructure like chilling plants, dairy etc. Though the bank supported improvement of the existing cattle for improving milk production through a better feed and fodder programme, it did not accept a massive cross-breeding programme as problems of management in the drought prone areas may be too large for improved cattle to survive. The bank did not recommend infrastructural activities on the belief that the improvement in milk supply through the existing cattle will take a fairly long time and that milk should be marketed through dairies in the neighbouring districts.

As the final round of negotiations with the World Bank are due to take place shortly, the agricultural ministry has decided to discuss with the two states, all the programmes so that the schemes which will not be taken up by the bank but which the states are willing to implement should be taken up forthwith. During the time of final agreement, the ministry will once again try to press for the acceptance of the rejected programmes.



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IBRD ND3150 (Telex No.)

INDIA - DPAP

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Distribution

Mr. Spall
Mr. Picciotto
Mr. Kraske

AUGUST 21, 1974

Parsons

INTBAFRAD

WASHINGTON DC

354 FOR BROWN, PROJECTS ASIA

RE DPAP AURORA ADVISES ME CONFIDENTIALLY THAT FINANCE THUS FAR HAS SANCTIONED POSTS FOR SENIOR SPECIALISTS UNDER PARA 502 FOR ONE YEAR ONLY AND HE FEELS IT WOULD BE DIFFICULT TO ATTRACT QUALIFIED PERSONNEL FOR SUCH AN INSECURE TENURE. YOU MIGHT CONSIDER TIGHTENING OF 502 SO THAT APPOINTMENTS COULD BE OFFERED FOR LONGER PERIODS REGARDS

POHLAND

India - Drought Prone Areas Project

ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Via delle Terme di Caracalla, 00100-ROME | Cables: FOODAGRI ROME | Telex: 61181 FOODAGRI | Telephone: 5797

Ref. BK 3/2.10 IND

Letter No. 00226

Dear Marius,

INDIA : Drought Prone Areas Project

We had a brief discussion with Dennis Parsons during his recent stay in Rome concerning the need and possibility of assisting the Indian authorities in getting the above project off the ground. Heye Groenewold referred to a memorandum from Jim Brown, leader of the DPAP appraisal mission, which he had seen during his time of report writing in Washington, in which it was suggested that the officers involved in the preparation and appraisal of the project should stop-over for short tours in India, whenever travelling through the area. During these visits they would advise State authorities on existing technical problems and work out with them proposals for project implementation. Particularly in the sheep sector there are a number of issues on which advice to Government officials is very essential.

We are presently thinking of sending Heye Groenewold on mission to Indonesia toward the middle of September. On his way out, or back or both times, he could stop-over in India without much additional travel expenses. He thinks that it might be feasible to have stop-overs in New Delhi - Jaipur on his way out, and in Bombay on his way back.

As suggested by Dennis Parsons, we would appreciate it if you would take up the above matter with him, so that we might have an agreement on travel schedule and terms of reference before Groenewold's planned departure.

Kindest regards,

Yours sincerely,

cc: Messrs. Parsons
Brown
Kraske

J.P. Huyser
Director
FAO/World Bank Cooperative Programme

Mr. Marius Veraart
Planning Officer/FAO Coordinator
Agriculture and Rural Development Dept.
World Bank
1818 H Street N.W., Washington DC 20433

ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Via delle Terme di Caracalla, 00100-ROME — Cables: FOODAGRI ROME — Telex: 61181 FOODAGRI — Telephone: 5797

Ref. BK 3/2.10 IND

Letter No. 00226

Dear Marina,

INDIA : Drought Prone Areas Project

We had a brief discussion with Dennis Parsons during his recent stay in Rome concerning the need and possibility of assisting the Indian authorities in getting the above project off the ground. Heye Groeneveld referred to a memorandum from Jim Brown, leader of the DPAP appraisal mission, which he had seen during his time of report writing in Washington, in which it was suggested that the officers involved in the preparation and appraisal of the project should stop-over for short tours in India, whenever travelling through the area. During these visits they would advise State authorities on existing technical problems and work out with them proposals for project implementation. Particularly in the sheep sector there are a number of issues on which advice to Government officials is very essential.

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As suggested by Dennis Parsons, we would appreciate it if you would take up the above matter with him, so that we might have an agreement on travel schedule and terms of reference before Groeneveld's planned departure.

Kindest regards,

Yours sincerely,

J.P. Huyser
Director
FAO/World Bank Cooperative Programme

Mr. Marina Verzaro
Planning Officer/FAO Coordinator
Agriculture and Rural Development Dept.
World Bank
1818 H Street N.W., Washington DC 20433

India - Drought Prone Areas Project

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Files

DATE: August 8, 1974

FROM: K. H. Willen

SUBJECT: INDIA - Drought Prone Areas Project - Negotiations

1. These negotiations were scheduled to start on the 26th of this month. Since this complex project requires more time for internal review, however, it has proved necessary to postpone negotiations.

2. I have suggested to G. V. Ramakrishna that negotiations start on September 23, at the earliest. For the convenience of the Indians, I also suggested that they can pick any date thereafter, through October 14, considering other upcoming negotiations as well.

3. G. V. Ramakrishna has promised to inquire in Delhi and confirm a suitable date shortly.

KHWillen:ao

cc: Mrs. Robbin
Messrs. J. Brown, Forget, Slade

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From: Djakarta

JULY 31, 1974

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WASHINGTON DC

Distribution:

Mr. Kraske
Mr. Pranich

Mr. Wilson

INDIA - Drought Prone Areas Project

326 FOR CUNNINGHAM

E DPAP ONE I SUBMITTED ANNEX MATERIAL TO AURORA AND DEA AND GOI REACTION PROMISED EARLY NEXT WEEK AS OF PARSONS LETTER NO. 224 TWO CONVEYED BANK POSITION ON ANATAPURS-MEDIUM IRRIGATION TO AURORA AND DEA THREE AURORA WILL PARTICIPATE NEGOTIATIONS FOUR DEA ALSO ANXIOUS TO RECEIVE POINTS FOR NEGOTIATIONS AND FIRM DATE SINCE ARC AND DPAP NEGOTIATIONS WOULD HAVE TO BE COORDINATED FIVE RE WEST BENGAL MEETING BETWEEN GOI AND GOWB SCHEDULED FOR AUGUST 7 TO DECIDE ON PROJECT REGARDS

POHLAND

India - Drought Prone Areas Proj.

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: INTBAFRAD
NEW DELHI

DATE: July 29, 1974

CLASS OF SERVICE: TELEX ext. 2774

COUNTRY: INDIA

TEXT:
Cable No.: 489

DROUGHT PRONE AREAS FOR NAYLOR

ONE: YELLOW COVER APPRAISAL DISPATCHED TO YOU JULY 19

TWO: ANANTAPUR MEDIUM IRRIGATION REVIEW AFFIRMS ORIGINAL POSITION THAT PRESENT PROPOSALS SHOULD NOT BE PART OF THIS PROJECT STOP PREPARATION INADEQUATE TO SUPPORT EARLY CONSTRUCTION AND OTHER PROPOSALS NOW APPRAISED, INCLUDING CONTINGENCIES, CONSUME TOTAL DISTRICT ALLOCATION UNDER DPAP

THREE: MUST REITERATE IMPORTANCE OF AURORA'S PARTICIPATION IN NEGOTIATIONS AND GRATEFUL YOUR EFFORT TO PURSUADE EAD ACCORDINGLY

REGARDS NELSON

COMMUNICATIONS RECEIVED JUL 29 3 37 PM 1974

NOT TO BE TRANSMITTED

AUTHORIZED BY: 3508

NAME Peter Nelson, Acting Division Chief

DEPT. South Asia, General Agriculture

SIGNATURE _____
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JBrown:st

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

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DISPATCHED

JUL 29 9 31 PM 1974

COMMUNICATIONS

ARDC Comments
Headroth on Yellow
26 Jul 94

India - Drought Prone Areas Proj.

Mr. P. Nelson

July 26, 1974

A. H. Stoneham

INDIA - Appraisal of Drought Prone Areas Project

1. Reference Mr. Parsons memo of July 18, I attach Mr. Headworth's memo to me of July 26, which covers the main points on which we have comments and reservations.

2. Considering India's performance to date on Agricultural Credit Projects, I, too, have serious doubts whether this complex project can be fully implemented. But in view of its importance to the stabilization of the six drought prone areas, the attempt to make it work would be well worth the effort.

3. Although para 7.05 says that around 225,000 farmers would benefit from the project, it is not clear how many will benefit from on-farm investments, and thus what the impact of the credit element would be. But from para 4.57 "Credit Institutions" are responsible for financing about one quarter of the project (US$30.5 million). As Mr. Headworth points out, information as to how and under what conditions this will get to the farmer is lacking.

4. My main concern is that in many ways this project cuts across the on-going credit projects, and the new one proposed for ARC. For lending to farmers the same terms and conditions should apply to all of them, and this project should not deviate from the established norm unless a special case can be made out and specified in the report. Unless special safeguards are written in, IDA could well find itself financing the same on-farm investment twice; once through this project and once through an on-going or the new ARC project.

5. I consider ARC should be much more involved in the project since credit institutions are involved in a quarter of the funding. This is essential also if IDA's objective of changing ARCs role to that of an agricultural development bank is to be ultimately achieved.

cc: Mr. R. Picciotto

AHStoneham:je

India Drought Prone Areas

Mr. A.H. Stoneham

July 26, 1974

R. L. Headworth

re Appraisal of Drought Prone Areas

1. You asked me to review the Appraisal of Drought Prone Areas Project but in view of the very short time available for me to do so I can do no more than present my immediate thoughts on first reading of what is a very long report on an extremely complex project; for example, there are 6 pages of recommendations. I hope to be able to examine the report more fully during the next few days.

2. Before looking at the Yellow Cover itself there are two very important items raised in the covering memorandum from Dennis Parsons to R. Picciotto which, to me, raises a question; because of the complexity of the report has there been a tendency to give too much attention to one side of the project (strengthening the organization and management of the departments responsible for the overall direction of the DPA program - there are no less than 10 items to be referred to IDA for approval before appointments can be made - and not quite sufficient detail given to the financial operations).

a) I feel that the recommendations should have included reference to our accepted minimum requirement of overdues of LDBs not to exceed 25% of demand before participating in the scheme. I can find no reference to this even in the main body of the Report. Mr. Parsons memo should have read "overdues not exceeding 25% and actual recoveries not less than 65%! instead of "actual overdues were below 35%."

b) Mr. Parsons mentions refinance by ARC but I can see no reference in the Report of ARC as a participating agency in the project. I will cover this in more detail when commenting on the relative financing section in the Report.

3. Mr. Parsons refers to committing funds against unallocated core funds. I am in favour of introducing diversified lending of this nature in the project provided that there is a strong, competent financial organization, on the spot in the states concerned, to appraise and supervise the schemes. If ARC is not a major participant in the scheme I am not convinced that this requirement would be met - the activities of commercial banks in the field of agricultural lending to date leaves a lot to be desired.

Yellow Cover Report

Page iii(xii) (xiii) These two paragraphs raised the first doubts in my mind as to the coverage of the financial aspect (mentioned earlier in this memo). There is no reference to the % IDA would disburse against on-farm investments (e.g. the minor irrigation part of the projects) and equally it is not stated through which agent GOI will pass on funds for such investments.

Page 11 (4.05) Assurances would be sought that the criteria laid down in the IDA credit projects currently in effect would be sought: the actual criteria should be set out in a Schedule of the Report. I would have preferred the assurance to have been given by the lending agency which will have to satisfy itself that the criteria is met in each individual case (example - spacing of dug wells).

Page 19 (4.35) I would recommend a Schedule setting out the broad guidelines for Diversified Lending (including categories already identified); this would include, amongst other things, interest rates, maximum repayment periods, moratorium periods and minimum financial rates of return.

Page 23(4.48(a)) Is this limit of Rs 5000 now adequate? Because of rising costs leading to higher loans consideration is being given to raising this limit to Rs 15000 following the recent supervision mission to Madhya Pradesh. This will also help bring the cost of borrowing from commercial banks more in line with the cost of borrowing from LDBs who, at the moment, have an unfair advantage.

Page 23(4.49(ii)) Regional Managers of ARC are closely concerned with scheme developments in the project areas and should be included in the recommendations to the boards of district development authorities.

Page 24(4.50 (e)(ii)) Surely the lending bank would also require evidence that the total loans can be serviced - I feel that too much emphasis has, in the past, been placed by commercial banks on security alone and insufficient emphasis on repayment capabilities.

Page 24(4.51) While I can see no objections to AFC taking an active part in the project to the extent of advising commercial banks I am more than a little concerned that the proposals would include AFC to the total exclusion of ARC. There will be overlapping which could cause local problems: for instance, ARC is actively involved in schemes in all three states in the project and it has close cooperation with LDBs and commercial banks. To take this one step further - with the exception of those districts in Andhra Pradesh all the other districts in the two other states have been identified as "problem" areas for minor irrigation and no loans in those areas will be granted until comprehensive surveys have been carried out and the reports approved by ARC, if the proposed ARC credit project goes ahead.

Pages 27/28 (4.57) Is the farmer not intended to make any contribution (if only the value of self labor) towards minor irrigation investments or diversified schemes?

Page 30 (4.62) The bulk of the proceeds of the IDA credit would be channeled through GOI to State DPAP units but I am not clear as to how funds are channeled to LDBs and commercial banks.

General Observation(1) What are the project lending terms i.e. interest rates IDA to GOI, GOI to DPAP, DPAP to lending agency (or lending banks?), lending banks to farmers and what are the repayment periods?

General Observation(2) I have noticed in at least two parts of the Report reference to "Details of on-going IDA projects appear in Annex 1." Annex 1 gives details of the Drought Prone Areas Project.

Annex 12 (11) "sale of insecurities" should this read "sale of securities?"

(11) Special debentures are sold to ARC.

(13) I do not understand the reference to on-going IDA projects that "there is a continuing concern about the quality of technical and managerial

supervision being provided to sub-borrowers." Although each project has its own individual problems, personally, I am not aware of any that would come in this category. Incidentally, who are the "sub-borrowers." GOI is the borrower, onlending to ARC - the sub-borrower, who on lends to banks (sub-sub-borrowers) who finally lend to farmers (ultimate borrowers).

(13) Annex 1 does not give details of on-going IDA projects.

(13) Continuing drought conditions have undoubtedly played a great part in the rising overdues but more serious has been the affect on overdues caused by bad management, poor appraisal methods and inadequate recovery procedures, which are worthy of equal mentioniin the report.

(14) Although RBI has laid down technical and financial criteria for loans for well construction and improvements etc. and the mission recommends adherence to these rules I feel that we should follow the criteria already agreed between ARC and IDA particularly as they have already been applied in some of the project states.

(28) I am not quite sure what is meant by the quality and quantity of staff "has bred highly selective credit policies on the part of lenders"- when this is read in conjunction with frustration of applicants, negligence on the part of borrowers and taking into consideration high overdues. Under this heading "Credit Staff" perhaps a sentence or two on poor organization and management would be appropriate.

(34) In the proposed ARC Credit project assurances will be obtained that LDBs valuations for project loans would be based on estimated value of land after development resulting from the loan.

Conclusion

The whole project is extremely complex, having six pages of recommendations and assurances, and must raise doubts as to how smoothly it will progress. It is bound to be a serious burden on organization and management at field level and it will be no mean task for IDA to ensure that all the requirements are fulfilled.

My main concerns are:

a) there does not seem to be any channelling agency of funds for on-farm lending between GOI (or DPAP) to LDBs and commercial banks;

b) there would be a serious overlap between AFC and ARC in project states;

c) there are no qualifying terms for LDBs participating in the project;

d) there is no contribution from farmers towards on-farm investments;

e) there is no laid down lending criteria;

f) what is the expected lending ratio for on-farm investments as between LDBs and commercial banks?

g) commercial banks have only recently entered the field of agricultural lending and it is doubtful if they will have built up the necessary expertise to make an impact on the project. Land Development Banks are the only other alternative source of long term finance; in the project areas their record is very poor but there is very little mention of them in the main body of the Report.

RLHeadworth/cbm

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Robert Picciotto

DATE: July 18, 1974

FROM: Dennis J. Parsons

— India - Drought Prone Areas Proj.

SUBJECT: INDIA - Appraisal of Drought Prone Areas Project

1. The Yellow Cover appraisal report on the Drought Prone Areas Project is attached for your review.

2. The present timetable for processing the Credit is as follows:

Distribution of Yellow Cover	--	July 18, 1974
Receipt of Comments on Yellow Cover	--	July 25, 1974
Distribution of Green Cover	--	July 31, 1974
Negotiations	--	August 26, 1974
Board Presentation	--	October 8, 1974

3. The appraisal mission is convinced that a key feature of improving the lot of the poorer farmers in the drought prone areas is an improved flow of credit. They are equally convinced that this will be difficult to implement effectively and that IDA must use all leverage available to it to help the process. The mission concurs fully with the views expressed in the Second Issues Paper of the Agricultural Refinance Corporation (ARC) appraisal mission (June 14, 1974). Should Management endorse these views, the mission would propose to add one of the proposed conditions of the ARC credit to the assurances to be sought from GOI on DPAP; namely, that the ARC would refinance Land Development Banks in DPAP project areas only if their actual overdues were below 35%. (See ARC Credit Project - Second Issues Paper, para. 3.02.)

4. I am inclined to feel that scarce IDA funds should not be committed against unallocated core funds as proposed (paras 4.52 and 4.57). Should general comment support this view, we could drop this item from IDA financing. This would reduce the IDA contribution to about US$34.5 million. It would not be satisfactory to compensate by increasing the proportion of other categories financed. To do so would increase the proportion of staff and operating costs financed (the only category available) to 80%.

5. The length of the report is 48 pages, with 6 pages of recommendations. I have considered this but am constrained to submit it in this form as the project is complex and undertakes what amounts to a sub-sector investment.

Attachment

cc: H. van der Tak (8), M. Yudelman (5), A. Stevenson, P. Bowron, von Busse (Contr'l), G. Street, L. Forget (Legal)(2), S. van der Meer, R. Picciotto, J. Kraske (5), K. Willen, P. Naylor (NDO, 2), Raj Krishna

Asia Files

FThornley:st

Indian Drought Prone Areas Project

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: INTBAFRAD

NEW DEIHI

DATE: JULY 11, 1974

CLASS OF SERVICE: TELEX (EXT. 2847)

RCA

COUNTRY: INDIA

TEXT: 466
Cable No.:

FOR NAYLOR. RE DPAP AND AURORA'S SUGGESTED VISIT TO BANK DURING HIS CANADIAN TRIP. BANK CANNOT IN ANY CIRCUMSTANCES DEFRAY ANY COST IN THIS CONNECTION. THEREFORE, AS MUCH AS PROJECTS ASIA WOULD APPRECIATE HIS VISIT FOR TECHNICAL DISCUSSIONS AND AS MUCH AS THIS COULD HELP IN REVIEWING CERTAIN PROJECT PROPOSALS, WE CAN TAKE NO INITIATIVE IN THIS RESPECT. REGARDS.

KRASKE

NOT TO BE TRANSMITTED

AUTHORIZED BY: JKraske, South Asia Department, India Division

NAME

DEPT.

SIGNATURE _____
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

CLEARANCES AND COPY DISTRIBUTION:
cc: Messrs. Parsons, Thornley

KHWillen:ao

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(IMPORTANT: See Secretaries Guide for preparing form)

JUL 10 9 33 PM 1974
COMMUNICATIONS

KHMallon:ec

cc: Messrs. Parsons, Moynihan

Agency, South Asia Department,
Light Division

KABAKE

INITIATIVE IN THIS RESPECT. KABAKE.

COULD HELP IN TREATMENT CERTAIN PROTECT PROPOSALS, WE CAN TAKE NO

APPRECIATE HIS VISIT FOR TECHNICAL DISCUSSIONS AND AS MUCH AS THIS

THIS CONNECTION. MEANWHILE, AS MUCH AS PROJECTS ASIA WOULD

CANADIAN TAPE. BANK CANNOT IN ANY CIRCUMSTANCES DEFRAY ANY COST IN

FOR AVIATION. WE HAVE NOW NARORA'S SUGGESTED VISIT TO BANK DURING HIS

CONTRA: INDIA

NEW DELHI

TO: INTERBANK

SERVICE: TELEX (EXT. 5814)

DATE: JULY 11, 1974

Asia Files
India - DPAP
India - Drought Prone Areas Project

Letter No. 224

July 9, 1974

Mr. Peter E. Naylor
World Bank Resident Mission
P. O. Box 416
New Delhi, India

Dear Peter:

I am enclosing a copy of the Recommendations from the DPAP Yellow Cover appraisal report and three copies each of the Research and Training Annexes, and part of the Livestock Annex.

Would you pass the annex material to Mr. Aurora. As you probably know, the research and training proposals were generated by the appraisal mission and I am anxious that the Indians have plenty of time to review them and, if necessary, to let us have their comments before negotiations. The same is true of a particular proposal in the livestock annex. During report writing the appraisal mission concluded that a guaranteed income, during the early years of sheep development, would be an attractive, and necessary, incentive to farmers to participate. Again I wish to expose this idea to the Indians as early as possible; would you point out to Aurora that it is this aspect of the sheep proposals we are anxious to have any comment on, together with any reaction to the proposed sheep growers' society by-laws.

I have enclosed the recommendations so that you could informally indicate to Aurora our thinking in this area. Please emphasize that these are still tentative proposals yet to be considered by management before we go into green cover. In order to avoid problems of protocol, would you also pass on our thinking to Mr. Shroff, or, if you consider it would be appropriate, ask Aurora to do so.

There is a possibility that we may see Aurora here late this month on a stopover from a trip to Canada. Obviously any preliminary reaction which he could bring on the project proposals would be appreciated.

We received your comments on the DPAP draft via Karl Willen and will review them in the process of going to green. (I hope the relatively little ink used reflected a favorable reaction and is an indication of what we can expect on the yellow cover!)

With best regards,

Yours sincerely,

Dennis J. Parsons
Division Chief
Crops, Forestry and Livestock Division
Asia ~~Projects Department~~

Cleared with +
cc: Mr. Willen FThornley:st
Enclosure: 3 copies Annexes

✓ Drought Prone Areas

Mr. Jocsen Crasko

July 5, 1974

K. H. Miller

INDIA - Visit, June 10-28, 1974 - Back-to-Office Report

Para 14

1. During my recent visit to India, I participated in Mr. Fiber's appraisal of the Godavari Barrage Project, Andhra Pradesh, and Mr. Landon's review of the Population Project. I also transmit some other projects in various stages of preparation, most notably the Drought Prone Areas Project, the Bombay Urban Project, and the U.P. Water Supply/Sanitation Project.

2. The Godavari Barrage has been selected for IDA for civil works, with a 7.5% preference for Indian contractors. Some 100 years ago, this barrage (in fact a low weir, stretching about 2.4 miles or 4 kilometers across the Godavari River) was constructed to supply irrigation water in the Godavari Delta area. By means of irrigation canals and other facilities, a well-established and well-managed irrigated agriculture has been developed, covering about 400,000 ha. Farmers benefit from irrigation water for their winter crops, producing chiefly paddy and sugarcane.

3. Over time, however, the barrage has been raised to augment water supply capacity. Its design criteria has been exceeded and deterioration is taking place. In spite of comprehensive annual maintenance works, there is an increasing risk that any monsoon flood might destroy part of the barrage, which would cause annual economic losses estimated at US$30 million equivalent, and social and political unrest among farmers concerned. (Actually, a similar facility on the adjacent Krishna River failed several years ago causing loss of lives and considerable economic damage).

4. A high-powered GOI committee recommended in 1965 that the Godavari Barrage be reconstructed, and the Central Water and Power Commission (CWPC) in collaboration with the Andhra Pradesh Government (GAP), produced detailed design and tender documents. For want of funds, however, nothing happened until 1971 when the GAP awarded a contract for partial reconstruction of the westcot section (out of four) of the weir. Delta cultivators contribute to the financing in the form of a cess; progress of works is steady but slow, dictated more by financial rather than physical constraints.

5. The appraisal mission, concerned that the existing situation represents a dangerous gamble with time, focussed on establishing a realistic work program for reconstruction of the whole weir in the shortest possible time. (It must be pointed out that the new investment serves no useful purpose until literally all sections have been completed and the last gate has been erected; this is so for various technical reasons that will be well-explained in the appraisal report.) It was agreed that, with proper planning and no constraint in the supply of funds or materials, it should be quite possible to complete the new investment in June 1978, taking advantage of four working seasons between monsoon floods. This will require some Rs. 50 crores (about US$63 million equivalent) excluding funds already committed for ongoing works. Once completed, the new weir will not only secure present irrigation water supplies, it will also provide increased capacity for winter crops irrigation, and add capacity for summer crops irrigation.

6. In the whole operation will be subjected to IDB (civil works as well as fabrication and erection of gates), consideration time was spent on a standard bidding tender documents to these guidelines for procurement. Certain interesting issues arose in connection with the application of preferences for local contractors and price suppliers, as will be further explained in the Issues Paper. One major issue, however, relates to funding of the project, or the additionality problem.

7. The GAP maintained that raising FD stores over four years was beyond their capacity without additional support from the Center. The GOI apparently felt that the GAP should be able to accommodate the situation by rescheduling priorities for public investments in Andhra Pradesh over the base period. Representatives of the two governments inquired as to whether it would be possible to extend the construction period over five or six years, thereby lessening the annual financial burden, and pushing part of the funding problem into the next Plan period. The mission pointed to the risk connected with such a measure. Some construction has already started and could be completed soonest; the probability for dam failure is increasing year by year, valuable time has already been lost, and no benefit will arise from this investment until all works have been carried out. Further, by extending the investment period, the total financial cost would increase in view of the considerable ongoing inflation in India.

8. At the time of the mission's departure from Delhi, the two governments had reached no agreement on the financing issue. However, the GAP is determined to settle it, based on a four year construction period. According to Mr. K. V. Rajagopalan, DEA, a high-powered group of GAP representatives will shortly start discussions with the GOI Ministry of Finance to obtain the additional funding required.

9. If this issue is being settled without too much delay, prospects are good for presenting the Bank with a credit proposal in August. Negotiations could be held in September, and the proposed credit could be presented to the Board in October. The mission and the GAP Irrigation Department worked out plans for issuance of tender documents and issuing of tenders aiming at bid opening in early November of this year and actual commencement of construction in January 1975. This would allow the contractor(s) to take advantage of part of the next working season, which is a prerequisite for securing the Godavari Barrage in time for the 1976 monsoon.

10. The review of the Population Project turned out to be essentially a study of the Indian bureaucracy and its reluctance to accept innovations. The project aims at establishing a Management Information and Evaluation System (MIES) in selected districts in Karnataka and Uttar Pradesh, to help Indian FP administrators in their efforts to improve program performance. To this end, SIDA and IDA finance jointly various additional infrastructural inputs (buildings, equipment, vehicles, etc.), as well as technical assistance and incremental recurrent costs. All these project inputs are necessary to support the activities of the two Population Centers, established in Bangalore and Lucknow respectively. They are carrying out applied research to devise and implement the MIES for collection and analysis of FP performance data.

11. The mission found that, in the face of various constraints in the Indian economy and a recently launched austerity program, progress on various project inputs is rather good. Implementation of the building component is gaining momentum, and the technical assistance components have gotten off the ground.

12. The problem with the project lies within the Population Centers proper. They are staffed partly by civil servants, including the Project Coordinators and partly by academicians, including the Project Directors. The latter have no previous experience in the workings of the Indian bureaucracy - or any bureaucracy. While the project director should provide general guidance for planning and execution of various studies and research projects in close cooperation with other project officers of the Center, the project coordinator should keep track of various project activities and facilitate their implementation by applying his skill and experience to avoid pitfalls in the bureaucratic maze. This is the working party approach really, but it has not worked out that way. One director finds himself entangled in petty problems referring to procurement of pencils and typewriters, being too much subordinated to the project coordinator; the other director takes no advantage of the working party approach, which creates a certain confusion and guesswork as to the general direction of the research component.

13. The mission spent much time discussing these problems, bringing the protagonists together in various combinations. These discussions no doubt were very helpful, misunderstandings were straightened out, and support from officials high up in the Central establishment was solicited. The Population Projects Department is planning an "in-depth" supervision mission later in October of this year, which will serve to ascertain that the MCHS component, the main objective of this project, is being properly launched.

14. As for the Drought Prone Areas Project, I assessed preparations on the Indian side for negotiations, and have reported to Projects separately. One possible issue during negotiations might be the extent the Bank will succeed in obtaining assurances that land records will be updated in Rajasthan and Andhra Pradesh. Such updating will identify titles to land in project areas, a prerequisite for extending credit to participating small farmers.

15. I attended a meeting in DEA between Messrs. Shroff and Bohr, relating to the Bombay Transportation Project. BEST, the Bombay transport undertaking, wants the Bank to finance 500 additional buses. Bohr said that the Bank must be satisfied that these buses will be rationally used, as a condition for participation in financing. Shroff and Bohr agreed that on this score, BEST must provide more evidence. Assuming that BEST can do this, Shroff suggested that about 170 buses be financed under the next Industrial Imports Credit, to be imported fully assembled under the rules for international shopping that normally apply to these credits. The balance could then be included in an Urban Transportation Project for Bombay. He felt that by this arrangement time would be saved; delivery time for buses is at least twelve months, and BEST should place an order for the first batch immediately.

16. Finally, I pursued progress on the Uttar Pradesh government's development of the U.P. Water Supply and Sanitation Project. I have reported separately on my findings; essentially, the Bank's proposed project concept is acceptable to the U.P. government. The only possible problem relates to the new corporation's right to interfere with local water utilities' financial regulations and operations.

Khalilian:ao

cc: Mr. Cunningham

Division File

Mr. Dennis J. Parsons July 3, 1974

Frank Thornley

NEPAL - Meeting on Second Highway Project

1. Mr. Nelson and I attended the meeting in Mr. Shields' office, also present were Messrs. Shields, Chung and Nathan.

2. The discussion was somewhat rambling and indecisive; however the following points emerged:

(a) The Bredero report was not per se an adequate justification for the roads under review. The development proposals identified would need much more work to determine their feasibility. In any event, roads which could only be justified on the basis of increased agricultural production should only be developed when firm proposals for that development have been agreed. This is not the case in this instance.

(b) The Bank Group should not finance the Ilam road because:

(i) it had low rates of return even with very risky assumptions regarding agricultural development,

(ii) it serves an area not high on Government's list of priorities for development,

(iii) ADB has expressed an interest in financing it.

3. The Tulsipur looks a possibility for financing because:

(a) It could probably be justified by enabling existing production to reach higher priced markets in India.

(b) It serves an area accorded high priority for development.

4. The highway's people are to draft a note to convey the Bank's views to Government which we shall be asked to comment on.

FThornley:st

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Files

DATE: July 1, 1974

FROM: Ann O. Hamilton

SUBJECT: INDIA - Review of Operational Matters

1. Members of the Bank delegation to the India Consortium meeting in Paris in June 1974 met with members of the Indian delegation to review operational matters. Present were Messrs. Shroff and Ramakrishna of the GOI and Messrs. Kraske, Gilmartin, Alisbah and Mrs. Hamilton of the Bank staff.

2. Agro-Aviation. Mr. Shroff indicated that the outstanding problems had been expected to be resolved by mid-May, but this had not been accomplished. The Government of India was therefore likely to request cancellation of the credit.

3. Rajasthan Rock Phosphate. Although the organizational issue had been resolved in principle, Mr. Shroff said that the techno-economic study now underway would not be completed for several months and, therefore, that the Bank could not expect a request before the end of the year. The Government would be in touch with the Bank as soon as the report was ready. Mr. Alisbah agreed to follow up in New Delhi on the status of examination of alternative technologies. Mr. Shroff pointed out that the Government was prepared to pay for sending an ore sample to Brazil for testing, but expressed concern that efforts to obtain small technological improvements could lead to costly delay in an otherwise very sound project.

4. Drought-Prone Areas. Mr. Kraske stated that negotiations were scheduled for mid-August and that a letter on points for negotiation would be sent in early July.

5. Cotton/Seeds. Mr. Kraske said that negotiations were scheduled for November, but that several matters remained to be clarified before that time.

6. Industrial Imports. Mr. Kraske explained that a letter to Mr. Kaul on the arrangements for the next credit, especially the follow-up on the recommendations of past special studies, should be sent within a week, and that Mr. Cunningham would visit India for appraisal in September. He indicated that the credit was likely to be made in two tranches, due to the limited availability of IDA funds through advance contributions during the first half of the fiscal year.

7. Railways. Mr. Kraske said that appraisal was tentatively scheduled for November, before which IDA would need the revised traffic data and investment requirements requested in a recent letter. He expressed the hope that this information had been given to Mr. Spencer during his recent visit.

8. Coastal Shipping. Mr. Kraske stressed the need to agree on terms of reference for consultants so that they could be hired promptly. Appraisal might be possible in late 1974 or early 1975; i.e., after the consultants had completed their work. However, Mr. Kraske suggested that this was probably optimistic in view of the additional time likely to be needed for project preparation. Mr. Shroff said that draft terms of reference would be forwarded to the Bank by the end of June.

9. Rural Electrification. Mr. Ramakrishna summarized the recent letter from Mr. Thomas, which outlined the Bank's concerns with respect to SEBs' rates of return, engendered by the decision to raise the REC's debt/equity ratio above 1:1 and to relax sub-project viability criteria adopted by REC. Mr. Shroff stated that he would consider the situation upon his return to New Delhi and would respond as soon as possible.

10. Power Transmission IV. Mr. Kraske emphasized the importance to this project and Rural Electrification of reactivation of the CEA. Mr. Shroff stated that the necessary steps were being taken and should be concluded by August.

11. West Bengal Rural Development. Mr. Shroff asked that submission to Loan Committee be delayed until the West Bengal Government reached a decision on whether they were interested in pursuing the smaller project proposed by the Bank.

12. ARC I. Mr. Kraske stated that negotiations had been scheduled for August 15, but that Dr. Sen had requested postponement to September, when he would be in town. The amount was still in question due to concern about the level of activity of LDBs. Mr. Shroff explained that the commercial banks were playing a more active role than in the past; he indicated that the amount was not a matter of great concern to the Government as long as it was clearly the beginning of a continuing program, but that at least $75-100 million was clearly needed.

13. IFFCO Fertilizer. Mr. Shroff asked that negotiations be held late in September rather than early. He indicated that he would consider whether this or another project should be earmarked for Bank financing and would let the staff have his views shortly. If it were to be financed through a Bank loan, he foresaw no difficulty in lending directly to IFFCO.

14. Dairy II and III. Mr. Kraske said that lending through the NDC would require further appraisal which could not take place before mid-September. Mr. Shroff said that he was in favor of using ARC as the channel; he would take the matter up with the States to see whether lending should be through NCDC or ARC and would let IDA have his views.

15. Agricultural Credit. Mr. Kraske stated that IDA expected to extend the June 30 Closing Date of the Gujarat project by 9 months and the Andhra Pradesh project by a year. He responded to Mr. Ramakrishna's recent note, pointing out that he could not recommend using agricultural credit project funds for fertilizer, since current inputs were not part

of the projects. He also said that increasing the disoursement percentages for minor irrigation would not be possible, since the projects were designed to finance a proportion of an on-going program rather than a specific number of wells, and since changing the percentages would upset the arrangements for sharing the financing the ARC and participating banks. However, funds now earmarked for mechanization in the Andhra Pradesh and Tamil Nadu projects would be reallocated to minor irrigation if the results of the Haryana tractor tender were discouraging. Extension of the project area under the Maharashtra area was still under consideration.

16. Shipping. Mr. Kraske requested a response to the Bank's letter enquiring about the problem in the Port of Bombay. Mr. Shroff agreed to do so.

17. Timing of Negotiations. Mr. Kraske summarized by saying that negotiations of the Drought Prone Areas and Rural Electrification projects were scheduled for mid-August, of West Bengal Rural Development and ARC for early September, and of IFFCO and Sindri for late September or early October (just before or just after the Annual Meetings). Mr. Ramakrishna suggested that it might be preferable to group Rural Electrification with the fertilizer projects, since they would all be negotiated by Mr. Rajagopalan of DEA. Mr. Shroff said that, since IDA availabilities were uncertain for the first half of the year, he would like us to bear in mind the need to reserve at least $100 million for Industrial Imports in committing IDA funds to other projects.

AOHamilton:il
cc: Messrs. Diamond, Kraske, Ramakrishna, Fuchs, Picciotto, Lerdau, Thomas, Cunningham
NDO

India- Credit 526
June 30, 1974

Country	Loan # / Credit #526 / Investment #	Project
INDIA		

Title and Description

Background Information
Indian Farming - Crop Production Strategy in Rainfed Areas

Form No. 114 (1-73)

Document Date June 1974	Prepared By Indian Council of Agricultural Research
Transmittal Letter No. / Date	From / No Letter-Copy Card for File ☐

Document # 140,357

India- Drought Prone Areas Project

Form No. 27
(3-70)
INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: INTBAFRAD
NEW DELHI

DATE: June 25, 1974

CLASS OF SERVICE: TELEX

COUNTRY: INDIA

TEXT: 443
Cable No.:

FOR NAYLOR

REFURCAB 273 DPAP STOP AGREE THAT UPDATING LAND RECORDS SHOULD BE FINALIZED AT NEGOTIATIONS STOP WE PROPOSE TO FINANCE 50 PERCENT OF COST STOP PLEASE EMPHASIZE NEED FOR DETAILED PROPOSALS AND OUR APPRECIATION FOR ANY DATA SENT PRIOR TO NEGOTIATIONS STOP SHALL WRITE SHORTLY WITH ITEMS FOR DISCUSSION IN INDIA PRIOR TO NEGOTIATIONS STOP AS RESULT OF INJURY TO BROWN AND TEMPORARY INCAPACITATION YELLOW COVER DELAYED TO JULY 8

REGARDS PARSONS

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Dennis J. Parsons, Division Chief

DEPT. Asia Projects, Crops, Forestry & Livestock

SIGNATURE _____
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JBrown:st

ORIGINAL (File Copy)

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JUN 26 10 12 PM 1979

COMMUNICATIONS

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DENNIS PARSONS

TEMPORARY INCAPACITATION NELSON COVEY DELAYED TO JULY 8

IN INDIA PRIOR TO NEGOTIATIONS SIGS AS RESULT TO INTENT TO BECOME AND

PRIOR TO NEGOTIATIONS SIGS SHALL WRITE SHORTLY WITH ITEMS FOR DISCUSSION

EMPHASIZE NEED FOR DETAILED PROPOSALS AND OUR APPRECIATION FOR ANY DATA SENT

TA NEGOTIATIONS SIGS WE PROPOSE TO FINANCE 50 PERCENT OF COST SIGS PLEASE

REFLECA 575 DATA SIGS AGREE THAT UPDATING LOAN RECORDS SHOULD BE MINIMIZED

FOR NATION

Cable No:

TEXT:

COUNTRY: INDIA

SERVICE: TELEX

CLASS OF

NEW DELHI

TO: INTERAGENCY

DATE: June 25, 1979

OUTGOING WIRE

INTERNATIONAL FINANCE CORPORATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

Form No. 31 (3-50)

India - DPAP

June 18, 1974

INCOMING TELEX

From: New Delhi

Distribution: Mr. Parsons
Mr. Picciotto
Mr. Kraske

India - Drought Prone Areas Project

Mr Brown

Please discuss

273 FOR PARSONS

REGARDING DPAP PROJECT DR SEN HAS WRITTEN TO DEA PRESUMABLY AT YOUR REQUEST ASKING URGENTLY FOR INFORMATION ON STAFFING PLANS ETCETRA TO UPDATE LAND RECORDS IN ANDHRA PRADESH AND RAJSTHAN. AURORA HAS CONTRACTED ME TO SAY HE DOES NOT HAVE THIS INFORMATION AND WHILE HE HAS ASKED THE STATES FOR IT HE IS CERTAIN THAT HE WILL NOT GET IN UNDER TWO TO THREE WEEKS, IF THEN. AT STATE LEVEL LAND RECORDS UPDATING IS TIED UP WITH IMPLEMENTATION OF NEW LAND REFORM LEGISLATION WHICH IS DELICATE SUBJECT NOT TO BE RUSHED. AURORA THINKS WILL BE MANY MONTHS BEFORE STATES TAKE DEFINITE ACTION ON UPDATING LAND RECORDS AND THEREFORE ANY STAFFING PROPOSALS YOU GET WILL NOT BE VERY MEANINGFUL PARTICULARLY BECAUSE THEY WILL INITIALLY BE PREPARED ON A STATEWIDE BASIS NOT ON A DISTRICT BASIS WHICH IS WHAT INTERESTS YOU. HE REQUESTS YOU DO NOT MAKE DATA AVAILABILITY PRECONDITION FOR NEGOTIATIONS AS WILL INEVITABLY DELAY THEM AND HE IS ANXIOUS TO HAVE THEM AS SOON AS POSSIBLE SINCE DISTRICT PROGRAM BEING DELAYED WHILE YOU WRITE REPORT. CAN YOU NOT WRITE IN GREEN COVER THAT TWO STATES INTENDING TO UNDERTAKE UPDATING AND WILL BE DISCUSSED AT NEGOTIATIONS. DO YOU INTEND TO FINANCE THIS ITEM ? PLEASE LET ME KNOW WHAT TO TELL AURORA REGARDS

NAYLOR

INCOMING TELEX

Distribution:

Mr. Parsons
Mr. Fitzgerald
Mr. Kraske

From: New Delhi

June 18, 1971

Jack Beach - 5570 - A-424. Mr. Piccirillo

A-600 2427

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

INDIA-DPAP or disposo!

attached Miss Bolet let me see copy of issues paper

TO: See Distribution

FROM: Grant Slade

DATE: June 7, 197[illegible]

SUBJECT: INDIA - Meeting to Discuss Issues of Power Transmission IV Project

The meeting to discuss the issues identified by the appraisal mission for this project is scheduled for Friday, June 14, at 11:00 a.m. in Conference Room C-510.

Ready also

Distribution: Messrs. Kraske
Picciotto
Arnold
Thomas
Beach
Scales
Howell
Carver
Sassoon
Lav
Mrs. Robbin

Mr Parsons
Mr J. Bowron

You should perhaps attend this to ensure consistency with our DPAP position re Rajasthan

cc: Messrs. Weiner, van der Meer, Bruce, Baneth, Street, Melmoth, PAS(5), DPS-Messrs. Stevenson, Singh; P&B - Mr. Bowron, Controller, Legal (3), Projects Division Chiefs, Programs Division Chiefs

GSlade/rsr

FORM NO. 75
(7–73)

WORLD BANK GRC

ROUTING SLIP	DATE 6/11

NAME	ROOM NO.
Mickey	

	APPROPRIATE DISPOSITION		NOTE AND RETURN
	APPROVAL		NOTE AND SEND ON
	COMMENT		PER OUR CONVERSATION
	FOR ACTION		PER YOUR REQUEST
	INFORMATION		PREPARE REPLY
	INITIAL		RECOMMENDATION
	NOTE AND FILE		SIGNATURE

REMARKS

FROM	ROOM NO.	EXTENSION
Mia		

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

TO: Mr. E. B. Arnold DATE: June 5, 1974

FROM: J. Beach, J. D. Carver and S. S. Scales

SUBJECT: INDIA - Appraisal of the Power Transmission IV Project
Issues Paper

1. Main features of the Proposed Project

(i) Borrower: The Government of India (GOI);

(ii) Amount of the Credit: The amount of the proposed Credit would be US$120 million equivalent including physical and price contingencies of about US$30 million equivalent;

(iii) Beneficiaries: (a) The Government of India in respect of equipment required for the Eastern and Western Regional Load Despatch Centers;

(b) The State Electricity Boards (SEBs) of Bihar, Gujarat, Maharashtra and West Bengal in respect of transmission lines, substation equipment, communication and load despatch equipment for State Load Despatch Centers;

(iv) Project: The project, which would be the fourth of its type to be financed by the Bank Group, would consist of (i) about 2,030 km of high voltage transmission lines and associated substation equipment with an aggregate capacity of about 2,450 MVA and (ii) communication and load despatch equipment for the SEBs involved and for Eastern and Western Regional Electricity Board.

2. Issues

The main issues are:

(i) reactivation of the Central Electricity Authority; (para. 4)

(ii) the amount of the Credit; (para. 5)

(iii) agreement by State Governments to subsidize losses incurred by their respective SEBs on account of rural electrification operations; (para. 6)

(iv) the failure of SEBs to meet rates of return previously agreed and the desirability of extending the period within which these returns are achieved; (para. 7)

(v) the desirability of State Governments waiving, or otherwise disposing of, arrears of unpaid interest; (para. 8)

(vi) agreement by the GOI to either continue the 'development rebate' when assessing Federal tax on SEBs' earnings or waive SEBs' liability to tax; (para. 9)

(vii) revision of the Electricity (Supply) Act, 1948. (para. 10)

3. The Project

3.01 The Project will be almost identical in nature to those financed by Credit 242-IN (Power Transmission Project II) and by Credit 377-IN (Power Transmission Project III). It would consist of about 2030 circuit KM of transmission lines at voltages of 220 kV and above, associated substation equipment with an aggregate capacity of 2450 MVA, and communication and supervision equipment for the state load despatch centers of the beneficiary SEBs and of the Eastern and Western Regional Electricity Boards.

3.02 Whereas the two previous credits together helped to finance the construction of transmission lines and substations in all states in India, the proposed credit seeks to concentrate on transmission lines and control equipment in the Eastern and Western Regions. The Beneficiaries would be the SEBs of Bihar and West Bengal in the East and Maharashtra and Gujarat in the West. The requirements of the Eastern and Western Regional Electricity Boards would be financed directly by the Government of India.

3.03 The estimated cost of equipment and materials required for the Project is:

		Estimated Cost (millions of US$ equivalent)
1.	Conductors and Ground wire	19.09
2.	Towers	14.56
3.	Insulators and hardware	5.48
4.	Transformers	8.45
5.	Switchgear	10.10
6.	Capacitors or Synchronous Condensers	3.25
7.	PLCC/Load Despatch	21.42
8.	Control & Relay Panels	1.05
9.	Power Cables	5.77
10.	Miscellaneous	0.78
	Sub-total	89.95
	Contingencies (i) Physical	4.50
	(ii) Price	25.55
	Total	120.00

3.04 The proceeds of the proposed Credit would be allocated:

	US$ millions
Bihar	17.80
West Bengal	21.00
Maharashtra	43.00
Gujarat	26.84
Eastern Regional Board	4.16
Western Regional Board	7.20
	120.00

4. Reactivation of the Central Electricity Authority (CEA)

4.01 Mr. V. N. Rajagopalan, Deputy Secretary, GOI wrote to Mr. Kraske on March 14, 1973 as follows:

"With reference to the proposed third Power Transmission Credit to India, India is taking action to enable the Central Electricity Authority to fulfill all the functions, responsibilities and duties assigned to it under the provisions of the Electricity (Supply) Act, 1948. For this purpose, it is also taking action to provide the Authority with necessary technical support, including the transfer of the staff of the Power Wing of the Central Water & Power Commission to the Central Electricity Authority. It is anticipated that this action will be completed in the near future and a note has been taken of the Association's position that it expects this action to be completed before any further proposal for a power project is negotiated."

4.02 The last two power missions to India have endeavoured to discuss this subject with the GOI but have been unable to determine either the form the reorganization will take or the date by which it will be implemented. Since a discussion on the Sector will be an important aspect of the appraisal report it would appear that there is little to be gained by proceeding with the report in accordance with the present timetable, until we know more about the form the proposed sector reorganization will take. A letter should therefore be addressed to the GOI as soon as possible explaining that unless the information we require is received in the very near future the processing of the Credit will be affected.

5. The Amount of the Credit

5.01 The final project submission by the GOI requested assistance in the amount of about US$140 million. Following discussions with the GOI and the beneficiaries, sub-projects which did not have the highest priority were eliminated thus reducing the estimated basic cost of the Project to about US$90 million. To this was added about US$30 million to cover physical and price contingencies. Other sub-projects could be eliminated to further reduce the amount of the proposed Credit but this course of action is not recommended.

6. Subsidization of losses incurred on rural electrification operations

6.01 In order to review the impact of RE investment on the finances of SEBs, GOI agreed in connection with Credit 242-IN to prepare financial data in respect of each SEB, separating information relating to RE operations from that relating to the SEBs' other functions. Since the GOI and State Government tariff and other policies result in expenses (including depreciation) which far exceed RE revenues there is a strong case for subsidy. However, this proposal should not be construed as a tacit endorsement of present RE tariff policies. On the basis of financial data thus made available the State Governments of Assam, Kerala, Madhya Pradesh, Mysore, Orissa and Tamil Nadu, as a condition of Credit 377-IN, agreed to provide its SEB with an annual subsidy equivalent to the amount by which such SEB's operating expenses (including depreciation and interest) in respect of its RE operations exceeded its revenues from such operations. A similar agreement should be obtained from the State Governments whose SEBs would be beneficiaries under the proposed Credit.

7. The failure of SEBs to meet rates of return previously agreed

7.01 The rates of return which SEBs were required to achieve in accordance with previous credit agreements were based on the combined operating results of SEB and, where applicable, government-owned plant. The Credit now proposed will focus on the financial viability of the SEBs and rates of return will be calculated on the results of SEB operations only. The figures below compare rates of return achieved in Fiscal 1973 with targets previously agreed:

Rates of Return %

SEBs	Targets FY '73	Targets FY '74	Targets FY '75	Actual FY '73	Forecast FY '74
Bihar	8.5	-	9.5	0.01	0.7
West Bengal	8.5	-	9.5	8.8	5.0
Maharashtra	9.0	9.5	-	5.0	3.7
Gujarat	9.0	9.5		7.6	7.0

7.02 Failure to reach and/or maintain targets can be attributed to shortage of generating/transmission capacity, operating cost increases not matched by tariff increases, continuing losses from rural electrification operations, high transmission and distribution losses, particularly in Bihar (36%) and in Gujarat (25%).

7.03 Positive action by the SEBs supported by their respective State Governments will be required if returns are to improve. Subsidization of RE operations by those States which refuse to allow proper tariffs will be required and it would help considerably if expenses could be pruned and losses reduced.

7.04 Whatever action is taken it will be necessary to allow the SEBs more time to achieve the targets, and a three year extension may be required in some cases. New interim targets should be established during negotiations. Agreement to the new interim targets by the SEBs and their State Governments would be a Condition of Effectiveness of the proposed Credit.

8. The desirability of State Governments waiving, or otherwise disposing of arrears of interest

8.01 During previous credit operations attention was drawn to the considerable arrears of interest on State Government loans which the SEBs had accumulated in the past because of insufficient tariffs. Until these interest arrears are removed from the SEBs' books, the priorities established by the Electricity (Supply) Act require surplus funds to be applied to their reduction before being applied to finance capital expenditure.

8.02 As a Condition of Effectiveness of Credit 377-IN the State Governments of Assam, Kerala, Madhya Pradesh, Mysore, Orissa and Tamil Nadu agreed that the accumulated arrears of interest would be waived or other arrangements, satisfactory to the Association, would be made to enable SEBs to dispose of these outstanding liabilities. It is recommended that a similar agreement between the beneficiary SEBs and their State Governments be a condition of the proposed Credit.

9. Development Rebate and Federal Income Tax

9.01 State Government officials are reluctant to support the raising of revenues by their SEBs beyond the stage at which they would be involved in paying Federal tax to the GOI on revenues which could be used to finance capital expenditure within the State, particularly when capital could be made available from the State Government without incurring any Federal tax liability. The present rate of tax is about 57%.

9.02 With the present development rebate the prospects of SEBs becoming liable to the payment of tax are small. However, we understand that there is a distinct possibility that the development rebate will be discontinued at the end of FY 1975. Should this be so, it is difficult to support an argument that tariffs should be sufficiently high to provide funds for future construction if such funds are to be subject to Federal tax at the penal rate of about 57%.

9.03 The GOI should be asked to consider the continuation of the development rebate for SEBs in assessing liability to Federal tax, or, alternatively a waiver of tax in respect of SEB operations.

10. Revision of the Electricity (Supply) Act, 1948

10.01 The appraisal report for Credit 377-IN discussed the many problems which beset the power sector in general and the financial management of the SEBs in particular. However, it seems clear that meaningful reorganization of the sector requires revision of the Act as a precondition. It is likely that the GOI will have appreciated this in their deliberations concerning reactivation of the CEA. (paragraph 4)

10.02 We therefore propose to tie the processing of this proposed credit to some progress being made by the GOI toward correcting the most glaring deficiencies in the Act. We shall endeavour to establish a dialogue on this

during review of a report recently prepared by a committee appointed to examine and suggest changes to the financial provisions of the Act.

cc: Messrs. Cargill
Weiner
Baneth
Street
van der Meer
Hansen
Diamond
Melmoth
Kraske
Thomas
van der Tak (5)
Rovani (5)
Stevenson
Bowron
Sassoon (3)
Mrs. Robin
Asia Files (2)
Div. Files

JBeach:mt

File John DPAP

INDIA

DROUGHT PRONE AREAS

Analysis of Alternative Farm Development Possibilities

Preliminary Statement

The Problem

1. Two possibilities exist for developing farms in drought prone areas: one is to develop groundwater for well irrigation with an output capacity sufficient to irrigate 1 - 2 ha, and the other is to increase the output from dryland farming. Into both situations, different systems of cattle production can be incorporated. It is essential to know what net farm income levels can be expected at full farm development from various methods of organizing dryland and/or irrigated farming in combination with, or without, cattle production.

Methods

2. A linear programming model of a typical farm with 4 ha of cropland was prepared. The various assumptions on which the model is based are listed in Annex 1.

3. To analyze the profitability of irrigation development, the model represented alternative courses of action open to a typical farmer, and it worked out his most profitable mix of farm enterprises at full development. Detailed crop and livestock budgets on which the calculations concerning the farm with irrigation are based, are listed in Annex 1, Tables 2 and 5.

4. Four alternative levels of rainfed agriculture have been considered along with three alternative livestock systems to determine the most profitable combination of dryland farming activities. Details of the cropping and livestock systems concerned are shown in Annex 1, Tables 3/4 and 6/7.

Results

5. Given access to development capital and groundwater the most profitable activity would be to develop irrigation and use the water for lucerne production, preferably for sale, but if no market exists then for feeding to cross-bred dairy

cows for milk production; the use of the water for crops produces lower profits. The results from improved dryland farming with inclusion of dairying are comparable to those from developing limited irrigation (200 mm/season) for crop production only. This does obviously not account for the possibility that exists with limited irrigation to avoid crop failure in years of drought by strategic irrigation.

Results of L.P. Analysis - Return per farm of 4 ha

Item	Net farm income Rs
1. Current position	
- crops only	1,500
- crops and native cows	1,780
2. Improved dryland farming	
- crops and indigenous cattle (limited roughage base)	2,330
- crops and indigenous cattle (unlimited roughage base)	2,450
3. Plus limited irrigation	
- crops only	1,700
crops and X-bred cows	3,170
4. Plus full irrigation	
- lucerne production for sale	5,900
- X-bred cows based on lucerne	4,440
- native cows and crops	3,440
- grain crops only	3,010

6. Details concerning resource use in the different farm management combinations are listed in Table 1.

Note

7. This preliminary statement is based on slightly different input data for (a) the rainfed situation, and (b) the irrigation situation. The rainfed situation works with higher productive levels of crop and livestock husbandry

than is the case in the situation with irrigation. This results in a relative under-estimation of net farm incomes resulting from irrigation development. The differences are of the order of 10 - 15 percent; they shall be eliminated in the final analysis.

INDIA - DROUGHT PRONE AREAS

FARM MODEL ANALYSIS AT FULL DEVELOPMENT

Item		Unit	Without Irrigation		Limited Irrigation		Full Irrigation			
			Limited roughage	Unlimited roughage 1/	Crops only	Crops + Livestock	X-bred Cows + Crops	Native Cows + Crops	Grain Crops only	Lucerne plus Rice
FALLOW + BUNDS		ha	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
DRY BAJRA		ha	3.5 2/	3.5 2/	1.4	3.3	2.8	2.8	0.4	2.1
IRRIGATED	- pulses - kharif	ha	-	-	0.8	-	-	-	2.0	-
	- lucerne	ha	-	-	-	0.2	0.3	-	-	1.0
	- rice	ha	-	-	-	-	0.4	0.7	-	0.4
	- wheat	ha	-	-	0.3	0.1	0.6	1.0	1.0	-
	- total area irrigated	ha	-	-	0.8	0.3	0.9	1.0	2.0	1.4
LIVESTOCK	- steers	no.	1	1	1	1	1	1	1	1
	- indigenous cows	no.	0.5 3/	2 4/	-	-	-	1.4 5/	-	-
	- crossbred cows	no.	-	-	-	1.6 6/	2 6/	-	-	-
LABOR USED	- family - kharif	man-day	250	250	193	250	250	250	250	250
	- rabi	man-day	36	85	100	130	250	250	250	200
	- hired - kharif	man-day	164	335	-	114	284	265	19	200
	- rabi	man-day	-	-	-	-	89	74	50	220
CAPITAL	- irrigation	Rs.	-	-	3,700	2,150	8,330	10,000	10,000	10,000
	- livestock	Rs.	320	650	-	1,240	1,640	430	-	-
WATER USE	- kharif	m^3	-	-	200	90	440	597	500	600
	- rabi	m^3	-	-	200	200	600	600	600	600
NET FARM INCOME		Rs.	2,330	2,450	1,700	3,170	4,440	3,440	3,010	5,900

1/ Free roughage harvested by own labor.
2/ Cropping pattern D, Annex 1, Tables 3 & 4.
3/ Cows valued Rs. 1,000 with 1,200 kg milk sold per lactation.
4/ Cows valued Rs. 800 with 600 kg milk sold per lactation.
5/ Cows valued Rs. 500 with 600 kg milk sold per lactation.
6/ Cows valued Rs. 1,800 with 1,600 kg milk sold per lactation.

Table 1

INDIA
DROUGHT PRONE AREAS

Linear Program Analysis of Farm Development

Assumptions

(a) Current position

Farm size:	4 ha annually arable of which 0.5 ha not cultivated.
Livestock:	1 steer, 1 cow, some followers.
Land use:	3.5 ha dry land bajra (or jowar), 0.5 ha fallow or in bunds.

(b) Possible developments

- irrigation of 1-2 ha;
- introduction of new crops and livestock husbandry without irrigation;
- dairying based on concentrates.

(c) Assumptions for analysis at full development

Possible crops:	irrigated bajra, rice, wheat, summer pulses, winter pulses.
Possible fodder crops:	irrigated intensive lucerne, extensive irrigated lucerne.
Possible livestock activities:	native dairying, improved native dairying, dairying with cross-bred cows.1/
Other activities:	buy concentrates and labor, sell lucerne, or feed it to stock.

1/ It is assumed that crossbred cows can be used only on farms with irrigation and with an assured year-round supply of green fodder.

(d) Other resources

- Family labor: 500 man/day/year.
- Capital: access to Rs. 10,000 for irrigation development and Rs. 10,000 for livestock purchases.
- Access to hired labor, concentrate feeds, milk marketing system, grain markets, but is not able to sell fresh green forage (except in one analysis).

(e) Crop and lucerne water requirements (Table 1). These were based on figures in the Chambal Command Area Development Project Preparation Report (No. 30/73 IND 18).

(f) Crop budgets for irrigated condition (Table 2)

These figures were based on those in the Chambal report.

(g) Crop budgets for dryland conditions (Tables 3 and 4)

These figures are based on DPAP mission.

(h) Livestock budgets (Tables 5 - 7)

These were derived mostly from local field studies of the DPAP missions, the estimates of maintenance and production feed requirements were derived from metabolisable energy tables.

(i) Prices

Those not shown in the budgets but used in the analyses were as follows:

concentrate feed : Rs. 1.00/kg on farm;

labor : Rs. 3/man/day.

(j) Other constraints:

Draught power: It was assumed that a farm had to have a steer to satisfy some of the draught requirements.

Feed transfer: It was assumed that it would be possible to transfer feed stuffs from the Kharif season to the Rabi season, but that its feeding value would decline by 50%.

(k) Livestock feed

For ease of analysis all feed resources have been converted into LSM (livestock month) which is a unit of metabolisable energy equivalent to 60 Mcals.[1/]

Feed supplies have been converted in the following way:

1 ton straw = 27 LSM

1 ton fresh green lucerne = 7 LSM

1 ton concentrate = 50 LSM

Feed supplies being seasonal, the year has been divided into the Kharif and Rabi seasons. Feed requirements are based on the nature of the breeding herd (Tables 5-7) and have been estimated for units of average cows. It includes the lactation needs of the cow and the feed requirement of progeny uptil 9-12 months.

	Kharif	Rabi	Total LSM
Native cows (traditional husbandry)	55	55	110
Native cows (intensified husbandry)	65	65	130
Cross-bred cows	85	85	170
Working steers	55	55	110

1/ LSM : is the energy requirements of a 100 lb dry sheep for a month.

ANNEX 1
Table 1

CROP WATER REQUIREMENTS
(mm)

Water requirements	Lucerne		Rice	Jowar Bajra	Ground nut	Kharif pulses (vegetable)	Wheat	Rabi pulses
	Intensive	Extensive						
January			-	-	-	-	90	72
February			-	-	-	-	127	-
March			-	-	-	-	170	-
April			-	-	-	-	96	-
May			145	100	100	96	-	-
June			290	50	-	50	-	-
July			80	50	-	-	-	-
August			70	50	-	-	-	-
September			170	50	40	54	-	-
October			-	-	40	50	-	50
November			-	-	-	-	50	84
December			-	-	-	-	90	80
TOTAL	900	450	755	300	180	250	623	286
Kharif (May-Oct)	300	150	800	300	200	250	-	-
Rabi (Nov-April)	600	300	-	-	-	-	600	300

INDIA - DROUGHT PRONE AREAS

Farms with irrigation

Crop - Budget details - 4 ha farm

Item		Unit	Resources available	Dry land		Irrigation crops					Lucerne	
				Bajra	Fallow &waste	Bajra	Rice	Kharif pulses	Rabi pulses	Wheat	Intensive	Extensive
RESOURCE REQUIRED												
Land:	- Kharif	ha	4	1	-	1	1	1	-	-	1	1
	- Rabi	ha	4	-	-	-	-	-	1	1	1	1
Water:	- Kharif	mm	600 1/	-	-	300	800	250	-	-	300	150
	- Rabi	mm	600	-	-	-	-	-	300	600	600	300
Labour:	- Kharif	m day	250 2/	70	-	130	400	120	-	-	300	150
	- Rabi	m day	250	-	-	-	-	-	120	300	200	10
Capital irrigation		Rs	10,000	-	-	2,500	6,700	2,500	2,500	5,000	7,500	3,000
CROP BUDGETS												
Yield	- Principal	kg	-	500	-	1,200	3,500	800	800	2,800	-	-
	- By-product	kg	-	1,000	1,000	1,800	2,500	800	800	1,800	90 ton/green	45 ton/green
	LSM - Kharif		-	-	30	-	-	-	20	50	350	120
	- Rabi		-	27	10	50	70	20	-	-	280	140
PRICE		Rs/kg	-	1.07	-	1.07	1.05	1.62	1.62	1.20	(Rs75/ton Kharif (Rs125/ton Rabi	
VALUE OF PRINCIPAL		Rs	-	530	-	1,280	3,680	1,300	1,300	3,360	9,000	4,500
PRODUCTION COSTS		R	-	100	-	400	1,400	400	400	1,100	2,600	1,000
GROSS MARGIN		R	-	430	-	880	2,280	900	900	2,260	6,400	3,500

1/ 200 mm, and 200 mm under limited irrigation.

2/ 300 days x 1.7 = 500.

ANNEX 1
Table 2

INDIA

DROUGHT PRONE AREAS

Farms with irrigation

Cropping pattern, yield, production for four levels of development[1/]

Item	Cropping pattern 2/ A ha	Cropping pattern B, C, D ha		Yield kg/ha A kg	Yield kg/ha B kg	Yield kg/ha C kg	Yield kg/ha D kg	Production A kg	Production B kg	Production C kg	Production D kg
Jowar	1.6	1.5	grain	350	400	510	750	560	600	765	1125
			roughage	700	800	1020	1300	1120	1200	1530	1950
Bajra	1.4	1.3	grain	275	315	400	600	385	410	520	780
			roughage	550	630	800	1100	770	820	1040	1430
Pulse	0.5	0.5	grain	250	290	350	500	125	145	175	250
			roughage	500	580	700	900	250	290	350	450
Oilseed	0.2	0.2	grain	200	230	280	400	40	46	56	80
			roughage	200	230	280	400	40	46	56	80
Fallow (rough grazing)	0.3	0.3	roughage	750	850	850	850	225	255	255	255
Bund (grassed)	-	0.2	roughage	-	2000	2000	2000	-	400	400	400
Waste land	3.0	3.0	roughage	1000	1000	1000	1000	3000	3000	3000	3000
Total roughage								5400	6000	6500	7600

1/ This model is representative of a 4-ha farm.

2/ A - without project.
B - with project - bunding only.
C - with project - bunding plus extension and improved technology. Improved cultural practices and varieties. No fertilizer.
D - with project - as C, but with fertilizer.

INDIA

DROUGHT PRONE AREAS

Farms without irrigation
Crop income compared at four levels of development

A - Without project

Income	Unit	Price (Rs)	Quantity	Value (Rs)
Jowar	kg	1.37	560	767
Bajra	"	1.07	385	412
Pulse	"	1.62	125	203
Oilseed	"	3.03	40	121
Total income				1,503
Costs (excluding labour)				
Seed				54
Fertilizer				-
Pesticide				-
Total costs				54
Net income				1,449
Labour - Mandays				330

B - With Project - Bunding only

Income	Unit	Price (Rs)	Quantity	Value (Rs)
Jowar	kg	1.37	600	822
Bajra	"	1.07	410	439
Pulse	"	1.62	145	235
Oilseed	"	3.03	46	139
Total income				1,635
Costs (excluding labour)				
Seed				54
Fertilizer				-
Pesticide				-
Bunding annual cost				40
Total costs				94
Net income				1,541
Labour - Mandays				345

C - With project - Bunding, improved technology but no fertilizer

Income	Unit	Price Rs	Quantity	Value Rs
Jowar	kg	1.37	765	1,048
Bajra	"	1.07	520	556
Pulse	"	1.62	175	284
Oilseed	"	3.03	56	170
Total income				2,058
Costs (excluding labour)				
Seed				164
Fertilizer				-
Pesticide (Rs30 x 2)				60
Annual cost of capital				51
Total costs				275
Net income				1,783
Labour - Mandays				420

D - With project - Full technology

Income	Unit	Price Rs	Quantity	Value Rs
Jowar	kg	1.37	1,125	1,541
Bajra	"	1.07	780	835
Pulse	"	1.62	250	405
Oilseed	"	3.03	80	242
Total income				3,023
Costs (excluding labour)				
Seed				164
Fertilizer (Rs2.50 x 130 kg)				325
Pesticide (Rs30 x 2 ha)				60
Annual cost of capital				82
Total costs				631
Net income				2,392
Labour - Mandays				525

ANNEX 1
Table 5

INDIA

DROUGHT PRONE AREAS

Livestock Alternatives on farms with irrigation

Annual position: 10-cow herd

(a) Physical herd parameters	Native cows: Traditional husbandry	Native cows: Improved husbandry	X-bred cows
No. calving and milked	5	7.5	7.5
No. dry	5	2.5	2.5
No. calves sold (1 year)	4	6.5	6.5
No. cows purchased	1	1	1
	.....	Rs	
(b) Costs			
Annual cow replacement	500	500	1,800
Operating (10 cows)	25	150	375
Total costs	525	650	2,175
(c) Income			
Calves x Rs 200, 250, 500 =	800	1,625	3,250
Manure: 3t, 4t, 5t x Rs 30/t x 8 =	720	960	1,200
Milk: 300 l; 600 l; 1,600 l x Rs1.2 =	1800	5,400	14,400
Total income	3,320	7,985	18,850
(d) Gross margin			
Per 10 cows	2,800	7,300	16,700
Per cow	280	730	1,670

1/ 45 LSM = 1 ton grain; 27 LSM = 1 ton straw; 7 LSM = 1 ton fresh green lucerne.

INDIA

DROUGHT PRONE AREAS

Livestock Alternatives on farms without irrigation

Annual position: 100 cow-herd

Item		Native cows: Traditional husbandry	Native cows: Improved husbandry	Native cows: Best husbandry
a) Physical herd parameters				
No. calving and milked		72	89	89
No. dry, die and sold		48	30	30
No. of calves sold at 6 months:	male	29	40	40
	female	-	19	19
No. of cull heifers		1	2	2
No. of cull cows		8	15	15
b) Feed requirements - Roughage (tons)**				
Cows 1/		324	354	389
Heifers 3-4	2/	46	-	-
Heifers 2-3	3/	57	46	46
Heifers 1-2	4/	64	46	46
Calves	5/	41	80	80
		532	526	561
c) Feed requirements - Concentrates (tons)				
Cows 6/		5.4	27	53

1/ 120 x 2.7 tons; 118 x 3 tons; 118 x 3.3 tons.

2/ 23 x 2 tons.

3/ 26 x 2.2 tons; 21 x 2.2 tons.

4/ 29 x 2.2 tons; 21 x 2.2 tons.

5/ 58 x 0.7 tons; 80 x 1 ton.

6/ 0.25 kg : kg milk sold; 0.5 kg : kg milk sold; 0.5 kg : kg milk sold.
Cost of concentrates: Rs1,000/ton.

*Based on herd structure in Table ... except that all males are sold at 6 months.
**Draught steers require 3.1 tons.

INDIA

DROUGHT PRONE AREAS

Farms without irrigation

Livestock costs and incomes : 100 cow herd

	Native cows		
	Traditional husbandry	Improved husbandry	Best husbandry
Costs			
Disease 1/	-	712	1,068
Annual cost of structures 2/	-	24	24
Total	-	736	1,092
Income			
Milk, sales 3/	25,920	64,080	128,160
Manure value 4/	10,800	14,160	15,930
Calves 5/	4,350	13,700	15,600
Cull cows & heifers 6/	900	2,550	3,400
Total	41,970	94,490	163,090
Gross margin/100 cows	41,970	93,754	161,998
Gross margin/cow	420	940	1,620
Value of cows	600	800	1,000

1/ Rp8 and Rp12 lactating cow; improved husbandry.

2/ Fifteen percent of capital cost.

3/ 300 litres, 600 litres and 1,200 litres per lactation respectively x Rp 1.2 per litre.

4/ 3 t; 4 t and 4.5 t respectively x Rp30/ton x cow No.

5/ Female Rp250, Rp300, Rp400 respectively; males Rp150, Rp200, Rp200.

6/ Rp100, Rp150, Rp200 respectively.

Asia Files 9 1062
India - Drought Prone Areas Proj

Mr. Arvind Pande

June 4, 1974

K. H. Willen

INDIA - Drought Prone Areas Project

1. During appraisal of this project, the State governments of Andhra Pradesh and Rajasthan undertook to provide the mission with proposals for updating of land records in project districts. These proposals, not yet received, are urgently needed for completion of the appraisal report.

2. As we discussed today, it would be much appreciated if you could help the mission to pursue this matter with the Indian authorities concerned.

KHWillen:ao

cc: Mr. J. G. Brown

Elect Schumer

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Robert Picciotto (through D. J. Parsons) **DATE:** May 16, 1974

FROM: Messrs. J. Brown and J. Loup

SUBJECT: Drought Prone Areas Program - Rural Electrification in Rajasthan

Background

1. Preparation documents for DPAP in Jodhpur and Nagaur included rural electrification proposals as follows:

	Nagaur	Jodhpur	Total	Total US$ Million
		Rs Million		
Total Cost	57.4	35.5	92.9	11.6
Subsidy	31.1	17.8	49.2	6.2
% Subsidy	55%	50%	53%	--

The subsidy component, in the form of an equity contribution to the Rajasthan Electricity Board, is required in order that the balance, when taken as the investment cost, meets the investment criteria of the Rural Electrification Corporation (ROR: ½% after 10 years) which would then finance the balance.

2. The request to finance the subsidy portion of these proposals under DPAP was reviewed with staff of the Power Division after our October/November appraisal and the decision was taken at that time that we should not recommend IDA support of these investments. As a result, irrigation components in Rajasthan were reduced by 231 tubewells and 691 dug-cum-bore wells, since these were to have been located in areas as yet unserved by a power grid. This represents a 35% reduction in irrigation works.

3. Diesel is not an alternative to electricity for tubewells in Rajasthan, since they are in excess of 100 meters deep, and the diameter is too small for the necessary submersible pumps. Dug-cum-bore and dug-cum-blast wells with representative cropping patterns and command areas would have a negative cash flow with fuel priced at Rs 1 per liter (25% above November prices).

4. In February of this year, Mr. V. Pande was advised in Washington of the decision not to recommend the electrification component, and he indicated that funds would be found from another source and that the additional wells should be reintroduced into the project. This was done, and during follow-up appraisal, in a general meeting chaired by the Chief Secretary, Rajasthan, we were asked how it could be that wells could be included in the project without the power to operate them! No alternate source of funds had been found, and GOR was most adamant that rural electrification be included in DPAP.

5. In the following paragraphs, we shall present the reasons for the decision to exclude rural electrification from DPAP.

Economic Evaluation

6. The load factor for the scheme is estimated at 25%, of which about 70% would be for agriculture (irrigation). This load factor is high for India, where we understand 12-15% is more frequently encountered. One likely explanation for the higher figure is the difference between the operating norm for irrigation wells, 3,000 hours per year, and that actually experienced in Rajasthan, about 1,000 hours per year. This adjustment would give a load factor of about 12%.

7. Compared with a current charge of Rs .13 per kwh, the actual cost of power would be about Rs .38 per kwh with a 25% load factor and Rs .57 with the more likely 12% load factor. The economic rate of return @ Rs .38 would be 10% on a typical tubewell, but at the Rs .57 level, the rate of return would be negative. Based on 70% agricultural use, the electrification scheme would add about Rs 11,500 to the economic cost of the average well, an increase of 34% on a typical tubewell, 58% on a dug-cum-bore well.

Size of Requested Funding

8. As a result of special agreement between GOI and GOR, DPAP funding in Rajasthan is to be Rs 3 crore from GOI and Rs 1.5 crore from GOR rather than 3 and 3 as in other states. IDA's involvement in the project increases the GOI contribution to Rs 4 crore per district. In short, DPAP in Jodhpur and Nagaur is limited to Rs 5.5 crore each of public financing. The proposed electrification scheme would consume more than Rs 3 crore of this in Jodhpur and Rs 1.8 crore in Nagaur. The project components appraised in Jodhpur will require more than Rs 4 crore of public financing, and those in Nagaur, Rs 2 crore. In the case of Jodhpur, then, electrification cannot be carried out in addition to the components which the mission recommends. Despite the fact that, overall, DPAP is a programme with set budgetary allocations, IDA participation has been recommended on the basis of project-type appraisal whereby individual components have been recommended or rejected on their own merits. As a result, some residual funds will remain unless GOI/DPAP norms are revised; but the mission cannot recommend, on project grounds, their use for electrification.

Proposed Rural Electrification Project

9. Power Division has appraised a line-of-credit project for the Rural Electrification Corporation. Negotiations are tentatively set for August and Board presentation, September. A condition of this and subsequent projects will be that state governments provide their electricity boards with the funds necessary to offset losses incurred by non-viable operations undertaken for non-economic reasons--for example, rural electrification. Power Division is therefore opposed to the Rajasthan proposal not only on economic grounds, but because, if accepted, it would remove the burden from GOR to meet the financial consequence of a basically political/social undertaking.

Edit to put in more general terms

Conclusion

ie. diesel.

10. Despite the financial viability of tubewells in Rajasthan at present costs and prices this proposal cannot be economically justified. The cost of power for this area of low user density is prohibitive. Furthermore, our support of this proposal would be inconsistent with IDA intentions to impose financial responsibility for non-economic investments on the state government which makes such investment decisions. We cannot therefore recommend these rural electrification components for DPAP.

Edit or delete

JBrown:JLoup:st

Headquarters:
Washington, D.C., U.S.A.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

RESIDENT REPRESENTATIVE IN INDIA
53 Lodi Estate, New Delhi 3
Telephone 617241 . Cable Address - INTBAFRAD NEW DELHI . Postal Address - P.O. Box 416

Letter No. 156 **May 2, 1974**

Mr. James Brown
South Asia Projects Department
International Bank for Reconstruction
and Development
1818 H Street, N.W.
Washington DC 20433

Dear Jim:

I sent today a cable in reply to Parson's No. 295. I shall repeat some of the points and elaborate couple of others: Aurora has checked the Civil Service salary schedules and they are alright. The ICAR proposal as discussed in your final meeting with Swaminathan is unlikely to be prepared until the end of this month because Swaminathan has other work he wants done which will tie up Krishnamurthy. The feeling in GOI is that your final meeting went far enough for either you or GOI to write mirror images and they therefore would be content if, for purposes of preparing the Yellow Cover on time you were to write a proposal yourself based on the agreement reached at that meeting. GOI would then be ready at negotiations to deal with the proposal completely without any expectation that major issues would arise. In other words they trust you, old boy! Pande is to be in Washington soon and is to carry the Rajasthan proposals to update the land records. Andhra Pradesh have promised to send their proposals to Delhi at the end of the week. The Center has proposed that secretaries be appointed to assist cooperatives and has sent instructions to the State governments, copy enclosed. You will note that the Center is in no way financially involved. This may have implications for project agreements.

Frank Thornley's idea to distribute good seed in exchange for other grains so as to assist in the wider distribution of good seed was accepted as having a worthwhile aim. However, Government felt that the intricacies of audit around grain stocks which have various qualities and even type in exchange for a higher value grain would threaten the officer-in-charge. They may be willing to try this on a small scale but would not like to start on any large scale merely because of the opposition it would create at the field level. Aurora has the other day received agreement from his Ministry to go ahead with the introduction of voluntary and other non-government agencies for field level management. This particular o.k. from the Ministry should in no way affect your work or the project agreement. It merely means that one area the Bank felt they could not divert your attention to has moved ahead nonetheless under other auspices. It

Headquarters:
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does provide a solution to Frank's idea since voluntary agencies would not be subject to the same audit and could run a scheme as he proposed as part of their business, even if charitable. GOI would be willing to encourage voluntary agencies to try out the scheme, no doubt with the knowledge that precedent is useful. One issue remains and that is the one we discussed with Frank as to relative prices. I would think that the intracacies of the relative prices are best handled by the field agency. Nonetheless it would be a good topic to raise at negotiation as the basic idea has much to commend it.

Parson's cable mentioned July as the timing for negotiation. The last week in July is impossible for GOI. They have suggested should you be thinking of the last week, that the first week in August would be fine.

I often wonder where you are or are going and who has his hands on the DPAP.

Yours,

Norman

Encl:

cc: Mr. Jochen Kraske

might take time to get a brief as discussed with J. Brown. This fixes the breakup of financial : amounts. Calculated for five years but in effect this year will be in recruitment. Effective period 4 years.

During the discussions the World Bank Mission stated that the World Bank would like to support the ICAR for providing an economist at the Headquarters, namely Hyderabad and also one each at the 15 main centres of the integrated dry land agricultural research projects. The job of the economist would be to analyse to economic viability of various techniques and crops being extended and also to evaluate their profitability on the farmers holdings. The Economist will research into the ~~regions~~ reasons for the farmers' rationality in carrying on with traditional practices. The Cell would have a very close relationship with the Working Group of the District Development Authority which will also have a Project Economist for the entire programme. The surveys and evaluations to be conducted will be the joint responsibility of the Economist in the Research Stations and the economist provided for the District Development Authority. The Bank would provide funds for this purpose. As it is not possible for the ICAR to provide for the 16 Economists out of their own budget, it will be necessary to provide the funds to the ICAR from the overall DPAP allocations. The funds required for this purpose will be as follows:-

(1) Economist

(i)	Scale of Pay	- Rs. ~~1100-1600~~ 700-1350
(ii)	Likely monthly average salary	- Rs. ~~1300~~ 900
(iii)	Annual salary	- Rs. ~~15600~~ 10800
(iv)	T.A., D.A. and contingencies @ 30% will be	- Rs. ~~74880~~ 57600
(v)	Annual salary for 16 Economists	-Rs. ~~249600~~ 172800
		-Rs.324480

Total

(2) Stenographer Grade II

(i)	Scale of pay	- Rs. 425-800
(ii)	Average monthly salary	- Rs. 600
(iii)	Annual salary	- Rs.7200
(iv)	Annual salary for 16 Stenographers	- Rs.1,15200

....2/-

(v) Contingencies, T.A. and D.A @ 20% -23040

1,38,240

Total

Grand Total: 14,62,720

Therefore, for 4 years: Rs. 18,50,880

3. The cost of providing the 16 Economists had been worked out only for 4 years because the entire year of 74-75 will be taken up for finalising the recruitment rules and for getting the men in position. The Project Economist is supposed to function on the desk officer system and therefore he has been provided with Stenographic assistance only. If he does not need stenographic assistance, in place of the stenographer we may provide a computer or a STA. The cost is not likely to alter materially. The Economist will then be free to use the typing and stenographic facilities already available at the Research Centre.

No central assistance in financing permanent secretaries.

NO.K.11011/5/70-Credit
Government of India
Ministry of Agriculture
(Department of Cooperation)

KRISHI BHAVAN, NEW DELHI.
Dated the 21st February, 1974.

To

The Secretaries Incharge of Cooperation
All States/Union Territories.

Subject:- Fifth Five Year Plan-Working Group on Cooperation-Recommendations regarding constitution of cadres of full-time paid secretaries of primary agricultural Credit societies.

Sir,

I am directed to say that the Working Group on Cooperation constituted to formulate proposals for the Fifth Plan have, in their Report, referred to the slow progress in the formation of cadres of paid secretaries of primary agricultural credit societies and have accordingly emphasised the need for early implementation of the cadre scheme, and the creation of a cadre Fund and a Cadre Authority. The need for an organised approach to the personnel management in cooperatives has been emphasised time and again and has been underlined by various committees and conferences. This aspect of the problem has, however, assumed added significance in the context of high level of overdues at various levels and the implementation of the reorganisation programme of primary agricultural credit societies so as to create strong and viable units at the base level manned by full-time qualified and trained secretaries. There appears to be significant evidence to indicate a positive connection between the volume of business of a society and the existence of a full-time paid secretary on the one hand and the position of overdues on the other. Generally, large societies and those having full-time paid secretaries appear to have attained a higher degree of success in the matter of recovery of dues. It is thus absolutely essential for any programme of strengthening the structural organisation of society to take due cognisance of the need of a full-time trained and qualified secretary. In the strategy of Cooperative Development in the Fifth Plan, main reliance will be placed on introducing measures for professionalised management. Apart from changes in bye-laws and procedures, building up of cadres of cooperative mangers will be given pointed attention.

2. At the end of the Fourth Plan only about one third of the primary agricultural credit societies in the country are likely to have paid secretaries even though the need for having a full time paid secretary has been recognised for several years now. The position is really difficult in the case of weak States and unless steps are taken to provide a

paid secretary to the societies in these States, the rate of growth indicated earlier cannot be achieved. At the same time the financial implications being large, it is necessary to implement this programme in a phased manner out of [illegible] primary societies which are likely to be retained by the end of the 5th Plan, at least 80,000 societies should be brought under the cadre scheme by 1978-79. This may be done in a phased programme so that about 16,000 societies (20% of the total likely to be covered by the end of the 5th Plan) may be taken up every year. To begin with, all societies which have reached a loan business of at least Rs. 50,000 should be covered by this scheme. Other societies may be provided this facility as and when they reach this level of business. This has the advantage of reducing pressure on States' resources for paying subsidies.

3. The following observations may kindly be kept as guidelines in organising cadres:-

a) CADRE FUND:- In order to organise secretaries of the primary societies into a cadre, the constitution of a cadre authority and a cadre fund is absolutely essential. Every society covered by the cadre scheme should have a full-time paid secretary. The secretary may be of two grades, grade I for larger societies and grade II for smaller societies. The emoluments may be fixed with reference to local conditions. Contributions to the cadre fund should be made by the societies, central cooperative banks and the apex cooperative banks.

The primary societies should contribute to the cadre fund 75% of the interest income earned by them, subject to the maximum of the cost of the secretary. The Central Cooperative Banks should be calculated as a percentage of their outstanding loans to the society and the percentage may be determined with rerference to whether the cadre includes the supervisors of the central banks or only the secretaries of the primary societies. The apex bank may also contribute a percentage of its net profits for the year to the cadre funds. The cost of training of the staff may also be debited to the cadre fund. The deficit in the cadre fund, if any, should be made good by tan appropriate subsidy from the State Government.

/also contribute a percentage of their income to the cadre fund. This should

b) CADRE AUTHORITY: The cadre authority may normally consist of the following:-

i) Chief Executive of the Central Cooperative Bank.

ii) The Assistant Registrar or Deputy Registrar of the District.

iii) The District Development Officer or equivalent. pfficer to be appointed in consultation with the Collector or a representative of the commercial banks if they are involved in loaning to primary societies, or a representative of the Apex Cooperative Bank.

4. As an incentive to the societies to have full-time paid secretaries under a cadre scheme, the Reserve Bank of India,

vide their circular NO. ACD. Plan.1058/P.R.-7(Gen)-73/74 dated the 2nd November, 1973, have modified the ciriteria for sanctioning loans from the LOng-Term Operations Fund for Government participation in the share capital of primary societies. According to the revised instructions, share capital assistance will now be available from the Long-term Operation Fund of the Reserve Bank of India to all the primary agricultural credit societies which are having a full-time paid secretary appointed from a Cadre maintained either by the central cooperative bank or District society formed for the purpose, even if the percentage of their overdues exceeds 30 but not 50. This concession, it is hoped, will act as a suitable incentive for the formation of cadres of paid secretaries of primary societies.

5. In order to ensure that the Cadre scheme is implemanted by the societies and central cooperative banks, all subsidies from the State Governments may be made conditional to the society/bank accepting the Cadre Scheme.

6. I am, therefore, to request that the State Governments may consider the suggestions in the foregoing paragraphs and take early action for bringing the cadres into existence. This Department may kindly be kept posted with the progress made in this direction.

Yours faithfully

21/2/74

(K.S.BAWA)
JOINT SECRETARY TO THE GOVT. OF INDIA.

Copy to:

1. The Registrars of Cooperative Societies, All States/ U.Ts.
2. The Executive Director, Reserve Bank of India, Agricultural Credit Department, Worli, BOMBAY.
3. The Chairman, All India State Cooperative Banks Federation, Garment House, Worli, BOMBAY.
4. The Chairman, State Cooperative Banks, All States/ U.Ts.

21.2.74

(R.SRINIVASAN)
DEPUTY SECRETARY TO THE GOVT. OF INDIA.

India - DPAP

INCOMING TELEX

Distribution

Mr. Parsons
Mr. Picciotto
Mr. Kraske

FROM: NEW DELHI
May 2, 1974

209 FOR JIM BROWN

REFERENCE PARSONS 295 AAA SALARY SCHEDULES CHECKED AND ALRIGHT BBB AURORA ADVISES ICAR PROPOSAL NOT READY FOR YELLOW COVER BUT FEELS YOU CAN WRITE UP AGREEMENT REACHED IN DELHI SUBJECT ONLY TO REVIEW AT NEGOTIATIONS CCC PANDE HAND CARRYING RAJASTHAN LAND RECORDS PROGRAM. AP SENDING PROGRAM IN ONE WEEK DDD SENDING GOI INSTRUCTION TO STATES ON SECRETARIES FOR COOPERATIVES WHICH, NOTE, NOT CENTRALLY FINANCED EEE ADVISE LAST WEEK JULY NOT SUIT GOI FOR NEGOTIATION, FIRST WEEK AUGUST FINE FFF THORNLEY SEED IDEA REGARDED AS TOO DIFFICULT ON MANAGEMENT SIDE SINCE ACCOUNTING PROCEDURES, PHYSICAL GRAIN AND PRICE DIFFERENTIALS, SCARE OFFICERS-IN-CHARGE. RECOMMEND RAISE AT NEGOTIATION FOR PILOT TESTING. COULD BE DONE BY NON-GOVERNMENT BODY. REGARDS

REYNOLDS

Decision Memo

May 1 74

BRDL fin ?

Ground H20 leg

OFFICE MEMORANDUM

TO: Files

DATE: May 1, 1974

FROM: Edward B. Cunningham

SUBJECT: INDIA - Drought Prone Areas Project: Decision Memorandum

1. A meeting was held on April 26, 1974, to discuss an Issues Paper, dated April 19, prepared by the appraisal mission. Present at the meeting were: Messrs. Parsons, Darnell, Brown, Groenewold, Loup, Thornley, Cunningham, and Willen. Issues raised by the mission were discussed and resolved as follows.

Inclusion of Subsidies in Project Costs

2. The mission explained that certain categories of farmers received subsidy assistance under two GOI programs: the Small Farmers Development Agency for farmers with less than 2 ha, and the Marginal Farmers and Agricultural Laborers for those with less than 1 ha. GOI had already made provision for these subsidies in the project cost and the meeting agreed that it was reasonable to retain these in the project costs, although no proceeds of the IDA credit would be disbursed for this purpose. While the meeting was agreed on this approach, CPS explained that Bank policy toward subsidies was still under review and that they reserved their position pending an examination of farm budgets justifying the need for such subsidies.

Retroactive Financing

3. The mission explained that total project expenditures from April 1, 1974, (the beginning of the Indian fiscal year and also the starting point for this project) to August 1974, when the project was expected to reach the Board, would be about US$0.8 million. Of this, US$650,000 would be eligible for financing under the credit and would include US$450,000 for procurement of drilling rigs under ICB; the balance of about US$200,000 would be for IDA disbursements against local cost expenditures.

4. It was agreed at the meeting that since procurement action had not yet been started for the drilling rigs, the date of purchase would almost certainly be after project approval by the Board. Considering the small net amount involved - US$200,000 excluding rigs - the meeting decided that no retroactive financing should be recommended.

Link with ARC Credit Project

5. The mission had recommended that funds be earmarked by ARC from the proceeds of the forthcoming ARC Credit Project to refinance about US$5.3 million in institutional credit required for groundwater development under the project. The meeting agreed that ARC should be asked for an assurance that it would support the proposals under the project and that where its investment criteria were satisfied, it would make available the necessary funds for refinancing. It was not considered necessary or desirable that ARC should be required to set up a separate fund or other form of specific earmarking for IDA projects.

Other Issues

Groundwater Legislation

6. As a certain volume of groundwater exploitation would take place under the project, the meeting discussed whether the Association should insist on promulgation of groundwater legislation in the four states concerned (Maharashtra, Rajasthan, Karnataka, and Andhra Pradesh). The Central Government had drafted model groundwater legislation but, so far, no state had enacted any legislation. Rajasthan had produced a draft for legislative action but little or no progress had been made in the other three states.

7. This issue had been raised in previous negotiations of the Agricultural Credit Projects. In each case, the Association decided not to press for inclusion in the legal document of a requirement that the state concerned should undertake to pass groundwater legislation. Under these circumstances, the meeting decided that the subject should be raised with the four states, and that an appropriate memorandum of understanding should be agreed upon during negotiations to the effect that the state governments will pursue the enactment of legislation.

Legal Documents

8. The mission explained the arrangements for channeling of IDA funds. It was agreed that there should be a Development Credit Agreement with GOI and a Project Agreement with each of the four state governments. The Development Credit Agreement should include provisions covering ARC's participation and the invitation to negotiate should suggest that a representative of ARC should attend the negotiations.

GOI On-Lending Terms

9. The mission explained that under the project GOI would make funds available to state governments on a grant basis and not on the usual interest and repayment terms for development projects. It was agreed that this arrangement should be drawn to the attention of the Loan Committee at the appropriate time.

KHWillen/EBCunningham:ao

cc: Mr. McNamara (through Mr. A. Ljung) with IP
Mr. Knapp (through Mr. R. A. Cambridge) with IP (3)

Messrs.	Weiner	Kraske
	Diamond	Picciotto
	Parsons	Brown, J.G.
	Baneth	Thornley
	Pilvin	Groenewold
	Street	Yudelman (3)
	Melmoth	Darnell
	Hansen, J.	Forget
	van der Tak (5)	Bennett
	Bowron	Veraart
	Stevenson	Segal
	Lav	Willen

Form No. 546
(6-73)

DEPARTMENTAL ROUTING SLIP			DATE 4/24/74		
ASIA PROJECTS DEPARTMENT					
	Mr. M. Weiner	A 507			
	Mr. C. Bruce	A 507			
	Mr. J. Hansen	A 507			
	Mr. E. Arnold	A 500			
	Mr. S. Burt	A 543			
	Mr. R. Picciotto	C 505			
	Mr. R. Powell	A 642			
	Mr. S. van der Meer	B 502			
	Mr. H. Vergin	C 522			
	Mr. J. Beach	A 524			
	Mr. H. Brandreth	B 508			
	Mr. A. Golan	C 514			
	Mr. R. Harma	C422			
	Mr. D. Parsons	C502			
	Mr. V. Rajagopalan	A 622			
	Mr. W. Spall	A 538			
	Mr. H. Young	B 510			
	Mr. Milford	C502			
	Mr. J. Brown	C508			
	Mr. Thanker	C507			

FROM R. Picciotto

Tropical Agroecosystems

These habitats are misunderstood by the temperate zones, mismanaged by the tropics.

Daniel H. Janzen

Tropical countries (*1*) have one major problem: how to evolve a social system that is tailored to the carrying capacity of a small resource base and yet have any resources left once the experiments in setting up the system have run their course. This challenge must be met in a very harsh sociobiological environment. Some of the outstanding environmental traits of most tropical countries are (i) past and present harvest of resources by temperate zone countries at prices unrelated to the worth of the resources at their place of origin; (ii) borders established directly or indirectly by temperate zone countries that were partitioning a resource for their own use; (iii) many nearly equal and opposing pressures acting on social structures, pressures generated not so much by the immediate environment as by the hybridization of two or more social structures with radically different goals in resource use; (iv) potential and realized resources per person already lower than in most temperate zone countries; (v) current social aspirations modeled after exploitative social systems that evolved in resource-rich habitats to deal with the harvest of highly pulsed, regionally homogeneous agricultural resources; and (vi) usable productivity per unit of human effort expended that is considerably lower than that in the temperate zones.

Scientists and policy-makers in the temperate zones often express high hopes for the future productivity of tropical agriculture (*2–6*), but constructive criticism of tropical agroecosystems (*2–24*) is in a primitive state. Nearly all research in tropical agriculture is highly reductionist, parochial, and discipline-oriented. This can be quickly observed by perusal of books such as *Farming Systems in the Tropics* (*2*) and *Pests and Diseases of Tropical Crops and Their Control* (*25*), as well as tropical agricultural journals (*26*). Articles with a holistic approach (*21, 27, 28*) are a conspicuous rarity in the trade journals, with the exception of those in recent volumes of *Tropical Science*.

It is widely believed in temperate zone countries that tropical countries disregard the rules of sustained-yield agroecosystems out of ignorance. This condescending evaluation is sometimes correct for certain aspects of the decision-making process. However, there are many more situations in which a key manager is deliberately maximizing short-term returns at the expense of long-term returns. It is not an acceptable defense to point out that technological knowledge, whether that of the culture or of the world at large, is not immediately available to the persons carrying out the act. If the cost of making technological knowledge available were to be charged against the project, even short-term exploitation would often be uneconomical.

Short-term exploitation is conspicuous at all levels of agricultural sophistication in the tropics, except perhaps in those rare "primitive" cultures whose traditions of resource harvest are still intact (*29, 30*). What tropical countries so rarely grasp (*22*) is the fact that agriculture in the temperate zone countries evolved (and is still evolving) from short-term exploitation to sustained-yield agriculture while operating off a much larger natural capital than the tropical countries possess. Furthermore, this natural capital is in part obtained from the tropics (or other "undeveloped" areas) at a cost much less than its value (*31*).

Short-term exploitation is particularly easy in contemporary tropical societies. Government attitudes are generally "frontier exploitative" (*32*), and the "tragedy of the commons" (*33*) is promoted by undefined ownership of resources despite the fact that much of the land has been under stable subsistence agriculture for thousands of years. The temperate zone countries have said to the tropics, "Look at all the nice cash crops you can grow for us to buy," but have neglected to teach the tropics at the same time how to preserve the natural capital and harvest its natural interest.

By assuming that technological ignorance is the sole cause of agricultural problems in the tropics, we allow this ignorance to become the scapegoat for all ills of the agroecosystem (*8, 10, 12*). In fact, the scientific and folklore communities know quite enough to deal with most of the technological problems in tropical agroecosystems, or if not, how to get that information. As Talbot states in his analysis of deterioration of Masai rangeland, "These adverse ecological consequences of the developments were not intentional. They were, however, anticipated, predicted, and documented by some range managers, wildlife ecologists and other biologists who knew the area" (*34*, p. 695). There are many examples of a disastrous tropical agroecosystem existing side by side with a highly successful one—but under a different social system (*35*). This strongly suggests that the social rather than technological environment is at fault in problems of tropical agroecosystems.

It is a common argument that technological advance in the tropics will buy time in the war against population increase and deterioration of natural capital (*5*). However, there is little evidence that anything is being done with the time bought. It is of no use to fund a soil or natural resource survey for a major development scheme (*36, 37*) when there is a preordained number of settlers (*38*). I feel that the plea for technological advance gives the scientific community a perfect excuse to continue their reductionist and esoteric approaches (*12, 39*) rather than to put their efforts into the far more frustrating task of generating sustained-yield tropical agroecosystems and ensuring that technological advances are integrated with them. Few basic studies in tropical biology genuinely seek to

The author is associate professor of zoology, University of Michigan, Ann Arbor 48104.

adapt their technology and finding the agroecosystem (*40*), although many of them could. A few pious sentences in the introduction (*41*), or the use of economically important animals in experiments, does not remove a study from the category of "biological art form." Some argue that a crisis is needed to alter the situation (*42*). However, like other forms of tropical change, approaching tropical crises tend to be inconspicuous and cannot be recovered from as easily as can crises in the temperate zones.

When examining the problems that confront the development of a sustained-yield tropical agroecosystem (SYTA), it is impossible to separate the biological problems of practicing agriculture in the tropics from those of inadequate education, public facilities, administration, and social aspirations. The regions under discussion are both tropical and undeveloped, and it would be a major tactical error to attribute their overall difficulties to either of these traits.

I focus on some of the areas that seem to be generally unappreciated or ignored by those in the temperate zones who influence the development of SYTA's. In most cases, there is a conflict between optimization and maximization. Reductionism is the order of the day in the contemporary forces shaping SYTA's, and descriptions and analyses of SYTA's are influenced by this philosophy. Tropical agroecosystems are characterized by attempts to maximize outcomes of single processes and the glorification of this maximization. The major challenge in the tropics today is to determine which reductionist lines of research and development should be halted or deflected in deference to optimization processes within holistically designed SYTA's.

Productivity

Net annual primary productivity may be higher in the moist, lowland tropics than anywhere else in the world (*43*), but what really matters is the difference between the cost of turning that productivity into human desiderata and the value of the output (*11*, *17*, *44*, *45*). This difference is very poorly understood as it applies to the tropics. There is a strong tendency for tropical administrators to evaluate labor as free input, to value land only for food and fiber production, and to value products in terms of the world market rather than national life-support systems. When people in the temperate zones say (*46*, p. 440):

> The need is universally recognized for drastic increases in production of food and fiber to feed and clothe a rapidly expanding [tropical] population, a large percentage of which is now undernourished and poorly clothed. It is also recognized that much of the increase required must come from the intensification of agricultural production in the developing nations.

and, "A continual guarantee of increasing agricultural productivity is absolutely essential for our tropics" (*27*, p. 1), they forget that tropical people are no more interested in spending all their waking hours picking beetles off bean bushes and transplanting rice by hand than they are. High-yield tropical agriculture requires immense amounts of very accurate hand care (*2*, *47–49*) or tremendous amounts of fossil fuel (*50*), or both.

If agricultural production costs were determined equally and fully throughout the world, most of the lowland tropics would be classified as marginal farmland. Some researchers have come to this conclusion on the basis of weather data alone (*9*, *19*). As Paddock puts it, "The hungry nations have been and are hungry because they have a poor piece of real estate" (*15*, p. 898). This is well illustrated by the very high cost and slow rate of development of tropical Australia as compared with temperate Australia. Tropical Australia lacks a large, free labor force and its products are in direct competition with those of temperate Australia (*9*). Oddly, the temperate zones accept the concept of nonagricultural use of marginal farmland at the national level, but not at the international level.

In the tropics, "optimum population size and optimal political area are almost irreconcilable! for a state to reach a reasonable size of population it must overstep the optimum-area limits; for it to remain within a reasonable area means more often than not a midget population. . . ." (*51*, p. 435). There is no biological reason that the capacity to support human life should be evenly distributed over the earth's surface, nor why it should be correlated with the primary productivity of natural ecosystems or with the biomass (standing crop) of these ecosystems.

Temperate-tropical comparisons aside, as population density and cash cropping for export increase, the use of marginal land within the tropics increases. In addition to being fragile and having low productivity, marginal farmlands in the tropics have greatly fluctuating productivity. Colonization of such areas may appear justified for several years, and during this time the invading population severs its cultural-economic connection with its homeland (*18*). Then, when drought (*18*, *34*), hurricane (*52*), or resistance to pesticides (*8*, *53*) occurs, it is termed a "natural disaster." Because one person can be sustained at a minimal standard of living more easily in the tropics than in the temperate zones, the population in the tropics is likely to have been greater before the catastrophe than it would have been in marginal farmland in the temperate zones.

Year-Round Warmth

The year-round warmth of the lowland tropics is a mixed blessing (*11*). High year-round soil temperatures lead to very rapid breakdown of litter, with subsequent leaching of soil nutrients before they can be taken up by plants (*54*). Plant diseases breed year round (*27*), and pests breed freely in stored food that is not chilled by winter cold (*53*). In addition, stored foods degenerate rapidly because of their own metabolic activity at high temperatures. Even in areas with a severe dry season, many insect species are present as active adults; they are concentrated at local moist sites or are breeding on alternate hosts (*55*, *56*). Insect pests are therefore available for immediate colonization of newly planted fields, even during the harshest time of year; the same is probably true of plant diseases (*27*). Tropical herbivorous insects are highly adapted for making local migrations (*55*, *56*); this makes it difficult to protect crops by introducing heterogeneity of fields in time and space.

One possible remedy is unpleasant for the conservationist. The agricultural potential of many parts of the seasonally dry tropics might well be improved by systematic destruction of the riparian and other vegetation that is often left for livestock shade, erosion control, and conservation. It might be well to replace the spreading banyan tree with a shed. The tremendous number of species of insects (*56*) and diseases (*27*) that characterizes the

tropics might be severely aced through habitat destruction. T conclusion might change the policy problem to a consideration of how much land should be set aside purely for conservation; the remaining land might not even approximate a natural ecosystem (*57*). Some studies even suggest that "overgrazed" pastures may have a higher overall yield than more carefully managed sites (*58*), especially if the real costs of management are charged against the system. If one wishes a high yield from a particular site, year-round warmth necessitates complex fallow systems to deal with the weeds and insects. However, it is possible that, over large areas, a much lower yield per acre in fields under continuous cultivation could produce the same average yield per acre as fallow systems. Social complications, rather than pests, are likely to be the major barrier to experimentation leading to SYTA's based on extensive, rather than intensive, agriculture; tropical countries are conspicuously hostile to schemes requiring tight administrative control over large areas by single sources of power.

It is not only superior nutrient dynamics of the soil that cause the seasonally dry tropics to be more productive agriculturally than the wet tropical lowlands. In the ever-warm tropics, irrigating between subtropical oases (*36, 59*) and between wet seasons is tempting, but it eliminates the only part of the physical environment that is on the farmer's side in his competition with animals and weeds. The less extreme the dry season (or the more thorough the irrigation), the less extreme are the seasonal dips in insect pest population, with which the farmer can synchronize his crop's growth. There are numerous parallel cases between the natural communities of the tropics and those of temperate zones (*60, 61*).

Ecosystem Fragility

Two very different concepts are involved in the "stability" so often attributed to tropical ecosystems. On the one hand, owing to the apparent lack of variation in the weather within each year (*62*) and the apparently small variations in the climate from year to year, temperate zone peoples often regard the tropics as stable. However, much of this stability is illusory (*63*), as any farmer on a large scale will confirm after plowing under his third attempt to grow rice on a site in seasonal tropics where rice can grown only in wet years.

On the other hand, the complex biological systems of the tropical lowlands are very easily perturbed and cannot be easily reconstituted from roadside and woodlot plants and animals (*20*), as could many North American habitats. For this reason, the complex processes in SYTA's are likely to be highly unstable. For example, a great variety of horticultural practices and strains of common tropical food plants have accumulated over the centuries (*64*). They are closely adjusted to local farming conditions and coevolved with the other dietary resources of the area. When high-yield hybrids are introduced, the local strains (*65*) and practices (*66*) are quickly abandoned. This later leads to (i) expensive and complex programs to reevolve these strains when adjusting hybrid monocultures to SYTA's (*65*), (ii) increased dependence on pesticides and complex breeding programs to keep abreast of the pest problem in single-strain monocultures, and (iii) increased imbalance in the distribution of wealth among farmers (*6, 15, 16, 22*). The same may be said for the replacement of indigenous floras by foreign grasses (*67*) and pure stands of foreign trees (*14, 68*), the generation of complex irrigation systems susceptible to market perturbations (*69*), and the destruction of adaptive village structures by population pressure (*70*) or cash cropping (*17, 30*). As mentioned earlier with respect to the pest community, one way to remove fragility is to remove complexity. However, monocultures are clearly unstable in certain circumstances (*23, 57, 71*), at least with respect to the demands made on them.

Crops and Spacing

Long distances in space and time between conspecific plants in the lowland tropics are a major element in their escape from their host-specific herbivores (*11, 13, 60, 61, 72–74*). The monocultures or moderately mixed stands that characterize modern agriculture are thus a much greater departure from normal in the tropics than they are in the temperate zones. In this sense, modern agriculture removes a much greater proportion of the plant's defense in the tropics than in the temperate zones. However, as has been correctly emphasized (*45, 57, 71, 72, 75*), crop heterogeneity is a mixed bag.

First, there is heterogeneity among monoculture fields in time and space. Here, the benefits of heterogeneity depend on whether the vegetation that is interspersed with the crop field sustains a pest community of less risk than the benefit of the entomophagus parasites and predators it also contains. The outcome has to be determined individually for each site, and in the tropics, it may well go either way (*72, 76*). The efficacy of letting a field lie fallow depends also on the proximity of seed sources for wild plants (*30, 77*) and the value of these wild plants for other uses (*78*). We cannot even infer that a reduction in yield after a shortened fallow period is the result of less effective pest control (*79*).

Second, there is heterogeneity within the field. Often viewed as *the* answer for the tropics, this practice has two major problems: harvesting a mixed crop requires greatly increased labor and skill, and different crops may well require mutually incompatible treatments (*48, 68, 80*). Furthermore, crop plants have had much of their chemical and mechanical defense system bred out of them. For many pests, a field of four or five crops may be a monoculture (*13, 74*).

While some of the most complex mixed cropping is in the tropics (*2*), the tropics also have some very successful monoculture agriculture, if human labor is not included in the cost calculation (*47*). Finally, in some cases in the tropics, a monoculture may have a greater productivity than mixed crops (*81*).

Chemical Defenses against Pests

Secondary compounds are a tropical plant's other major form of defense. However, tropical crops, perhaps even more than those in the temperate zones, have had many of their internal defenses bred out of them in man's quest for less toxic or offensive food. It is almost impossible to grow vegetables in pure stands in the lowland tropics without heavy use of pesticides (*11, 82*). Furthermore, when there is intense selection for higher yields and other energy- and nutrient-consuming traits, the plant probably reduces its defense outlay in order to balance its internal resource budget. "Miracle grains" may be especially susceptible to insects and disease for internal rea-

sons, as well as their genetic and horticultural uniformity.

In the tropics, as in the temperate zones, plants' internal defenses are often replaced with pesticides. However, tropical insects should develop resistance to pesticides as fast as or faster than insects in the temperate zones. One of the classic stories of mismanagement of a tropical agroecosystem is the losing battle between large-scale cotton production with the aid of pesticides and the evolution of insects' resistance (*53, 82, 83*). The modern tropics are dotted with doomed pesticide disclimaxes requiring ever-increasing amounts of chemicals for their maintenance. Only now are the side effects being monitored for a few major crops (*84*).

There are several reasons to expect a more rapid evolution of a pesticide-resistant pest community in tropical agroecosystems than in temperate agroecosystems: (i) the coevolution of herbivores and plant chemistry has always been a major aspect of tropical community structure—if there is a biochemical defense genome in insects, this is probably where it is most highly developed (*11*); (ii) the larger the proportion of the insect community that is hit by the pesticide, the more rapidly resistance may be expected to appear (*85*), and in tropical communities it is commonplace for an insect that is rare in nature to be very common in adjacent fields—even the use of systemic pesticides against vampire bats (*86*) has this problem; (iii) if tropical insects are as localized in their geographic distributions as they appear to be, there will be less chance for dilution of resistant genotypes by susceptible genotypes from unsprayed neighboring regions (*82*); and (iv) in species-rich tropical communities (*27, 56, 87*), the pool from which resistant species may be drawn is much larger than in a temperate zone community.

Tree crops, particularly prominent in discussions of tropical agroecosystem potential (*73, 88, 89*), deserve special mention here. In contrast to annual plants, it is impossible to breed resistant tree strains each year in order to keep ahead of pests that are resistant to natural and artificial pesticides. Not only are the breeding times of pest and host disproportionate, but farming tree crops is a long-term investment, and the loss of a tree crop to a newly resistant pest is a much greater loss to the agroecosystem than is the loss of an annual crop.

Soils

Soils in the tropical lowlands are often a nutrient reservoir of very low capacity (*54, 90, 91*). Plant ash from burning, ions from the very rapid litter breakdown, and chemical fertilizers are rapidly leached from the soil if not taken up by plants. There is generally a deep layer of nutrient-poor material over unweathered rock. Chemical fertilizers are a far more complex solution than they would appear to be. Because of the high rate of leaching from the soil, fertilizers must be added in far greater amounts than are actually taken up by the plant, and this creates a pollution problem. This overdose also raises the real cost of the crop. If fertilizers are added frequently, but in small amounts, the amount of work put into the crop is greatly increased. Even less appreciated is the fact that, since the soil nutrient pool is very small, a careful balance of chemical fertilizers must be added to avoid toxicity; sulfate of ammonia, the standard nitrogenous fertilizer in much of the tropics, may be doing more harm than good in that it acidifies an already acid soil (*91*).

In shifting agriculture, fields are commonly left fallow after 2 to 5 years of farming. The standard explanation for this is exhaustion of the nutrients in the soil. However, the real cause is lowered yield, and pest insects and competing weeds probably contribute as much as or more than soil depletion does to lowered yield (*11, 30, 92*). Magnificent stands of native weeds grow in the abandoned fields—and often in fields before they are abandoned. It is a very great mistake to analyze the adaptive significance of subsistence cultivation patterns in the tropics solely in terms of soil nutrient depletion. Ruthenberg's detailed description of tropical agriculture (*2*) contains not one sentence analyzing pest problems. The literature of tropical agriculture is replete with fertilizer trials, and there is almost no information on the dynamics of field colonization by insect and weed faunas (*93*).

Heterogeneity of Pest Distribution

There are at least five major kinds of pest communities that may be encountered as background to a tropical agroecosystem. As mentioned earlier, the insect community of the lowland seasonal tropics differs strikingly from that of the lowland aseasonal tropics, primarily because of the difference in intensity of the dry season in the two habitats.

The third major pest community is that of upper elevations. Cooler soils and the lower humus decomposition rates associated with them are undoubtedly partly responsible for the higher yields per acre of fixed-field agriculture at upper elevations in the tropics [and the focus of major societies on them (*94*)]. However, one cannot ignore the effect of cool weather in slowing the growth rates of insect and weed populations. The elevation at which this effect is maximal is a complicated function of the decline of plant photosynthesis with increasing elevation, the amount of photosynthate metabolized at night, and the growth rates of insect and weed populations. I have recently found that there are more species and a greater biomass in natural insect communities at elevations of 500 to 1000 meters than in the lowland tropics (*56*). This suggests that man may be able to harvest more there if he is clever about it. Ironically, it is the intermediate to high elevations that are often ignored in overall investigations of tropical productivity (*95*, figure 1, p. 47).

The fourth major pest community is that of tropical islands. In addition to having very few species, native insect populations on tropical islands have an amazingly low biomass (*56*). Aside from the obvious potential effects on natural plant community structure and decomposition (*60, 96*), this means that crops on islands should have fewer challenges from native pests than those on the mainland. Further, when a pest is introduced, it is unlikely to be fed on by a native entomophage. These observations speak poorly for the extrapolation of results from tropical island agroecosystem studies (*97*) to mainland circumstances.

The fifth major type of pest community is that produced by plants growing on very poor soils. I have recently found that animal communities in Borneo are drastically reduced when supported by tropical rain forest growing on nutrient-poor white sand soils. The conspicuous success of lowland rice monoculture in Southeast Asia may be due, in part, to a generally depauperate insect community, as compared to that of other parts of the lowland tropics.

Finally, and to put it bluntly, next to nothing is known about the losses

or more families, which increased rates of land degradation near the village and decreased crop protection at greater distances from the village (*30*). The people displaced by hydroelectric impoundments are usually relocated in areas where their age-old riparian farming traditions are of little use; the people downstream are of even less concern (*8, 18*). The following is a representative story (*105*, p. 597):

> As part of an attempt to introduce cash-cropping to the district, the Zande Scheme opened in the 1940's with the commissioner resettling five thousand homesteads in the Yambio area. The theory was that the cotton-producing scheme would be more successful if the supervision were easier. Ultimately 40 thousand families were resettled, almost the entire population. The cotton crop was a success for the first few years and the yields were high, but after three years of operation the production dropped off markedly. Force was then applied to attain the desired production levels and the Azande became plantation "peons" instead of the prime actors in a great drama of the advance of the stone age.

This would appear to be only quaint history today, but in fact it would probably be impossible to fit this population back into the tightly integrated local ecosystem they once occupied, and such settlement programs are currently in progress elsewhere (*89*).

Interference by the Temperate Zone

Can SYTA's really be developed if new traditions are constantly being bombarded by innovations from other social systems? Well-meaning persons are constantly injecting fragments of temperate zone agricultural technology into the tropics without realizing that much of the value of these fragments is intrinsic not to the technology, but rather to the society in which that technology evolved. Temperate zone countries tend to give "aid" in forms of which they have an excess, or in forms that will benefit their foreign trade (*24*). The Peace Corps, military bases, tractors, miracle grains, grain surpluses, hydroelectric dams, and antibiotics without birth control are a few examples. More often than not, these acts are simply modern versions of buying Manhattan for a few trinkets. That the tropical country "cannot resist" these gratuities is hardly justification for giving them. There appears to be no moral code for the injection of temperate zone technology into the tropics (*106*). Although DDT is banned in the United States, it is freely exported to the tropics. American cigarettes are sold in Central and South America without cancer warning labels. By eradicating tsetse flies, we encourage the raising of cattle in preference to wild game animals, the harvest of which may have been conducive to an SYTA. In the long run, modern drugs without concomitant birth control will take more lives than they save and will lead to a long-range lowering of health and standard of living.

A major force in tropical agroecosystems is "international development," as exported by the temperate zones. It is "a nebulous term, and its meaning seems to reflect the opinion, interest and profession of the beholder" (*107*). An important aspect of international development is illustrated by the following comments on irrigation, which apply equally to other areas (*107*):

> Many development projects, whether in Australia, Massiland, Saudi Arabia, or Rhodesia, fail because they do not take this question of carrying capacity into consideration. Water is provided perhaps, and the land is thus enabled to support more animals and people. But seldom is provision made to hold populations at the new levels that land can support. *In consequence, the land deteriorates, deserts spread or become more barren, and a greater number of people end up worse off than they were before development of the area took place* [italics added]. One can question whether international development agencies should continue to play this losing game.

Conclusion

I have listed some of the ways in which the lowland tropics are not such a warm and wonderful place for the farmer, some of the reasons why it may be unreasonable to expect him to cope with the problems, and some of the ways in which the temperate zones make his task more difficult. The tropics are very close to being a tragedy of the commons on a global scale (*69, 103*), and it is the temperate zone's shepherds and sheep who are among the greatest offenders (*31*). Given that the temperate zones have some limited amount of resources with which they are willing to repay the tropics, how can these resources best be spent? The first answer, without doubt, is education, and the incorporation of what is already known about the tropics into that education. Second should be the generation of secure psychological and physical resources for governments that show they are enthusiastic about the development of an SYTA. Third should be support of intensive research needed to generate the set of site-specific rules for specific, clearly identified SYTA's.

The subject matter of youths' cultural programming is presumably determined by what they will need during the rest of their lives. A major component of this programming should be the teaching of the socioeconomic rules of a sustained-yield, nonexpanding economy, tuned to the concept of living within the carrying capacity of the country's or region's resources. Incorporating such a process into tropical school systems will cause a major upheaval, if for no other reason than that it will involve an evaluation of the country's resources, what standard of living is to be accepted by those living on them, and who is presently harvesting them. Of even greater impact, it will have to evaluate resources in terms of their ability to raise the standard of living by Y amount for X proportion of the people in the region, rather than in terms of their cash value on the world market.

For such a change to be technologically successful, it will require a great deal of pantropical information exchange. This information exchange will cost a great deal of resource, not only in travel funds and support of on-site study, but in insurance policies for the countries that are willing to take the risk of trying to change from an exploitative agroecosystem to an SYTA. For such an experiment to be sociologically successful, it will require a complete change in tropical educational systems, from emphasizing descriptions of events as they now stand, to emphasizing analysis of why things happen the way they do. This will also be very expensive, not only in retreading the technology and mind-sets of current teaching programs, but in gathering the facts on why the tropics have met their current fate.

There is a surfeit of biological and agricultural reports dealing with ecological experiments and generalities which suggest that such and such will be the outcome if such and such form of resource harvest is attempted. It is clear that human desiderata regarding a particular site are often radically different from the needs of the "average" wild animals and plants that

formed the basis for such experiments and generalities. A finely tuned ... FA will come close to providing a unique solution for each region. The generalities that will rule it are highly stochastic. The more tropical the region, the more evenly weighted the sub outcomes will be, and thus the more likely each region will be to have a unique overall outcome. For example, it is easy to imagine four different parts of the tropics, each with the same kind of soil and the same climate, with four different, successful SYTA's, one based on paddy rice, one on shelterwood forestry, one on tourism, and one on shifting maize culture.

A regional experiment station working holistically toward an SYTA is potentially one of the best solutions available. As currently structured, however, almost all tropical experiment stations are inadequate for such a mission. Most commonly they are structured around a single export crop such as coffee, sugar, rubber, cotton, cacao, or tea. A major portion of their budgets comes directly or indirectly from the industry concerned. This industry can hardly be expected to wish to see its production integrated with a sustained-yield system that charges real costs for its materials. When an experiment station is centered around a major food crop, such as rice or maize, the goal becomes one of maximizing production per acre rather than per unit of resource spent; this goal may often be translated into one of generating more people. More general experiment stations tend to be established in the most productive regions of the country and, therefore, receive the most funding. Such regions (islands, intermediate elevations, areas with severe dry seasons) need experiment stations the least because they can often be successfully farmed with only slightly modified temperate zone technologies and philosophies. The administrators of tropical experiment stations often regard their job as a hardship post and tend to orient their research toward the hand that feeds them, which is certainly not the farming communities in which they have been placed.

The tropics do not need more hard cash for tractors; they need a program that will show when, where, and how hand care should be replaced with draft animals, and draft animals with tractors. The tropics do not need more randomly gathered, esoteric or applied agricultural research; they need a means to integrate what is already known into the process of developing SYTA's. The tropics do not need more food as much as a means of evaluating the resources they have and generating social systems that will maximize the standard of living possible with those resources, whatever the size. The tropics need a realistic set of expectations.

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The Colossi of Memnon Revisited

Recent research has established the source of the stone of the two 720-ton statues at Thebes.

R. F. Heizer, F. Stross, T. R. Hester, A. Albee, I. Perlman, F. Asaro, H. Bowman

The two colossal statues usually referred to as the "Colossi of Memnon" are prominent features on the western plain of Thebes in Upper Egypt (Fig. 1). The impressive dimensions of the colossi, the quality of the stone, the technology involved in moving them to their present location, and the desire to determine the exact sources of the stone have been the primary reasons for continued interest in the statues. However, the location of the quarry sources, the weights of the statues, and even their dimensions have been matters of disagreement for a long time. In this article we describe the results of field and laboratory investigations that we undertook in an attempt to resolve these questions. To determine the provenience (place of origin) of the rock, which to us was the most important problem, we used neutron activation analysis to obtain elemental composition patterns of samples from the colossi which could be compared with the composition patterns of samples from different quarries (*1*).

The colossi are seated representations of King Amenhotep III (14th century B.C.), with smaller figures of members of his family forming part of the monument. Originally each of the colossi were monolithic, and they stood in front of a sumptuous mortuary temple of the monarch. The temple was destroyed soon after it was built. The statues are made of ferruginous quartzite, probably the hardest stone used for large sculpture in antiquity, and they rest on pedestals of similar material. The quartzite is distinguished not only by its hardness—greater than that of diorite—but also by its beauty and its ability to take on a high polish. There are about six quartzite quarries known in Egypt from which the stone might have been derived; the nearest of these is about 60 kilometers upriver from Thebes. Some of the quarries, however, may not have been able to produce blocks of the size and quality considered suitable for making the statues by the ancient Egyptians.

In antiquity, the colossi acquired fame by a curious development. In 27 B.C. an earthquake toppled the upper half of the northern colossus to the ground (*2*); thereafter in the early morning, strange sounds began to issue from the truncated statue. In contemporary reports these sounds are variously described as sounding like human voices, wind instruments, breaking harp or lyre strings, trumpets, and the sound of clashing cymbals. At this time

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C. Files

OFFICE MEMORANDUM

TO: Mr. J.G. Brown (AP)

DATE: April 23, 1974

India - Drought Prone Areas Project

FROM: B. Kanchanalak (AGROP-CPS)

SUBJECT: INDIA: Drought Prone Area Project
Medium Irrigation Schemes

1. I wish to confirm our First Mission's findings given in the draft Annex concerning the role of irrigation in the DPAP area, which concluded that the medium schemes (over 1,000 ha) even where they exist their feasibilities as well as the inter-state agreements have not yet been established. This is quite true for the Papaghni Dam and Otikunta Balancing Reservoir proposals you brought back when returned from the Second Mission. The weaknesses of these proposals are given:

Papaghni Dam (2,000 ha - Rs 6.5 million)

2. The project, located in Anantapur District of Andra Pradesh State, is still in preliminary stage. The hydrological study, which defines sources of the project water supply is inadequate; it is totally based on arbitrary and specious assumptions. Moreover, the project water supply is subject to the as yet unsettled inter-state water use agreements, since about 65% of the upstream Papaghni basin is in the other State (Karnataka). There are some existing projects already use the river water in the upstream State.

Otikunta Balancing Reservoir (4,000 ha - Rs 3.5 million)

3. The project, also in Anantapur District, appears to be premature, since the water from the existing Penna River Reservoir, which is one of the project supply sources, has not yet been fully utilized. Moreover, the additional sources of supply designed for the proposed Balancing Reservoir are very vague.

Recommendations

4. In view of the above, I, therefore recommend these two proposals be excluded from the DPAP project components.

cc: Messrs. M. Yudelman
G. Darnell

Bkanchanalak/mh

X

DPAP Loans
Paper 15 Apr 74

Food choices

OFFICE MEMORANDUM

TO: Mr. Dennis J. Parsons

DATE: April 19, 1974

FROM: Messrs. Brown, Thornley and Groenewold

SUBJECT: INDIA: Drought Prone Areas Project
Issues Paper

Background

1. The Drought Prone Areas Program (DPAP) was introduced by the Government of India (GOI) in 1970-71. Its principal objective was the creation of employment in drought prone districts through public-sector construction works. Fifty-four districts in 13 states were selected for the program on the basis of three criteria: (a) level and periodicity of rainfall; (b) intensity and past occurrence of drought; and (c) proportion of irrigated area to total cultivated area.

2. Over the past four years, DPAP has evolved from a purely employment oriented program to one which is intended to "drought-proof" districts within the scheme. To mitigate the effects of future drought, investments are to be made in all sectors of the rural economies of program districts on the basis of their respective resource potentials, with the objective of stabilizing both production and employment. Works are to be taken up principally by existing government departments and agencies and coordinated by a district development authority.

3. In February 1973, an IDA Reconnaissance Mission visited India to review work under the program and assess prospects of IDA assistance to DPAP during the Fifth Plan. Terms of Reference for project preparation were provided in the Reconnaissance Report, June 11, 1973, and reports produced in India formed the basis of the appraisal mission's field evaluation in October/November 1973. Although these reports represented a major improvement over those submitted prior to the Reconnaissance Mission, a number of weaknesses both technical and organizational precluded final appraisal at that time. After a detailed study of proposals and information collected during appraisal, the present mission returned to India between March 17 to April 6 to complete the field appraisal and, in particular, to discuss the scope for dry farming improvement under the project, and to determine the nature of research, training and evaluation activities to be undertaken.

Project Summary

4. The proposed project is designed to increase and stabilize the production from agriculture and related sectors in six drought prone districts of Western and Central India. The project would be administered as part of GOI's Drought Prone Areas Program, executed principally by existing development departments, and coordinated by development authorities to be established in each district. The public works and on-farm investments to be financed under the project would differ somewhat in each district, reflecting its particular needs and resources. The project places particular emphasis on investments to benefit smallholders and an element of subsidy is included in on-farm investments for these farmers. Creation of productive employment for landless laborers is also a major feature of the project.

5. Preliminary project cost estimates are summarized below:

Summary of Project Costs

	US$ million
Minor Irrigation	11.3
Soil Conservation	11.3
Forestry	0.4
Pasture Development	3.1
Dry Farming	1.5
Sheep Development	1.6
Dairy Development	13.6
Sericulture	0.1
Horticulture	0.1
Fisheries	1.0
Assistance to Cooperatives	0.1
Project Management	0.4
District Core Funds	3.4
Central Core Funds	4.9
Consultants	0.3
Research	0.4
Training	1.2
Project Evaluation	0.1
Sub-Total	54.8
Price Contingency	17.5 1/
Total	72.5

1/ Will be increased in accordance with recent directive.

Issues

Allocation of Development Costs (Subsidies)

6. The majority of physical works under the project would be executed by government departments; for example, forestry, soil and moisture conservation and surface irrigation works. Although a portion of government costs would be recovered in the form of water charges and land improvement levies, such revenues would not, at present rates, enable the recovery of the full amounts expended to the direct benefit of farmers. In view of the major social benefits attributable to forestry, pasture development, soil conservation, irrigation tanks, etc., especially recognizing the low economic cost of labor, public sector expenditure in these areas seems entirely justified. Many of the services, too, would be provided by government under the project because of the poor economic conditions and weak cooperative institutions in the project area; for example, artificial insemination and animal health services and engineering services for on-farm development. In addition to these indirect subsidies, direct financial assistance would be provided for several innovative investments such as pasture development, and a fixed subsidy

would be given for all investments by small and marginal farmers. GOI has adopted the policy that subsidies will play a major role in development efforts in backward districts. Specifically, the decision has been taken that small and marginal farmers in all DPAP districts will be eligible for the same benefits as those in districts now served by the Small Farmers Development Agency and the Marginal Farmers and Agricultural Labourers Agency, that is, a 25% or 33-1/3% subsidy, respectively, on a range of specified investments.

7. The Issue. In view of the eventual profitability of project investments, ought IDA to support direct subsidies under the project?

8. The mission recommends that direct subsidies as described be accepted as project costs although it is understood that IDA would not disburse against those components. The Reconnaissance Report which served as the guideline for project preparation set out conditions for subsidies, specifically that they:

(i) encourage technical innovation

(ii) support economically sound investments with some financial uncertainty; or

(iii) assist weaker sections of the populations.

Subsidies in the project would comply with these conditions.

Retroactive Financing

9. The proposed project would be signed in August or September of this year. However, the execution of many of the project components is in one way or another dependent on the monsoon and will therefore be undertaken before June of each project year. For example, pasture and forestry work must be started well in advance of the first rains, distribution of improved inputs arranged by that time and extension efforts launched. Other work such as tank construction is inhibited by the rains. Furthermore, since the project is to operate within the constraints of a government program of the Fifth Plan, budgetary procedures and fiscal periods become significant. The first year of the Plan and the Program has now started and governments are prepared to begin a number of activities included in the project. GOI has indicated to states that its contribution to DPAP is available, in installments, as of April 1, 1974.

10. The Issue. Should retroactive financing be provided for expenditures incurred on approved project activities after April 1, 1974?

11. The mission recommends that retroactive financing be provided. Depending on the ability of states to initiate project activities quickly, total expenditure during the period April 1 - September 1 would be approximately US$800,000, of which IDA's share would amount to about US$650,000 including the foreign exchange cost of drilling rigs to be procured through international competitive bidding (US$450,000).

Link With ARC Credit Project

12. Under the proposed project, IDA participation would be limited to refinancing public sector expenditure. Medium and long-term institutional credit requirements would amount to about Rs 140 million (US$17 million) of which about Rs 120 million would be for on-farm development. Individual loans would be largest for well construction and improvement, and several states have expressed the concern that adequate credit may not be forthcoming without IDA assistance through ARC.

13. The Issue. Should provision be made explicitly in the proposed ARC credit project for the refinancing of minor irrigation under DPAP, and if so, what is the most suitable form of such a provision.

14. The mission recommends that DPAP minor irrigation schemes be identified in the ARC Credit Project for the immediate preparation of financing plans upon effectiveness of the latter project. This would ensure the attention of ARC and credit institution staff to financial evaluation and banking procedures for specific schemes at an early date. This recommendation has been discussed and tentatively agreed with the ARC appraisal mission.

cc: Messrs. Yudelman (3), van der Tak, Street, Melmoth, Picciotto, Kraske, Bowron, Singh, Slade, Darnell, M. Veraart (2), Willen

JBrown:st

GOVERNMENT OF RAJASTHAN
MINISTRY OF AGRICULTURE
RAJASTHAN-JAIPUR

APRIL 18, 1974

LT

INDIA

FOR V. PANDE REYOURCAB APRIL EIGHT DPAP EXTENSION STOP BENOR ARRIVING RAJASTHAN MAY 20 FOR ABOUT FOUR WEEKS ASSIST IMPLEMENTATION CHAMBAL AND RCP EXTENSION EFFORT STOP WILL REQUEST GOI AGREEMENT HIS ASSISTANCE DPAP EXTENSION PROGRAM SELECTED BLOCKS IN JODHPUR DURING VISIT REGARDS

GOLAN

Dw tele. DPAP

A. Golan
Asia Projects

AGolan:rf

Cleared with and cc: Mr. Parsons

Division File
INDIA-

Mr. William H. Spall

April 3, 1974

K. Pranich

INDIA - Proposed Rajasthan Seeds Project

1. During the appraisal of the Rajasthan Command Area Development Projects, the need for a statewide Seeds Project in Rajasthan became clear. While the irrigation projects would still be viable assuming that present conditions of seed availability continue, both projects (and agriculture generally in the State) would be enhanced by improvements in the production and distribution of the major crop seeds: wheat, sorghum, millet, paddy and cotton. Consequently, it is proposed that each project would carry an assurance that the Government of Rajasthan would initiate a Seeds Project within one year of credit signing.

2. We note from the Travel Schedule that your Division plans to send a Seeds Specialist to India in mid-May, in connection with the Tamil Nadu Agricultural Universities Project. We would like to know whether it would be possible for him to spend about five days in Rajasthan to assist the Government in identifying a Seeds Project and in drawing up outline Terms of Reference for a feasibility study. We have already mentioned to the Government the possibility of Cooperative Program help in preparing such a project.

cc: Messrs. Picciotto
Parsons ✓
Golan (o/r)
Rodger
Cunningham
Veraart (Agric. and Rural Dev)
Naylor (New Delhi)

PWhitford:bsm

India cr 526

file in DCAP file

April 12, 1974.

Mr. Amnon Golan,
Chief, Irrigation and Area
Development I Division,
Asia Projects Department,
I.B.R.D.

Dear Amnon,

Jodhpur District - Extension Proposals
My Visit in April 1974

I visited the Jodhpur District together with a team of experts from Jaipur. We held discussions on agricultural matters and extension services with many of the Government officials and research personnel who worked in the District. We also interviewed about 350 farmers in a number of villages in different parts of the District. My particular assignment was "to assess the potential benefits from an improved extension system in the context of present dry farming technology". My findings were as follows:

(1) The farmers in the Jodhpur District number about 100,000. Administratively the District is divided into five Teshils (regions) and nine blocks. Total number of villages - 716. The average size of a holding is 11 ha. 70% of the farmers have holdings more than 6 ha in size. The main crop grown is bajra and second in importance is guar. These two crops cover a high proportion of the cultivable area. There are about 100 Village Level Workers and six Agricultural Extension Officers in the District, but they only devote about 10% of their time to agricultural extension work. (The bajra yield is about 250 kg/ha.)

(2) Rainfall varies greatly from one Teshil to another. Rainfall records show that over a period of 18 years, there was only one year with less than 300 mm of rain in Teshil Bilara, as compared with six years in Teshil Jodhpur and 13 years in Teshil Phalodi. All these Teshils are situated in the Jodhpur District.

(3) Through the adoption of improved agricultural practices, and by better management, the farmers would be able to increase yields and net income by between 25% and 50%, or possibly more. These yields can be obtained with minimal additional expenditure on purchased inputs.

Some examples of recommended practices are as follows:

a. Use of hybrid varieties and good quality seed.

b. Timely sowing - damage and reduced yield are often the result of late sowing.

c. Proper depth of sowing.

d. Maintenance of the optimum number of plants in the field - according to the farmers' information, plant population is 25-30% below the optimum.

e. Proper ploughing and seedbed preparation.

f. Mulching.

g. Mixed cropping.

h. Plant protection.

i. "Clean Cultivation".

j. Contour farming.

(4) A massive extension effort would result in an immediate improvement in yields. If, at the start, only two factors are changed in bajra growing - hybrid varieties and good quality seed, and full plant population - yields will be considerably increased.

I reported to the Chief Secretary and Mr. Pande on my main findings. I also recommended that they should consider the inclusion of extension work in the DPAP project in about five of the better blocks in that area.

Both the Chief Secretary and Mr. Pande were very much in favour of the extension work starting right away. They said: "It is a pity to waste a year, and the farmers should be able to reap the benefits in the 1974 Kharif season". They also declared: "The State Government will provide anything you recommend for the establishment of a strong extension service that will start operating before the Kharif season of 1974. Any funds, personnel, or anything else required will be provided within 24 hours of your request".

They urged me to stay, to prepare the project and to start on its implementation. Of course I could not do that, as it was outside my terms of reference, but I tried to initiate the necessary steps for starting the project as they requested. I think that the project can be started this year provided you decide that it has high priority (after Chambal and R.C.P. but taking precedence over the projects in Madhia Pradhes and Andra Pradhes).

A team of four senior officials was nominated for collecting data and making other arrangements necessary for project preparation (see Annex I). (The leader of this team, Dr. G.S. Shekhawat may be a good candidate for leading the project later on.)

Personally, I find the prospects of such a project fascinating. It will help the most needy farmers by better utilization of their existing means of production. Time is very short, but if an immediate decision is taken, the benefits may be reaped as early as the Kharif season of 1974.

Sincerely yours,

D. Benor

D. Benor

ANNEX I

April 8, 1974.

Preparation of Extension Project in Jodhpur District

(1) Collection of data concerning:

a. Rainfall

b. No. of farmers

c. Crops

d. Size of holdings

e. Size of villages

f. Distances between villages, etc.

g. Soil quality, soil reconnaissance, soil survey

h. Existing cropping pattern. Area under each crop and practices followed.

(2) Purchasing of recommended seed (hybrid bajra 3).

(3) Making list and interview of candidates out of whom approximately 40 V.L.Ws will be selected.

(4) Proposals for blocks where work should be started (? two blocks).

(5) Arrangements for supply of good quality hybrid bajra 3 to all the farmers.

(6) Identification of possibilities for seed multiplication in the area.

(7) Identification of improved methods not requiring additional purchased inputs (except for seed).

(8) Preparation of training programs for extension personnel, in conjunction with Central Arid Zone Research Institute.

(9) Concentration of all efforts on growing of bajra.

(10) Preparation of publicity campaign for farmers in early June.

(11) Preparation for sowing campaign to be initiated by end of June. This should include: assessment of total seed requirement and arrangements for its distribution; assessment of farm machinery requirement and its procurement, etc.

Proposed Time Table

a. Items 1-11 above should be concluded by 18th May 1974.

b. Project preparation to be concluded by 15th June.

c. Training course to take place during first fortnight of June.

d. Field work to be carried out on full scale in mid June.

e. Fields to be ready for sowing late June to first week of July.

The composition of the team responsible for the preparation of the project is as follows:

Dr. G.S. Shekhawat	Leader
Dr. S.C. Sharma	Member
Sh. R.K. Kapoor	Member
Deputy Director of Agriculture, Jodhpur	Member

INCOMING CABLE

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DPAP

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April 8th 1974

Distribution: Mr. Golan

Mr. Picciotto

Mr. Kraske

LT

GOLAN CHIEF IRRIGATION AND AREA DEVELOPMENT SECTION ASIA

PROJECT DEPARTMENT INTBAFRAD

WASHINGTONDC20433

BENOR AND TECHNICAL OFFICERS VISITED JODHPUR AND CONVINCED THAT SIGNIFICANT EXTENSION PROGRAMME POSSIBLE FOR FIVE BLOCKS (.) ENCREASE IN YIELDS BY 25 TO 50 PERCENT POSSIBLE WITHOUT PURCHASED INPUTS (.) KINDLY ARRANGE FOR BENOR TO

~~GOL LT GOLAN 20433 25 50~~

~~NDS257/8 PAGE 2/23~~

PREPARE EXTENSION PROPOSALS FOR JODHPUR FOR KHARIF 74 (.) THIS MAY BE GIVEN PRECEDENCEOVER OTHER WORK ALLOTTED TO BENOR IN INDIA

PANDE

India - Drought Prone Areas Project

INCOMING CABLE

ZCZC 248423 RC005 PDI1831 RML1210 KNY051 BDS895/8

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April 8, 1974

Distribution: Mr. Golan
Mr. Picciotto
Mr. Kraske

LT

GOLAN CHIEF IRRIGATION AND AREA DEVELOPMENT SECTION

ASIA PROJECT DEPARTMENT INTEAFRAD

WASHINGTON20433

BENORS VISIT TO JODHPUR DISCUSSED WITH CHIEF SECRETARY

STOP CHIEF SECRETARY AND MYSELF WOULD PAINT OUT FOLLOWING

A DPAP JODHPUR PROJECT MUST INCLUDE AGRICULTURE EXTENSION

PROJECT AND IMPLEMENTATION SHOULD BEGIN BY AGRICULURE EXTENSION

& AGRICULURE EXTENSION

COL LT WASHINGTON20433

BDS695 PAGE 2/50

MUST START WITH KHARIF 74 ITSELF AS KHARIF IS THE ONLY CROP AND DEVELOPMENT WILL BE DELAYED ONE YEAR IF AGRICULTURE EXTENSION PROJECT DOES NOT START IMMEDIATELY STOP STATE GOVT WILLING TO PROVIDE FOR REQUIRED REORGANISATION ETC STOP REQUEST BENOR SHOULD COME AS SOON AS POSSIBLE FOR PREPARATION REPORT WRITING

BDS695 PAGE 3/16

AND INITIATING IMPLEMENTION OF AGRICULTURE EXTENSION PROJECT FOR JODHPUR STOP KINDLY CABLE REPLY STOP REGARDS

PANDE

India - Drought Prone Areas Project

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INCOMING CABLE

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April 8th 1974

Distribution: Mr. Golan
Mr. Picciotto
Mr. Kraske

LT

GOLAN CHIEF IRRIGATION AND AREA DEVELOPMENT SECTION ASIA

PROJECT DEPARTMENT INTBAFRAD

WASHINGTONDC20433

BENOR AND TECHNICAL OFFICERS VISITED JODHPUR AND CONVINCED THAT SIGNIFICANT EXTENSION PROGRAMME POSSIBLE FOR FIVE BLOCKS (.) ENCREASE IN YIELDS BY 25 TO 50 PERCENT POSSIBLE WITHOUT PURCHASED INPUTS (.) KINDLY ARRANGE FOR BENOR TO

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PREPARE EXTENSION PROPOSALS FOR JODHPUR FOR KHARIF 74 (.) THIS MAY BE GIVEN PRECEDENCEOVER OTHER WORK ALLOTTED TO BENOR IN INDIA

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COMMUNICATIONS SECTION

Distribution

Mr. Parsons
Mr. Picciotto
Mr. Kraske

FROM: NEW DELHI
March 12, 1974

this will be discussed in Delhi by folks up DPAP. Mrs Brown Thornley Norwegian economist. Lets discuss

119 FOR PARSONS

REF DPAP DRY FARM COMPONENT. MISSION'S RECOMMENDATION THORNLEY MEMORANDUM BASED ON TWO PREMISES WHICH ARE NOT TRUE. ALSO VAGUE ON QUOTE FUTURE PROJECT COMPONENT UNQUOTE AND ON SIZE OF IDA PROJECT IF GOI WISH TO PROCEED DRY FARM PROGRAM ALONGSIDE IDA PROJECT. PRIMO GOI HAVE ADOPTED POLICY TO SPREAD FERTILIZER TO INSTILL DISCIPLINE IN USE IN LXNG FAVOURED IRRIGATED AREAS AND PROMOTE RETURNS TO UNDOUBTED BREAKTHROUGH IN MAIZE, BAJRA AND JOWAR UNDER RAINFED CONDITIONS FOR WHICH WILL EARMARK SUPPLIES AS IN EARLIER DPAP PROPOSAL TO SUPPORT FERTILIZER. SECUNDO BLACKMARKET THEORY NOT ACCEPTED IN DELHI UNLESS BASED ON INTERNAL EVIDENCE MADRAS IRRIGATED AREAS WITHOUT ALLOWANCE RETURNS TO DRY FARM CEREALS AS DEMONSTRATED IN THORNLEY ANALYSIS AND DRY FARM AREAS RECENT SEASONS. MOREOVER, UNDER PROJECT CAN ISSUE FERTILIZER SMALL AMOUNTS AGAINST CROP PLAN. FURTHER SUPPORT TO INCLUSION DRY FARM COMPONENT PRIMO NO INSTITUTIONAL CREDIT UNTIL SMALL FARMER STAND ON HIS OWN FEET FOR WHICH NEEDS FERTILIZER SECUNDO SMALL FARMER HIGHER YIELD PER ACRE DRY FARM CONDITIONS AND DOMINANT DRY AREAS TERTIO MEMORANDUM IGNORES RETURNS TO EXISTING CAPITAL OF RESEARCH AND INFRASTRUCTURE QUARTO PRESENT POSITION RESEARCH REQUIRES DIRECT LINK IF FIELD CONDITIONS TO PLACE DEMANDS ON RESEARCH QUINTO CEREAL PROMOTION LEAD TO ACCEPTANCE OTHER CROPS AND LIVESTOCK AS SECURES SUBSISTENCE, MEMORANDUM IGNORES HISTORICAL PROCESS SEXTO ARGUMENT APPEARS NIGGARDLY WHEN PROJECT FERTILIZER UNLIKELY EXCEED 30,000 TONS OVER FIVE YEARS REGARDS

REYNOLDS

√India - Drought Prone Areas Project
cc India - Chambal C.A.D. Project
cc India - Rajasthan Canal C.A.D Project
cc India - Andhra Pradesh CAD Project
cc India - Credit 176 Admin
cc India - Credit 268 Admin
cc India - Terms of Reference

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

TO: Messrs. G. Tibor (IBRD) and D. Benor (Consultant)

DATE: February 27, 1974

FROM: A. Golan

SUBJECT: Terms of Reference - INDIA - DPAP - Appraisal Follow-up
Rajasthan and Chambal CAD Projects
Appraisal Follow-up
Andhra Pradesh CAD Project Preparation
Kadana (Credit 176-IN) and Pochampad
(Credit 268-IN) Project Supervision

1. You should arrive in India on or about March 17, 1974 to review progress on the above projects.

2. Mr. Tibor will concentrate his activities on supervising the Kadana and Pochampad projects. He should pay particular attention to the following matters:

Kadana:

(a) Progress on dam construction and the Limbazi pilot project;

(b) The soil and water management project on the left bank canal area; and

(c) Budgetary allocations and the proposed construction schedule for 1974/75.

Pochampad:

(a) Progress on dam and main canal construction;

(b) Preparation for the canal lining works;

(c) The Chalgal demonstration farm;

(d) The monitoring of groundwater; and

(e) Budgetary allocations and the proposed construction schedule for 1974/75.

3. While in India, Mr. Tibor should also attend a meeting on March 18 in Bombay, with ARC and Government of Rajasthan officials to discuss arrangements for ARC participation in the CAD projects. He should also review in the field with the FAO/IBRD mission the needs for further project preparation work on the Andhra Pradesh CAD projects.

4. Mr. Benor will concentrate his activities on assisting the Government of Rajasthan to set up the extension services organization recommended by the CAD appraisal mission. While in Rajasthan, he should also spend up to one week in one of the Districts included under the DPA project to review the existing extension system and to assess the potential benefits from an improved extension system in the context of present dry farming technology. From March 25-31 he should visit Andhra Pradesh together with Mr. Tibor to assist the FAO/IBRD preparation mission in formulating the extension components of the CAD projects.

5. On or about March 31, you should meet me and Mr. Brown, leader of the DPAP mission in New Delhi, to discuss the findings of your mission. Upon completion of his assignment in India, Mr. Tibor should return to Washington on or about April 8 and prepare a full supervision report for projects 176-IN and 268-IN. Mr. Benor should complete his assignment in India by April 12. He should mail to the Bank a detailed report on all his findings and recommendations by mid-May, 1974.

AGolan/GJTibor:cfa

Cleared with and cc: Mr. Parsons

cc: Messrs. Baneth
Street
Kraske
Beutgen
Koramzay (Legal)
Pilvin
Diamond
Spall
Vergin
Mrs. Robbin (Controller's)

Asia Files

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

INDIA 526

OUTGOING WIRE

TO: HUYSER
FOODAGRI
ROME

DATE: FEBRUARY 27, 1974

CLASS OF SERVICE: GLT

47. DPAP

COUNTRY: ITALY

TEXT: # 41
Cable No.:

ONE INDIA DPAP APPRAISAL STOP DATES NOW SET FOR MARCH EIGHTEEN TO APRIL FIVE IN FIELD STOP WILL ADVISE DETAILED ITINERARY LATER THIS WEEK

TWO ALGERIA ECONOMIC STOP HAVE YOU BEEN SUCCESSFUL LOCATING ALTERNATIVE AGRONOMIST PLEASE ADVISE

THREE PLEASE REPLY URGENTLY OURCAB JANUARY ELEVEN #8 ITEM TWO RE PARIS ECONOMIDES

FOUR REURCAB 66 NO OBJECTION

FIVE THOMAS INDIA PROGRAMS HAS ADVISED THAT GOI NOT ENTHUSIASTIC SHEEP PROJECT PLEASE DO NOT CONTACT HELEN NEWTON TURNER UNTIL WE HAVE DISCUSSED THIS MATTER WITH THOMAS ON HIS RETURN

SIX REUR 51 ITEM FOUR INDONESIA REFERENCE OURCAB 232 ITEM ONE STOP HAVE MADE INTERNAL ARRANGEMENTS STOP APPRECIATE YOU OFFER TO ASSIST

VERAART

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: Marius Veraart

DEPT.: Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

SIGNATURE: MVeraart:fb

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

BILL COPY

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

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(2) - cc: Messrs. Dumoulin & Springuel
(3) - cc: Mr. Gobena
(4) - cc: -
(5) - cc: Messrs. ffrench-Mullen, Brumby, Milford & Kraske

For Use By Communications Section

(6) - cc: Messrs. G. Bruce & Sandberg

Checked for Dispatch:

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

India er 526

TO: Mr. Dennis J. Parsons

DATE: February 26, 1974

FROM: James G. Brown JB

SUBJECT: INDIA - Drought Prone Areas Project
Approach to Rainfed Crop Production

1. The Drought Prone Areas Project now being appraised will include a soil and moisture conservation program, but a component to improve rainfed cropping practices would not be appropriate at this time. In view of current shortages it would not be sound to recommend the use of fertilizers on rainfed crops in these areas, nor is it likely that fertilizer would in fact be so used. Without fertilizer, improved practices would not be financially attractive to farmers; nor would a program for this purpose, with its requisite extension effort, be economically viable.

2. The attached paper prepared by Mr. Frank Thornley presents the analysis upon which the mission's decision is based.

Attachment

JBrown:st

INDIA - DROUGHT PRONE AREAS PROJECT PRE-APPRAISAL

Approach to Rainfed Crop Production Under the Project

1. The mission has concluded that the Drought Prone Areas Project should include a soil and moisture conservation program but that a component to improve rainfed cropping practices would not be appropriate at this time. This conclusion has been arrived at only after an exhaustive examination of possibilities and in full recognition of the critical role that rainfed cropping plays in the lives of the majority of farmers in the drought prone areas.

2. The decision to exclude the crop improvement component rests on a two-stage argument. First, the use of fertilizer in the drought prone areas cannot be justified under the present conditions of increasingly acute fertilizer shortages in the country. Its use would be profitable (para 9), but markedly less so than in irrigated and assured rainfall areas. Second, without fertilizer the package of technology which could be put together would produce benefits that were neither financially attractive at the farm level nor economically viable.

3. Deferring this component during the period of fertilizer shortage would not be time totally lost. There has been a recent upsurge of interest and activity in dryland research, the main focus being the All India Coordinated Dryland Farming Research Project, which needs time to produce results. When available these would form a sounder base for a rainfed crop improvement program than exists at present. The present research effort is imperfect in quality and coverage. The mission would hope to influence the effort through its report and discussions, again leading to a sounder future base for a project component. In particular it is hoped that research into pasture establishment and production and agrometeorology would be undertaken under the present project, providing additional data for future project preparation.

4. Fertilizer has been in short supply for the past two years, hence Government control of distribution. 1/ Whilst shortages are uneven the overall shortfall in 1973 was about 25% of demand. Throughout the mission's field work the most commonly heard complaint from farmers on irrigated tracts was their inability to obtain fertilizer. It has not yet been possible to assess the full impact that the 'oil crisis' will have on the Indian economy, but it can be assumed that for the next few years supplies of fertilizer will be even more critical than at present.

1/ Under the Essential Commodities Act

5. In a situation of shortage the available fertilizer should be used to maximum advantage. This would imply that fertilizer should be used in irrigated areas and areas receiving an assured rainfall of over 1,000 mm per year. In such areas the typical response of a cereal crop to fertilizer would be in the range 10-12 kg of grain per 1 kg of fertilizer. By contrast the average response of a cereal crop to fertilizer in the drought prone area, with perhaps 4 years in 10 having climatically induced low yeilds, would not be more than 5-6 kg of grain per kg of fertilizer.

6. It may be argued that deciding where fertilizer should be used on the basis of the response per kg applied does not adequately weigh social benefits. However, a shortage of fertilizer will almost certainly increase the shortage of food grains. In such a situation the imperative should be to maximize food grain production for distribution rather than attempt to marginally increase production in situ in chronically short areas.

7. A further factor which added weight to the mission's conclusion is the existence of a fertilizer black market. (See Dorris Brown's memo of Jan. 4, 1974.) Even if GOI were to decide to supply fertilizer for dryland crops in the drought prone areas, wrongly in the mission's view, the existence of a strong black market would ensure that the fertilizer was used where it would be most profitable, i.e., irrigated and high rainfall areas.

8. The technology of rainfed crop production in the drought prone areas can certainly be improved. The mission's estimates of what could be achieved are set out in Tables 1 and 2 using a model based on Ahmednagar District as an example. Four alternative levels of development were postulated:

A -- without project

B -- with project; soil and moisture conservation (bunding) only

C -- with project; level B plus improved extension and partial package of improved technology (contour cultivation, strip cropping, mulching, early planting, adjustment of cropping pattern, improved varieties) 1/

D -- with project; level C plus use of fertilizer (moderate amounts, typically on cereals 25 kg N and 15 kg P_2O_5 per hectare)

The following table compares farmer's net cash income at the four levels of development postulated. (From Table 2)

	Level of Development			
	A (Rs)	B (Rs)	C (Rs)	D (Rs)
Gross Income	1,143	1,567	1,852	2,502
Cash Costs of Production	37	84	244	600
Net Cash Income	1,106	1,446	1,608	1,902
Index	76	100	111	132
Labor - Man days	330	345	420	525

1/ The varietal material available is unspectacular; the best, hybrid bajra is already being adopted quite rapidly.

9. Despite the obvious profitability of fertilizer use, for the reasons outlined above, the mission concluded that it could not be justified in the drought prone areas now, or in the near future. The mission therefore addressed the question of whether a project component based on a curtailed package of technology could be justified (development levels B and C).

10. A component consisting only of soil and moisture conservation would clearly be financially viable. No difficulty is foreseen in persuading farmers to accept such a program. It would be an expansion of an ongoing, widely accepted effort not requiring incremental extension activities. Such a component would also be economically attractive, with an estimated IRR of 14%, or 34% if wages for unskilled labor are shadow priced at 50% of cost. (Table 3 compares the IRRs for different levels of development.)

11. The question then remained whether a limited package of improved technology, together with the increased extension 1/ effort necessary to get farmer adoption, would be a viable component to add to the bunding program. As the above table shows the increase in production and income from B to C, (11%) relative to increased costs and effort, would be inadequate to persuade farmers to adopt the proposed package of technology. The incremental production would be well within the yield fluctuations occasioned by climate and would therefore tend to be masked. (The "C" yield levels represent the upper limit that could be expected.) Furthermore the "C" yield levels would be more dependent on improved cultural practices than would "D" levels and these are the most difficult improvements to get farmers to adopt.

12. The IRR on the incremental costs to move from development level "B" to "C" is even less attractive, being negative if unskilled labor is not shadow priced and only moving to 4% at a 50% shadow pricing. In contrast the IRR on the costs to move from "B" to "D", were fertilizer available, would be 27% and 46% with unskilled labor shadow priced at 50%.

13. To summarize the mission has concluded that only soil and moisture conservation can be justified as a component to improve rainfed crop production at the present time. The only viable package of technology to improve cropping practices is dependent on fertilizer, the use of which cannot be justified in drought prone areas during a period of acute fertilizer shortage. The period of fertilizer shortage will not be time totally wasted. In the interim, results will be obtained from improved research on rainfed crops and from research into pasture production and agrometeorology. These, plus experience from the extension programs of the Rajasthan Canal and Chambal Command Area Projects, will form a much sounder base for a dry farming component in future.

1/ Since the possible impact and cost of an improved extension service were issues critical to the mission's deliberations, the structure for an improved service was developed and costed. An outline of the mission's thinking is given at Appendix I.

Table 1: CROPPING PATTERN, YIELD, PRODUCTION FOR FOUR LEVELS OF DEVELOPMENT 1/

	2/ Cropping Pattern		Yield Kg/Ha				Production			
	A Ha	B, C, D, Ha	A Kg	B Kg	C Kg	D Kg	A Kg	B Kg	C Kg	D Kg
Jowar	1.6	1.5	350	400	510	750	560	600	765	1,125
Bajra	1.4	1.3	275	315	400	600	385	410	520	780
Pulse	0.5	0.5	250	290	350	500	125	145	175	250
Oilseed	0.2	0.2	200	230	280	400	40	46	56	80
Fallow (rough grazing)	0.3	0.3	750	850	850	850	225	255	255	255
Bund (grassed)	-	0.2	-	2,000	2,000	2,000	-	400	400	400

1/ This model is representative of a four hectare farm in Ahmednagar District.

2/ A - without project

B - with project - bunding only

C - with project - bunding plus extension and improved technology - improved cultural practices and varieties - no fertilizer

D - with project - as C but with fertilizer

Table 2: NET CASH INCOME COMPARED AT FOUR LEVELS OF DEVELOPMENT

A - Without Project

Income	Unit	Price Rs	No.	Value Rs
Jowar	kgs	0.90	560	504
Bajra	"	0.80	385	308
Pulse	"	1.12	125	140
Oilseed	"	1.40	40	56
Fallow	"	0.60	225	135
Bund	"	-	-	-
Total Income				1,143
Costs (excluding labor)				
Seed				37
Fertilizer				-
Pesticide				-
Total Costs				37
Net Cash Income				1,106
Labor - Man days				330

B - With Project - Bunding Only

Income	Unit	Price Rs	No.	Value Rs
Jowar	kgs	0.90	600	540
Bajra	"	0.80	410	328
Pulse	"	1.12	145	162
Oilseed	"	1.40	46	64
Fallow	"	0.60	255	153
Bund	"	0.80	400	320
Total Income				1,567
Costs (excluding labor)				
Seed				37
Fertilizer				-
Fertilizer				-
Bunding loan repayment				84
Total Costs				121
Net Cash Income				1,446
Labor - Man days				345

C - With Project - Bunding, Improved Technology but no Fertilizer

Income	Unit	Price Rs	No.	Value Rs
Jowar	kgs	0.90	765	689
Bajra	"	0.80	520	416
Pulse	"	1.12	175	196
Oilseed	"	1.40	56	78
Fallow	"	0.60	255	153
Bund	"	0.80	400	320
Total Income				1,852
Costs (excluding labor)				
Seed				109
Fertilizer				-
Pesticide	ha	20	2	40
Bunding loan repayment				84
Interest on annual credit (9½%)				11
Total Costs				244
Net Cash Income				1,608
Labor - Man days				420

D - With Project - Full Technology

Income	Unit	Price Rs	No.	Value Rs
Jowar	kgs	0.90	1,125	1,013
Bajra	"	0.80	780	624
Pulse	"	1.12	250	280
Oilseed	"	1.40	80	112
Fallow	"	0.60	255	153
Bund	"	0.80	400	320
Total Income				2,502
Costs (excluding labor)				
Seed				109
Fertilizer	"	2.50	130	325
Pesticide	ha	20	2	40
Bunding loan repayment				84
Interest on annual credit (9½%)				42
Total Costs				600
Net Cash Income				1,902
Labor - Man days				525

Table 3: INTERNAL RATES OF RETURN ON INCREMENTAL INVESTMENTS

Cost/Price Level	Level B over A		Level C over B		Level D over B	
	Shadow Wage Rate		Shadow Wage Rate		Shadow Wage Rate	
	100%	50%	100%	50%	100%	50%
Pre-appraisal estimates	14%	34%	20%	3%	27%	46%
Pre-appraisal plus	20%	50%	20%	4%	23%	40%
(70% on fertilizer 1/						
(25% on prices 2/						

1/ The increased fertilizer costs are equivalent to a farm gate cost of US$240/ton for urea.

2/ The maximum likely increase in the next 3-5 years.

Improving the Extension Service

1. The extension service could be improved for maximum impact, yet minimal institutional disruption, by major changes at the field level. It was felt that it would be necessary to add a new cadre of field extension workers to complement the work of the VLW's. In view of their low cost and ready availability agricultural graduates would be employed for these positions. They would be needed at the rate of about one per 500 farmers. Each would work through lead farmers chosen at the rate of about one per 25 farmers. The extension workers would operate large and comprehensive demonstration plots at each village with smaller simpler ones on the farm of each lead farmer.

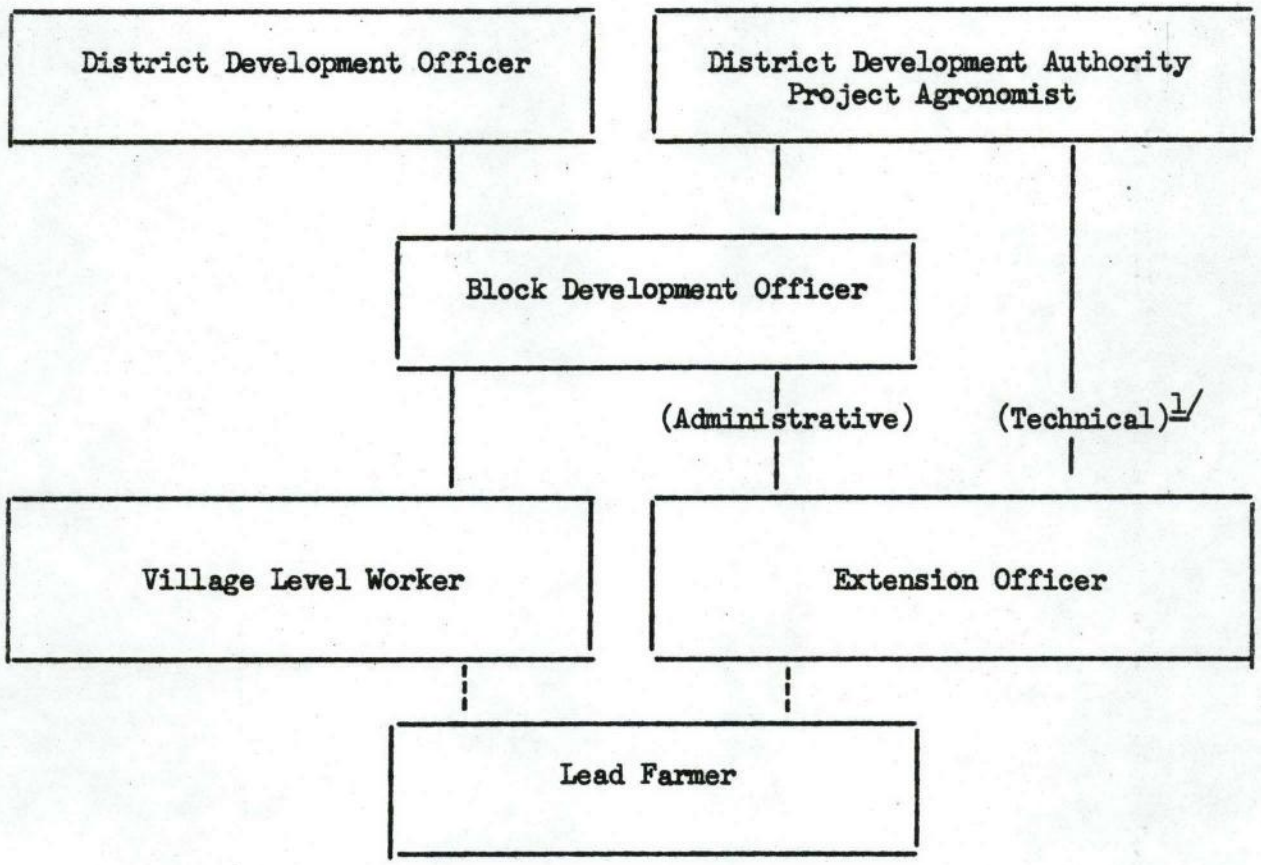
2. The extension workers would require thorough, job-oriented training. This would emphasize not technology per se but how to put new technology across to farmers. They would need instruction in a simple reporting procedure which would permit evaluation of their performance.

3. In order to fit with existing institutional patterns, the extension workers should be under the administration of the Block Development Officers. However, for the project period, in order to ensure that the new cadre became fully effective, work programs would be prepared by the project agronomist in the District Development Authority. (In some cases this might be an added function of the District Deputy Director of Agriculture.) He would also work with the BDOs in monitoring performance. After the project period, BDOs would assume full responsibility for extension workers without disruptive reorganization.

4. Estimated incremental costs of an improved extension service for a hypothetical dry farming component in Ahmednagar District are given in Table 1. This assumes a project area with a total of 25,000 farmers in 100 villages. Table 2 gives detailed costs of demonstration plots. Chart 1 outlines the organizational links of the new cadre of extension workers.

APPENDIX I
Chart 1

Organizational Links of Extension Officers



1/ The few extension officers currently in the field operate under this dual authority, which appears to work satisfactorily.

APPENDIX I
Table 1

Table 1: INCREMENTAL COSTS OF EXTENSION - Ahmednagar District

	Unit Cost Rupees	Year 1 No.	Year 1 Rs	Year 2 No.	Year 2 Rs	Year 3 No.	Year 3 Rs	Year 4 No.	Year 4 Rs	Year 5 No.	Year 5 Rs
Project Headquarters 1/											
Salary 2/											
Agronomist	12,000	1	12,000	1	12,000	1	12,000	1	12,000	1	12,000
Support staff			1,000		1,000		1,000		1,000		1,000
Subtotal			13,000		13,000		13,000		13,000		13,000
Recurrent Costs											
Office and vehicle running			7,000		7,000		7,000		7,000		7,000
Non-Recurring											
Jeep and office equipment			30,000		---		---		---		---
FIELD											
Salaries											
Extension Officer	5,300	7	37,100	20	106,000	35	185,500	50	265,000	50	265,000
Labourer	1,900	7	13,300	20	38,000	35	66,500	50	95,000	50	95,000
Subtotal			50,400		144,000		252,000		360,000		360,000
Recurrent Office											
Rent, rates, taxes	1,200	7	8,400	20	24,000	35	42,000	50	60,000	50	60,000
Office running	500	7	3,500	20	10,000	35	17,500	50	25,000	50	25,000
Subtotal			11,900		34,000		59,500		85,000		85,000
Recurrent Demonstration Plots											
Large	1,000	14	14,000	40	40,000	70	70,000	100	100,000	100	100,000
Small	50	140	7,000	400	20,000	700	35,000	1,000	50,000	1,000	50,000
Subtotal			21,000		60,000		105,000		150,000		150,000
Non-Recurrent											
Office	500	7	3,500	13	6,500	15	7,500	15	7,500	--	---
Demonstration plots - large	3,000	14	42,000	26	78,000	30	90,000	30	90,000	--	---
Subtotal			45,500		84,500		97,500		97,500	--	---
Grand Total			178,800		342,500		534,000		712,500		615,000

	Year 6	Year 7	Year 8	Year 9	Year 10
FIELD					
Recurrent					
Salaries	360,000	360,000	360,000	360,000	360,000
Office running	85,000	85,000	85,000	85,000	85,000
Demonstration plots	150,000	150,000	150,000	150,000	150,000
Non-Recurrent Demonstration plots	21,000	39,000	45,000	---	---
Grand Total	616,000	634,000	640,000	595,000	595,000

	Year 11	Year 12	Year 13	Year 14	Year 15-20
FIELD					
Recurrent					
Salaries	360,000	360,000	360,000	360,000	360,000
Office running	85,000	85,000	85,000	85,000	85,000
Non-Recurrent - Office equipment	3,500	6,500	7,500	7,500	---
Grand Total	448,500	451,500	452,500	452,500	445,000

1/ Part cost of District Development Authority

2/ Includes all allowances, etc.

Table 2: Cost of Demonstration Plots

Large Plot - 1 Ha

	Unit	Unit Cost	No.	Rs
Capital				
Fence	m	3.75	400	1,500
Implements 1/				1,500
				3,000
Recurrent				
Rent	ha	500	1	500
Fertilizer	kg	2.50	40	100
Seed				25
Bullock hire	per day	10.00	20	200
Pesticide				25
Miscellaneous				150
				1,000

1/ Set of local implements (plow, blade harrow, seeder, blade hoe, tine hoe) plus combined seed/fertilizer drill and sprayer. Assume 5-6 yrs life.

Small Plot - 0.25 Ha

Recurrent	
Fertilizer	25
Seed	6
Pesticide	7
Miscellaneous	12
	50

DPAP file

Mr. Khasha 6.2

February 7, 1974

Letter No. 57

Mr. James G. Brown
Asia Projects Department
International Bank for Reconstruction
and Development
1818 H Street NW
Washington DC

Dear Jim,

When you come to India in the near future would you consider giving yourself time to do the following. The proposal to utilize voluntary and other non-government agencies particularly at the project level but also in consultancy and training has received a fillip from the Consultative Committee on Panchayati Raj and Rural Development. This Committee is made up of ministers of the Centre and the States plus other VIPs. The Committee recommended the promotion of voluntary effort in rural development to break what is now generally regarded as stagnation in rural areas. The Minister of Agriculture at the Centre has made a statement to the same effect. Daljit is to write a note on the same lines to secure Ministry approval for one form or another whereby a proportion of DPAP funds can be reserved for use by voluntary and other non-government bodies.

Even given the above which after all is but another step in a continuum of statements to the same effect, it may be that the Bank acting as the third force has greater ability to achieve anything constructive in this field. I suggest that we do two things : the first is that you should try to leave Washington with as definite a set of proposals, even if only for discussion, to secure constructive relationships between the Government setup and voluntary agencies in-charge of project areas and training and consultancy. For instance, the idea of reserving a proportion of DPAP funds to be expended only against claims by non-government bodies may be the most effective form. It does require some pre-knowledge as to what capacity voluntary and other agencies have to undertake work of particular types. The second suggestion is that you should use your trip and your presence in the States to bring together the states& district authorities with representatives of agencies who could play a role. I could set up such meetings but would need some advance warning as to the timetable. I do not think these meetings should become large and unweildy. In each State there may not be more than 8-10 people who would represent all important non-government agencies including agricultural universities and institutes of management. You might cable me as to your present thinking and your reaction to these suggestions.

In the last week or so I have been approached by a number of parties interested in operating with the DPAP. They have one fear in common and that is that while Government may announce intentions to involve non-government bodies it is hard to see their taking concrete action. They would like the Bank to prepare descriptions of the work to be done and even to go as far as to prepare model legal agreements. These agreements could take a simple form whereby the agency signed with the State government or they might take a more complicated form whereby an initial agreement was reached between the State and the agency and a subsequent agreement was worked out between the agency, a financial body and the farmers or the community to be served.

Clearly one can delineate the responsibilities around the watershed even if only as a draft for discussion purposes. One could also consider a draft of the role of the district consultant and of the various levels of training. A third level that may become fairly pivotal is at the block or a group of project areas. The AFC and the Ministry have become excited about the concept of non-governmental bodies, even commercial bodies, being given responsibility for services, input provision and even training at the block level. Organisations such as Mahindra and Mahindra, Mafatlal, the Agricultural Service Organisation are all keen to see this idea pursued.

Perhaps the trick in the whole structure is to balance not only the political and bureaucratic forces and discipline them through surveys and performance budgets but to achieve an equation between the non-government bodies as well. For instance, the IIMs are the elite well ahead of the agricultural universities who in turn are ahead of voluntary agencies. I doubt if voluntary agencies would be happy to work in a structure too dominated in consulting terms by an IIM. Theywould be concerned that their status in the eyes of their clients might be damaged. Perhaps, and of more importance, they distrust the wave of management that is current because they feel that this wave has to be de-educated from the Harvard Business School level to a more humble level approaching sympathy with village views. The answer may lie in the contract for district consultancy being given to an IIM and their retaining prime responsibility but having to involve on their panel members of agricultural universities and voluntary agencies, even on a fulltime basis. This could be reinforced by similar representation on the district board. Another move, and one Daljit favours, is not to use IIMs but lesser elite bodies for the District Consultant, eg, Agro-Research Centres, university Departments of Economics with an IIM membership to fill management gaps.

The above may sound like another tall order. It does reflect the despair and cynicism that non-government bodies have at present just as Government steps up noise making in their favour. It also represents the potential value of third powers, by which I mean the Bank.

The increasing political disruption in many States of India albeit fueled by inflation and shortages does reflect a deeper malaise. The combination of party politics and stagnation in the rural areas seem to feed each other in a vicious circle with the result that communities are increasingly split according to party affiliation. I might add that party affiliations can often take the form of caste grouping. Nonetheless the process seems to be accelerating and has rendered the community, whether it be a hamlet, a village or a group of villages, almost inoperative as a unit for decision-making. Any failure on the part of the DPAP to break through this negative process would indeed be tragic for India. To say so much is not to deny the difficulties. I have spoken to a number of people in the voluntary agencies and others in Government concerned with rural development. There are at present not many vehicles that have developed the concept of district management and some tentative proposals towards the inclusion of non-governmental bodies in management, training and consultancy as has the DPAP. I know that much of my writing on the DPAP has harped on the management side. I do not apologise, rather events seem to bear me out.

Kind regards,

Yours,

Norman Reynolds

Headquarters:
Washington, D.C., U.S.A.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

RESIDENT REPRESENTATIVE IN INDIA
53 Lodi Estate, New Delhi 3
Telephone 617241 . Cable Address - INTBAFRAD NEW DELHI . Postal Address - P.O. Box 416

February 1, 1974

Letter No. 46

Mr. James G. Brown
Asia Projects Department
International Bank for Reconstruction
and Development
1818 H Street NW
Washington DC

Dear Jim,

Karl Willen read back some of the notes he had taken when he spoke to you before he left Washington. Needless to say his notes were not perfect and some parts of the notes he could not put into coherent form. Anyway I imagine he passed on the gist of what you had to say. In reply I will make a few observations and add a short list of recent developments that will interest you.

I saw in a press statement that Science Magazine have a report on a study carried out by a Dr. David Pimental of New York State College of Agriculture. He has studied the energy inputs in agriculture. From the little that is reproduced in the press it would be an interesting and possibly useful report to have. Would you secure one or two copies for me. It seems that the report recommends the use of animal traction and manure compost in terms of the energy inputs involved. Moreover they appear to have some analysis on the energy requirement of tractors versus bullock traction and of tractors for spray purposes versus hand-spraying. The report may help you formulate the dry farm package. In India there has been a national program for the development of natural fertilizers. In the Third Plan this was a Central scheme and although quite small is claimed to have achieved some success. In the Fourth Plan it became a state scheme and went nowhere. In the Fifth Plan they were talking some months ago of re-introducing the scheme as a Central program probably with a small matching share to be provided by the states. Daljit is trying to discover what the final position is in relation to this program. When you come in February we should have all the information there is. I was heartened to hear from Karl that the pasture component was coming out well. I have always seen that as the pivot of more rational resource use. I wonder how far you are predicting the conversion of crop to pasture land and whether this will be dramatic enough to play back into the fuel fertilizer issue. Your predictions may have to be weighted to the national manure program as it may apply to our districts.

Headquarters:
Washington, D.C., U.S.A.

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Telephone 617241 . Cable Address - INTBAFRAD NEW DELHI . Postal Address - P.O. Box 416

February 1, 1974

Mr Brown
accesin file

Letter No. 46

Mr. James G. Brown
Asia Projects Department
International Bank for Reconstruction
and Development
1818 H Street NW
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Dear Jim,

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COMMUNICATIONS
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The Annual Plan exercises are nearing completion in Delhi. They are instructive in one sense. There is under each one of the Central programs provision for staff increases at the state and district levels without any cross-reference to other programs. Daljit and I have been arguing for a prior policy decision to avoid this needless duplication. The result is a committee in Krishi Bhavan the Member Secretary of which is Daljit! Related to this issue, Vinod Pande seems determined to try and wheedle a separate DPAP organisation at the district which would obviously enhance his empire. It is, as you will remember, quite contrary to the concept of the DPAP as a district program one of whose aims is to strengthen the ability of the districts to plan for themselves. It is not certain that Pande will have his way. At present the issue is being decided within the Government of Rajasthan. I mention this for your information and also to warn you that the advance to effective district management has many backward steps in it which your report should seek to tackle in advance.

Dantwala is engaged in the completion of a large study on rural poverty and works programs. He has been assisted in this by a number of people including Ranjit Gupta whom I think you met. The study argues persuasively for the philosophy of disaggregated information rather than the past trend of large aggregated bodies of data whose endless and frequently sophisticated analysis often means little or nothing. A trial investigation with the district as the level of comparison did not yield significant comparative results because the wide variations of conditions within a district when aggregated are masked.1/A similar study treating the block as the level for comparison threw up considerable variations when aggregated. I report this briefly simply to stress the need to pursue the idea of the watershed as the level for plan and action. These studies concluded that the block was the highest level at which anything like uniform treatment is sensible and probably the lowest level at which much discretion can be exercised administratively under the present system. The watershed with its revised administrative structure would needless to say relieve the condition in the last statement.

Alan Berg was in Delhi for a few days seeking a frame for a nutrition project in India. He was interested in the DPAP and will come to see you. It is not immediately apparent what a nutrition component to the DPAP could be. In my talk with Alan I suggested that the most practical approach might be to include a couple of small surveys or studies around small areas such as the watershed or block designed to cover primarily oil seed and grain areas. The costs would not run to more than a few thousand rupees and there need be no explicit intention to fund a nutrition project within the DPAP from the beginning. Rather once the DPAP project takes its final form the survey and planning work that has to be done in the beginning could, in one or two areas, be infused with a nutrition weightage. I

1/ Not Dantwala's study.

have talked to Daljit about this. He has always been interested in nutrition and has worked with CARE when he was a Collector. Next week he is going to organise a meeting with CARE to see what survey work they are conducting at present and whether it has much relevance should similar work be considered for the DPAP. Shall also check on UNICEF now that their plans are to be presented to their own Board this month.

The VIth Finance Commission have reported. One major recommendation is that relief in the drought areas should be administered through the DPAP. In other areas (cyclones, floods, etc) where relief is less frequent a feature it would have to be treated on a more ad hoc basis. The Ministry of Agriculture have not yet come to grips with this recommendation. Many had not heard of it. My enquiries have started some questioning. The first is the managerial implications. The second the source of the funding in relation to the present DPAP. Any attempt to save via the DPAP fund would reduce its character as a regular programme. I'm sure that is not the intention. However, in a difficult financial year with many dark clouds on the horizon such a move might be in some people's minds. Otherwise a sound recommendation and one that is likely to go through.

As you can see, the DPAP is still evolving and getting prettier all the time. More substance later.

When you come out would you bring out some 35 mm colour print film.

Yours sincerely,

Norman.

Norman Reynolds

DPAP Central Cdt Staff

INCOMING TELEX

LOG 107

RECEIVED

Distribution: Mr. Parsons
Mr. Picciotto
Mr. Kraske

FROM NEW DELHI

1974 FEB -1 PM 12: 01

COMMUNICATIONS
SECTION

54 FOR JIM BROWN

GOI HAVE APPROVED FOUR ADIDITIONAL POSTS FOR DPAP UNIT ALL UNDER AURORA AS WE HAD FIRST RECOMMENDED. POSITIONS ARE SENIOR OFFICERS, IE DEPUTY COMMISSIONERS RANK FOR ALPHA LIVESTOCK, BETA DRY FARMING AND SOIL CONSERVATION, DELTA IRRIGATION GAMMA PROJECT ECONOMIST. ALL EXPECTED TO JOIN DURING MARCH. REGARDS

REYNOLDS

Jim Brown
sectors file
INDIA - DPAP

replied @ Mar 14 & cc TORs sent Mar 15 gp

Feb.

Ron Brown ?

VEAART

Kenrick Chaturvedi

ONE ZAIRE SECOND EDUCATION PROJECT REYRCAB 49 REPORT POUCHED YESTERDAY

Parsons Kraske

TWO INDIA DPAP FOLLOWUP MISSION STILL AWAITING GROENEWOLDS TOR

Small Surveys

THREE INDONESIA CREDIT REYRCAB 47 RE PINEAU VISIT TO INDONESIA STOP EARLIER AGREED WITH GOLAN THAT TO AVOID DUPLICATION PINEAU WOULD ASSIST IRRIGATION REVIEW MISSION IN CONJUCTION WITH FOLLOWUP CREDIT PROJECT STOP ALTHOUGH CREIDT DRAFT NOT YET FINALIZED WE ARE PREPARED TO ABIDE BY AGREEMENT AND MAKE PINEAU AVAILABLE TO ASSIST TENNANT MISSION FOR MAXIMUM TWO WEEKS WHILE OTHER MEMBERS CREDIT MISSION FINALIZE THEIR CONTRIBUTIONS STOP PINEAU WOULD NOT DISCUSS CREDIT MISSION FINDINGS WITH GOVERNMENT BUT IF YOU WISH WOULD TAKE OPPORTUNITY TO FURTHER REVIEW POSSIBLITY WIDENING SCOPE OF PROJECT AS DISCUSSED WITH YOU IN WASHINGTON STOP WE ARE ALSO ANXIOUS TO HAVE RESULTS OF RECENT IFC AND ADB MISSIONS STOP GRATEFUL YOU CONSULT WITH IRRIGATION AND AREA DEVELOP MENT DIVISION ONE AND ADVISE US SOONEST ARRANGEMENT ACCAPTABLE BOTH DIVISIONS AS PINEAU SCHEDULED TRAVEL 17 MARCH STOP EXPECT FORWA RD DRAFT REPORT AROUND MID APRIL

Parsons Gleaves

FOUR MALAYSIA SMALLHOLDER MISSION FOLLOWING OURCAB OF 8 MARCH WE U HAVE NOW RECEIVED SWAYZE LETTER OF 1 MARCH WHICH MAKES ROBLESS CABLE MORE INTELLIGIBLE STOP STILL WELCOME YOUR REACTION HIS PROPOSAL=

Sent Mar 11

No action

CLARK +

INDIA DPAP- TORS refer to appraisal follow-up on data already cabled to you, and read in part as follows. " Copy to be mailed to you Mar 14.

Mr Dworecwld will review with government the steps and dairy development component of the project to confirm technical and cost data, and he will discuss with NDDB the procedures whereby the latter will review milk flow projections and investment proposals. It is expected that Mr Dworecwld will be required to put appraisal one week in Washington to complete the investment segment of the appraisal report.

INCOMING TELEX

LOG 100

Distribution: Agriculture & Rural Dev.

VERRART

NO.53

ONE INDIA DROUGHT PRONE PLEASE CONFIRM DATES GRONEWOLDS RETURN TO ROME AND HIS PARTICIPATION APPRAISAL MISSION

TWO PHILIPPINES MINDORO RURAL DEVELOPMENT PREPARATION MISSION ARRIVES MANILA 26 FEBRUARY COMPRISING HEWSON/LEADER) COMMA SPINKS (MARKETING) COMMA COLE (ECONOMICS) COMMA TRNKA (TRANSPORTATION) AND LAFONT(IRRIGATION) STOP MISSION VISIT MINDORO FROM MARCH 2 RETURNING MANILA MARCH 8 AND LOOKS FORWARD VISIT TIBOR FROM MARCH 11

THREE LIBERIA FORESTRY MISSION CONSIDER MOST USEFUL BLINKHORN PARTICIPATE DISCUSSIONS WITH GOVERNMENT DURING FINAL WEEK OF MISSION COMMENCING 18 MARCH STOP ALSO FEEL DISCUSSIONS BONN MORE PRODUCTIVE AFTER MISSION TO PERMIT EXCHANGE ON BASIS MISSION FINDINGS STOP THEREFORE PROPOSE BLINKHORN JOIN MISSION IN LIBERIA 18 MARCH AND CONTINUE WITH IT TO BONN IMMEDIATELY THEREAFTER STOP PLEASE CONFIRM

FOUR KENYA FORESTRY REYRCAB 32 UNDERSTAND BRODERICK FALLS EXPANSION FOR 100,000 TONS PRIMARILY TO MEET DOMESTIC MARKET REQUIREMENTS STOP PROPOSAL IN SPEARS BTO REFERS TO POSSIBLE FURTHER EXPANSION I IN LATE 1980'S SPECIFICALLY FOR EXPORT MARKET STOP ASSUME THAT IF STUDY IS FINANCED AS PART OF SECOND PHASE LOAN AND COMPLETED BY END 76 SUPPLEMENTARY PULPWOOD AFFORESTATION PROGRAMME FOR EXPORT PULP PRODUCTION COULD BE UNDERTAKEN FROM 1977 INWARDS STOP ASSUME THAT THIS EXPANSION WOULD HAVE TO BE FINANCED BY GOVERNMENT SINCE PRESUMABLY BANK LOAN FOR PERIOD 1976-80 WOULD ALREADY BE IN OPERATION=

CLARK ROME+

Consultants
DPAP

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RECEIVED LOG NO.12

1974 JAN 28 AM 11: 35

COMMUNICATIONS

IB 50 ZY1524 M59 GENEVE METEOMOND 26 18 1330Z;

JANUARY 18,1974 (via UN New York)

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IBRD

1818 H STREET NW

WASHINGTON/DC/20433

Distribution

Mr.Parsons

Mr.Picciotto

273 NOW ARRIVING WASHINGTON TUESDAY 22 PAN AMERICA 107 FROM LODNON

STOP REGRET DELAY

MAUNDER METEOMOND

COL 273 22 107

UNATIONS NYK

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DPAP Consultants Log 193
DPAP

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JANURY 17, 1974

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Mr. Picciotto

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WASHINGTON/DC/20433

237 REYOURCAB JAN 15 PLEASE REFER MY LETTER JAN 9 ARRIVING WASHINGTON MONDAY JAN 21 PAN AMERICAN 107 FROM LONDON WILL BRING PUBLICATION

MAUNDER METEOMOND

COL 237 15 9 21 107

Consultants
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Log. 106

INTBAFRAD WSH

FROM: GENEVA VIA UNITED NATIONS NEWYORK
1838 ZY1145 MAO GENEVE METEOMOND 35 17 11007;

JANUARY 17, 1974

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Mr. Parsons
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237 REYOURCAD JAN 15 PLEASE REFER MY LETTER JAN 9 ARRIVING
WASHINGTON MONDAY JAN 21 PAN AMERICAN 107 FROM LONDON WILL BRING
PUBLICATION

MAUNDER METEOMOND

COL 237 15 9 21 107

Section File
INDIA - DPAP

WORLD METEOROLOGICAL ORGANIZATION
CABLE ADDRESS 23260
GENEVA

January 15, 1974

CABLE

SWITZERLAND

FOR MAUNDER

ACCOMMODATION WATERGATE HOTEL CONFIRMED JANUARY TWENTIETH STOP

PLEASE COME TO BANK OFFICE C-508 MONDAY 9:00 A.M. MAY BE REACHED

AT 354-6461 BEFORE THAT TIME STOP PLEASE ADVISE BY RETURN CABLE

IF YOU CAN BRING MEMOIRS OF INDIAN METEOROLOGICAL DEPARTMENT

VOL. XXXI PART III

REGARDS BROWN

Dennis J. Parsons, Division Chief

Asia Projects, Crops, Forestry & Livestock

JBrown:st

DPAP

INDIA - ~~Confid~~

INCOMING TELEX

Log 128

Distribution:

Mr. Parsons
Mr. Picciotto
Mr. Kraske

FROM: NEW DELHI

JANUARY 11, 1974

14 FOR JIM BROWN

HAVE SENT INFO ANNANTPUR CREDIT AND BIJAPUR CONSERVATION TRAINING THROUGH STONEHAM. CREDIT ONLY DEAL COOPERATIVE SECTOR STO HAVE REQUESTED COMMERCIAL AS WELL PRESUMING THAT INCLUDED YOUR INITIAL REQUEST. WHAT STATE ISSUES PAPER. REGARDS

REYNOLDS

DPAP
INDIA - ~~General~~

INCOMING TELEX

Log 96

440098 IBRD UI

IBRD ND3150

FROM: NEW DELHI

Distribution:

Mr. Parsons
Mr. Picciotto
Mr. Kraske

DECEMBER 28, 1973

INTBAFRAD

WASHINGTON DC

558 FOR JIM BROWN

ANDRAH INFORMATION AND TALWAR REPORTS TO BE POSTED DECEMBER 31 BY ME. REGARDS

REYNOLDS

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OBRR fet

OUTGOING WIRE

TO: MAUNDER

METEMOND

DATE: DECEMBER 21, 1973

CLASS OF SERVICE: TELEX

COUNTRY: GENEVA

TEXT:
Cable No.:

REURCAB 1408 DEFINITELY PREFER YOU VISIT FROM JANUARY TWENTY-FIRST STOP THIS WOULD PERMIT DISCUSSION WITH OTHER CONSULTANTS AND INFLUENCE ON REPORT WRITING STOP LATER VISIT WOULD PRECLUDE FORMER AND DEVALUE LATTER STOP WILL ALTER WATERGATE BOOKING TO JANUARY TWENTY-FIRST

REGARDS THORNLEY

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Dennis J. Parsons, Section Chief

DEPT. Asia Projects, Agriculture & Rural Devel.

SIGNATURE _____
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: FThornley:st

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

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DRAFT

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Log. 227

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1973 DEC 20 PM 3:03

COMMUNICATIONS SECTION

FROM: GENEVE VIA UN NEW YORK
December 19, 1973

Distribution

Mr. Parsons
Mr. Picciotto

1043

ZY679 GENEVE METEOMOND 56 19 10502;

JAMES BROWN

INTBAFRAD

1818 H STREET N.W.

WASHINGTON/DC20433

4408 EXTENSIVE REPORT BEING MAILED TEAM MEMBERS THURSDAY STOP DELAY REGRETTED STOP BECAUSE OF PRIOR COMMITMENTS IMPOSSIBLE TO BE IN WASHINGTON UNTIL 21 JANUARY STOP WOULD PREFER PERIOD 4 TO 8 FEBRUARY BUT COULD COME WITHIN PERIOD 21 TO 31

P2

JANUARY STOP ADVISE PREFERENCE

MAUNDER METEOMOND

COL 4408 21 4 8 21 31

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Dennis J. Parsons

DATE: December 12, 1973

FROM: Edward B. Cunningham

SUBJECT: INDIA - Drought Prone Areas Project
Back-to-Office Report of December 10, 1973

1. The reference in this report to rural electrification (para 4(a)) infers that this component of the DPAP project in the two Rajasthan districts should be dropped because the State Electricity Board (SEB) will need to subsidize the service. In the negotiation of Power III, we in fact urged that Rural Electrification (RE) should be subsidized through subventions from the State Government in order to offset the burden being placed upon the earnings of SEBs. In seeking agreement of GOI to arrange for these subventions, we recognized that RE was an economic service that would need financial subsidy in many cases. The decision therefore on whether or not to include RE in the DPAP projects should rests on the answer to two questions:

(a) Does the investment show a reasonable economic rate of return?

(b) Is the proposal relevant to present discussions between GOI and us on RE policy in general?

2. The first question I cannot answer but presumably the mission can or will be able to do so. If the incremental agricultural production resulting from RE is economic, then the question of repayment capacity can be considered in the broader context of the objectives of the DPAP and of lending to the agriculture sector. So far as the second question is concerned, the issue under discussion is the availability of power and the priorities to be adopted in allocating scarce supplies. In the case of Rajasthan, power is expected to be in surplus from 1975, so in the limited context of Rajasthan (really the Northern Grid Zone) the proposed investment is not relevant. In the broader context of interchanging power between the Northern and other Grids, it could be argued that expansion of use in Rajasthan would reduce availability for the rest of India. However, given the overall use of power in Rajsthan in relation to India as a whole, the almost total dependence of Rajasthan on agriculture, and the widespread lack of water which created conditions of extreme poverty in the rural areas, I think Rajasthan has powerful arguments on its side to use the power available in its zone.

cc: Messrs. Yudelman
Picciotto
Darnell
Bruce
Brown

Let us discuss

EBCunningham:ebc

Headquarters:
Washington, D.C., U.S.A.

Jet
DPAP

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

RESIDENT REPRESENTATIVE IN INDIA
53 Lodi Estate, New Delhi 3
Telephone 617241 . Cable Address - INTBAFRAD NEW DELHI . Postal Address - P.O. Box 416

December 4, 1973

Letter No. 512

Mr. James Brown
Asia Projects Department
International Bank for Reconstruction
and Development
1818 H Street NW
Washington DC

Dear Jim,

I have seen Minhas of the Planning Commission and Ishwar Dayal who is the Director of the Indian Institute of Public Administration. I went to see Minhas because he appreciates others acting as his eyes and ears and because he was the Chairman of the Task Force. Ishwar Dayal was until about a year ago with the Indian Institute of Management, Ahmedabad and on becoming Head of the IIPA expressed a need to free the IIPA from Government dominance by securing some part of their income from other sources. He and Minhas have rather similar views as to the present culture of administration in India. They are concerned that new arrangements by themselves will not form any departure point. A combination of consultancy and training at the District level and of management and lower level training at the project level (short of revolution) is a modest but hopeful approach towards new attitudes and working conventions. Minhas is keen to experiment and to recommend radical approaches to a number of problems. Dayal would like to provide IIPA with a chance to develop expertise in rural management so as to raise their ability to undertake many or even just some of the training required by the long list of "integrated approaches" spawned by the Fifth Plan.

Both men view the DPAP as important for the purpose of instituting an attack on the administrative culture. They are less clear as to what would constitute the attack and seem to hope that we will provide the answers within the frame mentioned above. They would like to involve as many outside agencies as is practicable, particularly at the watershed or project level. Here they are thinking of voluntary agencies, agricultural universities and various institutes of management or community development. At the district level they both agree that the real issue is management and that the district should be treated as one for the purpose. Institutes such as the IIM Ahmedabad, the IIPA or the National Institute of Community Development (NICD) would suit. The combination of consultancy and training they feel is crucial to any serious work by a third party as most trainers cannot be otherwise stimulated or otherwise feel responsible for results.

One link between the District consultant and the project level management could be made within the structure of district administration itself; ie, the agricultural university's Vice-Chancellor would sit on the district board or executive committee as might a social worker from the voluntary agency (ies) and deal directly with the consultant on behalf of the District. Outside of the district structure the university and the voluntary agency should be represented on the IIM or equivalent consultant's bench. In other words, an agricultural and/or lifestock expert working for the university or voluntary agency would be paid by the management agency to work part time for them, as should one or two district or regional technical officers. Thus the district would be treated as one and certain overlaps in training requirements, perhaps at the project manager level, could be tied together. In all instances the legal contracts should run for from four to five years.

Much as we had discussed while you were here both men would like to see a number of institutional models developed, particularly around the distinction of areas where present resource use has to be intensified and areas in which the present resource use has to be modified if not dramatically altered. For this reason they feel that the six districts we are to support should garner unto themselves the best agencies for management consulting purposes rather than initially pursuing a concern to spread the input of outside agencies across the National DPAP program. They feel that an institute like the IIM or the IIPA could only handle two districts, perhaps in two states, and that they would not wish to divert more than 10% of staff time and the institute's attention to such work even though they may be able to employ additional staff for the purpose. Under such an arrangement they feel the leading institutes would be very keen to participate but could not handle more than our six plus a few Districts in other States.

Both men hope that in February the Bank will have fairly clear proposals for training and management and a set of probable institutional approaches, particularly to the conversion of resource use. They would also like to see such proposals linked in terms of their responsibility and expected impact to the disciplining of research and extension. You may think it unfair that they expect the Bank to initiate concrete discussions on what, apart from the DPAP, would constitute a crucial topic to any assessment of the Fifth Plan. You will have to treat this task as one of the more valuable aspects of Bank participation and a rather good indice of the value of continued support for the DPAP and even the idea of tribal involvement.

I also raised the issue of district planning with Minhas and Dayal. I did this because on reading the chapter on the machinery for planning in the Draft Fifth Plan I noticed another culture coming to the fore. Just as the district statistics officer preceded the district planning officer by many years so the culture of planning in India seems to demand a lead role for the statistician. The chapter has several paragraphs in the front of each section which stress the importance of the collection of data and very

little in support of decision making based on local knowledge disciplined by resource surveys and technical inputs. I imagine the latter to be the first mode of operation in our Districts and did tend to agree with Dayal that statisticians should be removed from the planning scene as long as possible. Minhas accepted the criticism but was somewhat defensive, perhaps because of his position. I recount this only to urge you to devote a couple of paragraphs to the type of work you see the district and project level organizations undertaking and the information base they will require. I do not see a key role for the statistician and would be interested if you did. Instead we must stress resource surveys, technical inputs, financial analysis and management and institution building. Not information as such.

Yours,

Norman

OFFICE MEMORANDUM

Drought Prone Areas Project

TO: Mr. Jochen Kraske (o/r)

DATE: November 21, 1973

FROM: M. Beutgen M.B.

SUBJECT: My Recent Visit to India

1. I visited India from October 15 to November 10, 1973, and familiarized myself with Bank Group operations in India (terms of reference of October 4).

2. From October 15 to 17 I joined Mr. Cunningham in Delhi for discussions with members of the Bank's resident mission and with the Indian authorities. We discussed in particular matters related to projects out of our FY74 lending program for which appraisal missions were in India at that time.

3. From October 18 to November 1, I joined - together with Mr. Cunningham - the appraisal mission for the Drought Prone Areas Program Project (DPAP) for the first part of their field trip. I participated in the appraisal of three out of the six districts proposed for IDA financing (Jodhpur, Nagaur, Ahmednagar).

4. In the Jodhpur and Nagaur districts (both in Rajasthan), I concentrated on the cattle and sheep as well as the pasture development and soil conservation components of the project. I took part in various field trips to desert villages where we interviewed small farmers and cooperative officials. We also visited two rural branches of the United Commercial Bank which has been designated as Lead Bank for the two districts and will - besides Cooperative Institutions - extend agricultural credits to the ultimate borrowers. In Jodhpur we inspected the Central Arid Zone Research Institute, a department of which will be integrated in the project's research and extension services component.

5. We concluded the inspection of Jodhpur and Nagaur districts by discussing the mission's findings and tentative conclusions with senior officials of the Rajasthan State Government in Jaipur.

6. In Ahmednagar district (Maharashtra), I concentrated on the groundwater and irrigation development aspect of the project and joined Mr. Kanchanalak (Central Projects) for an appraisal of one medium (Sina) and some minor irrigation schemes proposed for IDA financing.

7. On November 2 I visited AFC - together with Mr. James Brown - in Bombay to discuss the extension of agricultural credit to small farmers under the DPAP project.

8. After the completion of three districts, the general feeling of the DPAP mission about the prospects of the project to come to the board in FY74 was positive. The mission anticipated, however, that it would be

necessary for one or two of its members to go back to India in January 1974 to collect and check additional data which the Indians have undertaken to work out by then.

9. In Bombay I also visited ICICI to introduce myself to Mr. S.S. Mehta and his senior staff. We discussed ICICI's recent bond issue in Switzerland and its current problem with regard to punctual payments due to the Bank and the procedure ICICI has recently adopted to ensure that the Bank is promptly informed about ICICI's payments (notification by cable from ICICI's corresponding banks).

10. From November 3 to 6 I joined the appraisal mission for the Rajasthan Canal Command Area Development Project. In Hanumangar we visited a research farm maintained by the Government of Rajasthan which will be integrated into the project. In Ganganagar and in the Ganganagar district we inspected parts of the ongoing large irrigation schemes and explored the farmers' attitude toward various aspects envisaged under the project (canal lining, cropping pattern, etc).

The mission will return to Washington on or about December 3 and write a full appraisal report.

11. From November 7 to 10 I joined you in Delhi for discussions of our FY74 lending program with Mr. Shroff and with members of our resident mission. I left with you in Delhi a separate detailed report on your discussion with Shroff.

cc: Messrs. Diamond
Melmoth
Cunningham

MBeutgen:nff

INTAFRAD
NEW DELHI

NOVEMBER 21, 1973

TELEX

INDIA

FOR BROWN REURCAB NOVEMBER TWENTYONE STOP RESCHEDULING AS PROPOSED AGREED STOP TIMING OF FOUR C APPEARS CRITICAL ASSUME YOU WILL IMPRESS THIS ON GOI AND REQUEST ALL BACKING POSSIBLE FROM DELHI STAFF TO ENSURE COMPLETION STOP ARRANGING PAYMENT FOR JESSUP REGARDS

PARSONS

Dennis J. Parsons, Section Chief
Agriculture and Rural Development Division
Asia Projects

DJParsons:br

cc: Messrs. Cunningham
Picciotto

INCOMING TELEX

File: India – Drought Prone Areas Project Log. 12

440098 IBRD UI

IBRD ND3150

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India - Drought Prone Areas Project
1973 NOV 21 AM 9:14
COMMUNICATIONS SECTION

FROM: NEW DELHI
November 21, 1973

Distribution

Mr. Parsons
Mr. Picciotto
Mr. Kraske

NOVEMBER 21, 1973

Mr Bomani.
Would you please arrange for fee advance as requested?
21 Nov

INTBAFRAD

WASHINGTON DC

FOR PARSONS URGENT

ONE: PROSPECTS FOR GOOD PROJECT EXCELLENT, BUT AVAILABLE INFO AND PLANNING THIS TRIP INADEQUATE FOR APPRAISAL. EXTRA TIME AS PROPOSED ESSENTIAL DESPITE POSSIBLE JEOPARDY FY74 PROGRAM.

TWO: ARRIVAL CONSULTANTS JANUARY 7 WILL NOT REPEAT NOT DELAY REPORT FULL 5 WEEKS. GROENEWOLD WILL PREPARE MODELS AND BASIC MATERIAL PRE-ARRIVAL AND MAUNDER'S REPORT WILL BE FINALIZED 1 WEEK AFTER ARRIVAL. STAFF MEMBERS WILL ALSO BEGIN MODELS AND EVALUATION PRE XMAS. BUT IT IS ESSENTIAL REPEAT ESSENTIAL THAT

SEVERAL ISSUES BE CLEARED AND BASIC MODEL WORK DONE BEFORE FINAL REPORT CAN BE PREPARED.

THREE: RE JESSUP, INPUT MUST BE CLOSELY TIED TO GROENEWOLD AND BY AGREEMENT WITH CP, GREOENEWOLD WILL NOT COME PRE XMAS SINCE STAFF PREOCCUPIED WITH ISSUES PROCEDURE FOR 2 WEEKS, JESSUP'S TIME PRE XMAS NOT FULLY EFFECTIVE.

FOUR: PROPOSE TO PROCEED AS FOLLOWS:

A) JESSUPS PROCEDURE AS PER APPRAISAL

B) REPORT IN DRAFT WHITE FORMAL BUT CALLED PREPARATION, TO BE COMPLETED EARLY FEBRUARY

C) TWO MAN MISSIONS TO STATE CAPITALS IN FEBRUARY FOR MISSING INFO, CONFIRMATION OF ASSUMPTIONS AND ACCEPTANCE OF PROJECT OUTLINE

D) YELLOW COVER POSSIBLY END MARCH

FIVE: MUST THEREFORE REPEAT URGENT REQUEST FOR RESCHEDULING JESSUP AND CONSEQUENT ARRANGEMENT FOR FEE ADVANCES. PLEASE ADVISE RETURN CABLE REGARDS

BROWN

India - Drought Prone Areas
Project Appraisal

INTBAFRAD
NEW DELHI

NOVEMBER 19, 1973

TELEX

INDIA

FOR BROWN REURCAB NOVEMBER EIGHTEEN STOP AM UNABLE TO ADVISE ON BASIS OF INFORMATION GIVEN STOP WILL FURTHER VISIT BE NECESSARY FOR APPRAISAL QUERY IF SO WHEN WILL THIS BE SCHEDULED STOP IF NOT WILL IT TAKE FIVE WORKING WEEKS TO REACH BANK POSITION BEFORE REPORT WRITING CAN START IN JANUARY QUERY AM CONCERNED AT LOSS OF OVER ONE MONTH IN ALREADY VERY TIGHT SCHEDULE FOR BOARD PRESENTATION NOR IS IT CLEAR HOW SUCH DELAY CAN HELP REPORT WRITING IF YOU HAVE PROJECT STOP IF NO PROJECT THEN JANUARY WRITEUP PRESUMABLY NOT REQUIRED STOP PLEASE ELUCIDATE STOP ON BASIS OF PRESENT KNOWLEDGE HERE WOULD NOT AGREE TO THIS DELAY REGARDS

PARSONS

Dennis J. Parsons, Section Chief
Agriculture and Rural Development Division
Asia Projects

DJParsons:br

cc: E. Cunningham

ZCZC 248423 RC068 PDG0070 RMF5938 KNY889 DBA0275 NPRS18/18

URWT HL INND 094

NEWDELHI TLX 84 18 2025 PAGE 1/50

Distribution: Mr. Parsons
Mr. Picciotto
Mr. Kraske
Mr. Brown's Office

November 18, 1973

LT

INTBAFRAD

WASHINGTON-DC-USA

FOR PARSONS

HAVE COMPLETED FIELD WORK AND RETURNED DELHI FOR FINAL DISCUSSIONS HOWEVER UNABLE COMPLETE APPRAISAL ON BASIS THIS VISIT SEVERAL MAJOR ISSUES REQUIRE BAN POSITION BEFORE REPORT CAN BE FINALIZED STOP THEREFORE RECOMMEND MISSION ASSEMBLE WASHINGTON JAN FOR REPORT WRITING STOP THIS DATE AGREED WITH CP

COL LT WASHINGTON-DC-USA

NPRS18/18 PAGE 2/44

RE GROENEWOLD AND SAME ARRANGEMENT FOR JESSUP AND MAUNDER WOULD FACILITATE COORDINATION AND ENABLE PRIOR FOCUS ON ISSUES STOP IF AGREED PLEASE ARRANGE PARTIAL ADVANCE JESSUPS FEE STOP DO NOT ANTICIPATE ANY INCREASE IN HIS ASSIGNMENT PERIOD STOP

PLEASE ADVISE SOONEST STOP REGARDS

BROWN

INCOMING CABLE

LOG 82

ZCZC 248423 RC082 PDE0234 RMF1216 RML2448 KNY418 BDS165/28

URWT HL INBX 037

JAIPUR 37 28 0820

OCTOBER 28, 1973

Distribution: Mr. Parsons ✓
Mr. Picciotto
Mr. Kraske
Mr. Thornley's Office
Mr. Loup's Office
Mr. Brown's Office

LT

INTBAFRAD

WASHINGTONDC

FOR PARSONS MISSION DEPARTS JAIPUR TODAY FOR AHMEDNAGAR GROENEWOLD XIN DELHK FOR TWO DAYS DISCUSSIONS WITH DAIRY MISSION SCHEDULE REVISE -D TO ECWMODATE LOCAL HOLIDAY BUT WIND UP AND DEPARTURE DATES REMAIN UNCHANGED REGARDS

BROWN

1 Mr Elz ✓

2 Andrea - pl. inform families

COL LT ECWMODATE SOC

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FROM: NEW DELHI

OCTOBER 16, 1973

Section file.

OCT 16 3 37 PM 1973
COMMUNICATIONS SECTION

Distribution: Mr. Parsons
Mr. Picciotto
Mr. Kraske

FOR PARSONS

MRS

IISSION ASSEMBLED DELHI. PLEASE ADVISE MESSRS BROWN THORNLEY AND KANCHANALAK START UP MEETING CHAIRED BY TP SINGH SEC AGRI. DEPART FOR JODHPUR OCTOBER 17 NIGHT. GROENEWOLD WILL MEET DAIRY MISSION ABOUT OCTOBER 25 TO DISCUSS COMMON APPROACH PROSPECT OF FERTILIZER COMPONENT OF DPAP WELL RECEIVED IN VIEW OF PROJECTED SHORTAGE NEXT SEVERL ASESSIONS REGARDS

Seasons

BROWN

COMMUNICATIONS NOTE: FAMILY NOTIFICATIONS MADE IN PREVIOUS CABLE (LOG. 131 OCT. 16)

FORM NO. 26
(4-69)

cc: Mr Parsons
Stock Tel

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

INCOMING CABLE

DATE AND TIME OF CABLE: OCTOBER 15, 1973 2000

LOG NO.: 131/16

TO: INTBAFRAD

FROM: NEW DELHI

TEXT:

ROUTING	
ACTION COPY:	MR. KRASKE MRS MCLAIN INDUSTRIAL PROJECT MR. PICCIOTTO
INFORMATION COPY:	MR. DOULTSINOS'S OFC. MISS FLORENDO'S OFC. MR. ISKANDER'S OFC. MR. BROWN'S OFC. MR. LOUP'S OFC. MR. BEUTGEN'S OFC. MR. CUNNINGHAM'S OFFICE
DECODED BY:	

ARRIVED DELHI TODAY FOLLOWING DOULTSINOS FLORENDO CUNNINGHAM ISKANDER BROWN LOUP JESOUP THORNLEY CROEN WOLD BEUTGEAN.

INTBAFRAD

ee

FOR INFORMATION REGARDING INCOMING CABLES, PLEASE CALL THE COMMUNICATIONS SECTION, EXT. 2021

DUPLICATE

cc: Pay Von Spell

HUYSER
FOODAGRI
ROME

OCTOBER 12, 1973

NLT

ITALY

188

ONE DPAP COLON MISSION SCHEDULE SUCH THAT APPROX THREE WEEKS AVAILABLE FOR CONSULTANTS TO COMPLETE REPORT WRITING IN WASHINGTON BEFORE XMAS STOP APPRECIATE NEED FOR GROENEWOLD TO BREAK TRAVEL BRIEFLY IN ROME AFTER FIELD WORK, BUT IF BTO AND FULL SHEEP REPORT DELAY WASHINGTON ARRIVAL, RETURN POST XMAS MIGHT BE REQUIRED STOP SUGGEST GROENEWOLD PLAN TO COMPLETE DPAP IN ONE VISIT BY SCHEDULING THREE WEEKS WASHINGTON PRE XMAS

Mr. Parsons Please handle →

TWO NIGERIA RICE PROJECT STOP HAVE RECEIVED FOLLOWING CABLE FROM APPRAISAL MISSION AT PRESENT IN NIGERIA QUOTE MAPS AVAILABLE HERE ARE POOR GRADE PHOTOCOPIES SMALL AREAS FROM FAO ROME STOP URGENT WE HAVE ORIGINAL MARKED UP MAPS DELINEATING GROSS AREAS EACH UNIT AND SHOWING ROUTES NEW AND UPGRADED ROADS STOP PLEASE REQUEST FAO ROME BORROW ORIGINAL MAPS AIRMAIL WASHINGTON SOONEST UNQUOTE GRATEFUL IF YOU COULD SEND REQUESTED MAPS

THREE REOURCAB 187 ITEM TWO DUE NEW DEVELOPMENTS HERE WOULD NOW LIKE EID TO BE AVAILABLE START WORK WASHINGTON NOVEMBER ONE

(CONTINUED)

(1) - cc: Messrs. Picciotto, Elz, Lesueur & Kraske
(2) - cc: Messrs. Povey & Rowe
(3) - cc: Messrs. Haynes, Horsley & ffrench-Mullen/Yoon
(4) - cc: Messrs. Devar, Loh, & Horastein Dean

Marius Verhaart
Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

MVerhaart:fh

Continued - Page 2

HUYSER
FOODAGRI
ROME

OCTOBER 12, 1973

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FOUR TANZANIA FORESTRY STOP WE HAVE DISCUSSED WITH JOHN SPEARS POSSIBILITY HE UNDERTAKE IDENTIFICATION AND LATER PREPARE FY 75 FORESTRY PROJECT STOP WE CONSIDER SUCH PROJECT WOULD BE SIMILAR TO MADAGASCAR PROJECT SCHEDULED APPRAISAL NEXT MONTH STOP POSSIBLE AREAS FOR PLANTATIONS AT SAO HILL AND RUVO AND PRINCIPAL OBJECTIVE LIKELY TO BE SUPPLY RAW MATERIAL FOR PAPER PULP INDUSTRY STOP WE UNDERSTAND SPEARS AVAILABLE UNDERTAKE IDENTIFICATION MISSION PRIOR TO CHRISTMAS AND IF SUITABLE PROJECT IDENTIFIED PREPARATION PROJECT COULD COMMENCE IN JANUARY STOP EITHER BEFORE OR AFTER TANZANIA MISSION WE WOULD BE GRATEFUL IF SPEARS COULD VISIT ZAMBIA AND KENYA TO ADVISE FOREST SERVICES PRESENTLY PREPARING PHASE TWO FORESTRY PROJECTS ALSO FOR FY 75 STOP WE WOULD WISH HIM DETERMINE WHAT ADDITIONAL IS REQUIRED IF PREPARATION TO BE COMPLETED FOR APPRAISAL WITHIN FISCAL YEAR STOP MOST GRATEFUL YOU ADVISE SPEARS WOULD BE AVAILABLE THIS WORK COMMENCING AS SOON AS CONVENIENT

(CONTINUED)

(5) - cc: Messrs. Roberts, Steel/Humphr
Burns & Perfrement
(6) - cc: Messrs. Haynes & Siebeck
(7) - cc: Messrs. Walton, Roulet &
Ljungman
(8) - cc: Messrs. Picciotto, Gibbs, Lesu
Reese, Garside & Spall

Marius Veraart
Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

MVeraart:fh

HUYSER
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FIVE BANK SEEKING FOREST PRODUCTS EXPERT FOR PREAPPRAISAL MISSION MID-JANUARY 1974 STOP PROJECT CONSISTS OF CONSTRUCTION PORT FACILITIES AT NASIPIT IN MINDANAO MAINLY TO HANDLE PLYWOOD AND VENEER EXPORTS STOP EXPERT REQUIRED TO PROVIDE COLON

AAA BRIEF REVIEW OF FOREST PRODUCTS INDUSTRY IN PHILIPPINES WITH EMPHASIS ON PLYWOOD AND VENEER

BBB ADEQUACY PRODUCTION FACILITIES AND MANAGERIAL CAPABILITIES

CCC FORECAST OF EXPORT VOLUMES THROUGH PORT IN LIGHT OF COMPETITIVENESS PHILIPPINE PRODUCT IN WORLD MARKETS STOP UNDP-FINANCED FEASIBILITY STUDY IN PROGRESS USING INDUSTRY PROJECTIONS AND SHOULD BE AVAILABLE MID-NOVEMBER PLEASE ADVISE WHETHER SUITABLE EXPERT AVAILABLE IN MID-JANUARY AND IF SO PROVIDE CV

SIX TUNISIA MEDJERDA STOP AM CABLING IN DETAIL OUR COMMENTS CP REPORT STOP PLEASE DO NOT TRANSMIT UNTIL THESE COMMENTS INCORPORATED OR DISCUSSED WITH US

(CONTINUED)

Marius Veraart
Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

MVeraart:fh

HUYSER
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SEVEN MADAGASCAR FORESTRY PROJECT STOP COULD MCFARLANE BE AVAILABLE FOR APPRAISAL IN FIELD NOVEMBER TWENTYTWO FOR THREE WEEKS AND WRITE REPORT IN FIELD DURING SAME PERIOD?

EIGHT PLEASE SEND COPIES OF THE THAILAND SEEDS PROJECT REPORT OF JULY SIXTEEN, 1973 TO THE APPROPRIATE OFFICIALS IN THE REPUBLIC OF THAILAND AND COPIES TO THE IBRD OFFICE IN BANGKOK STOP WE WILL BE IN CONTACT WITH THE GOVERNMENT REGARDING A NATIONAL APPROACH TO A SEEDS PROJECT

NINE REURTELEX 233 GRATEFUL YOU CONFIRM FAO WILL PROVIDE ANIMAL HUSBANDRY SPECIALIST AND ECONOMIST AS REQUESTED IN TELECON BURT/CLARK STOP BANK WILL PROVIDE ARCHITECT SHEDDEN CANADIAN NATIONAL STOP WE WOULD APPRECIATE EARLY INDICATION IF YOU WISH US TO PROVIDE CONSULTANT ON UNIVERSITY ADMINISTRATION

VERAART
INTBAFRAD

(8) - cc: Mr. Burt

Marius Veraart
Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

MVeraart:fh

Extra

M. Veraart

October 11, 1973

D. Elz

Cable to CP

I would be grateful if you would forward the following cable to the Cooperative Program.

"DPAP: MISSION SCHEDULE SUCH THAT APPROX 3 WEEKS AVAILABLE FOR CONSULTANTS TO COMPLETE REPORT WRITING IN WASHINGTON BEFORE XMAS. APPRECIATE NEED FOR GROENEWOLD TO BREAK TRAVEL BRIEFLY IN ROME AFTER FIELD WORK, BUT IF BTO AND FULL SHEEP REPORT DELAY WASHINGTON ARRIVAL, RETURN POST XMAS MIGHT BE REQUIRED. SUGGEST GROENEWOLD PLAN TO COMPLETE DPAP IN 1 VISIT BY SCHEDULING 3 WEEKS WASHINGTON PRE XMAS."

JBrown:st

HUYSER
FOODAGRI
ROME

OCTOBER 8, 1973

NLT

ITALY

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ONE INDIA DROUGHT PRONE AREAS STOP RE TELCON OF TODAY CLARK/VERAART HAVE NOT RECEIVED ANY INFORMATION REGARDING WITHERS STOP WAS INFO CABLED OR MAILED? REGRET UNABLE TRY FIND ALTERNATIVE ASSIGNMENT WITHOUT PRIOR RECEIPT CV OR AT LEAST SOME INFO STOP LATEST WE HAVE FROM YOU ON THIS ISSUE IS URCAB 207 ITEM THREE

TWO REURCAB MALAGASY FORESTRY PROJECT STOP MISSION WILL COMMENCE TANANARIVE NOVEMBER TWENTYTWO FOR THREE WEEKS FOLLOWED WASHINGTON FOUR WEEKS PROBABLY AFTER CHRISTMAS HOLIDAYS STOP TOR HUBER INCLUDE AAA GENERAL FORESTRY BACKGROUND BBB LAND USE CCC FOREST TECHNICAL ASPECTS AND COSTING ON PLANTING COMMA SILVICULTURE AND LOGGING DDD PRODUCTION ESTIMATES EEE FOREST INDUSTRIAL AND MARKETING ASPECTS OF THE PROJECT STOP PLEASE FORWARD A COPY PREPARATION REPORT TO HUBER STOP COULD DRAPER ON ROUTE BE AVAILABLE NOVEMBER TWENTYTWO TO TWENTYSEVEN IN MALAGASY FOR BRIEFING AND INITIAL DISCUSSIONS WITH THE MEM GOVERNMENT STOP WE WOULD ALSO APPRECIATE ARRANGEMENTS FOR FRED DEVIELLE FAO/UNDP IN MADAGASCAR TO BE AVAILABLE DURING THE APPRAISAL FOR TECHNICAL INFORMATION AND INTERPRETATION

(1) - cc: Messrs. Picciotto & Kraske
(2) - cc: Messrs. Dewar, Roulet, Ljungman & Lau (Cleared with)

Marius Veraart
Planning Officer/FAO Coordinator
Agr. & Rural Devt. Dept., CPS

MVeraart:fh

HUYSER
FOODAGRI
ROME

October 8, 1973

NLT

ITALY

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THREE FOR CLARKE INDIA DPAP STOP REGRET UNABLE TO FORWARD PREPARATION DOCUMENTS BEFORE GROENEWOLD DEPARTURE STOP SINGLE SET ARRIVED WASHINGTON OCTOBER THIRD STOP COPIES AVAILABLE OBEROI UPON ARRIVAL STOP MISSION WILL ASSEMBLE DELHI OCTOBER FOURTEENTH FOR FIRST MEETINGS OCTOBER FIFTEENTH STOP PLEASE CABLE TORS SHEEPSURVEY

FOUR INDIA RAJASTHAN APPRAISAL STOP JENSEN TO REPORT JAIPUR RAMBAGH HOTEL NOVEMBER FIVE STOP HE SHOULD CABLE TIBOR AT RAMBAGH JAIPUR HIS TIME AND DATE OF ARRIVAL STOP TIBOR IN JAIPUR FROM NOVEMBER FIRST STOP OBEROI HOTEL BOOKED AS NECESSARY

VERAART
INTDAFRAD

Marius Veraart
Planning Officer/FAO Coordinator
Agr. & Rural Dev. Dept., CPS

MVeraart/en

(3) - ## cc: Messrs. Picciotto/Kraske/Elz/Broun

(4) - cc; Messrs. Picciotto/Tibor & Kraske

Lesueur

✓India - Drought Prone Areas
cc: " " - Cr. 402 - Adm
" " - Indust. Imports (9)
" " - Terms of Ref.

Mr. Edward B. Cunningham

October 3, 1973

Jochen Kraske

INDIA - Terms of Reference
Visit to India, October/November 1973

1. You will visit India from October 15 to November 3. From October 17 to 23, you will join the appraisal mission of the Drought Prone Areas project. You will assist the mission in their review of the organizational aspects of the DPAP program. From October 27 to 29, you will join Mr. Bohr in Madras for discussions on the identification of a possible IDA project.

2. During the rest of your visit, you should take up, in New Delhi and Bombay as appropriate, operational matters concerning projects for which you are responsible, in particular the Eighth and and proposed Ninth Industrial Imports credits.

3. Mr. Manfred Beutgen will accompany you during this visit.

cc: Mr. Diamond
Miss Dowding

EBCunningham:ebc

Section File
India
Drought Prone Area

M. Veraart

October 5, 1973

D. Elz

Cable to Cooperative Program - India DPAP

I would be grateful if you would cable to Cooperative Program as follows:

FOR CLARKE

"INDIA DPAP. REGRET UNABLE TO FORWARD PREPARATION DOCUMENTS BEFORE GROENEWOLD DEPARTURE. SINGLE SET ARRIVED WASHINGTON OCT 3. COPIES AVAILABLE OBEROI UPON ARRIVAL. MISSION WILL ASSEMBLE DELHI OCT 14 FOR FIRST MEETINGS OCT 15. PLEASE CABLE TORS SHEEP SURVEY."

JBrown:st

Section File
~~Mission~~ India
Drought Prone Areas

October 5, 1973

BELAIR
6 North Penno Parade

Cable

SOUTH AUSTRALIA 5052

FOR JESSUP

REGRET UNABLE TO FORWARD PREPARATION REPOR TS TO YOU BEFORE DEPARTURE. SINGLE SET ARRIVED WASHINGTON ONLY YESTERDAY. REPORTS AVAILABLE OBEROI UPON ARRIVAL. TRUST TRAVEL ARRANGEMENTS INCLUDING ADVANCE FINALIZED THRU LOCAL AMERICAN EXPRESS. ADVISE ANY DIFFICULTIES BY RETURN CABLE. REGARDS.

BROWN

Dieter Elz, Acting Section Chief
Asia Projects

cc and cleared D. Elz

JBrown:st

OFFICE MEMORANDUM

TO: Mr. Edward B. Cunningham

DATE: October 3, 1973

FROM: Jochen Kraske

SUBJECT: INDIA - Terms of Reference
Visit to India, October/November 1973

1. You will visit India from October 15 to November 3. From October 17 to 23, you will join the appraisal mission of the Drought Prone Areas project. You will assist the mission in their review of the organizational aspects of the DPAP program. From October 27 to 29, you will join Mr. Bohr in Madras for discussions on the identification of a possible IDA project.

2. During the rest of your visit, you should take up, in New Delhi and Bombay as appropriate, operational matters concerning projects for which you are responsible, in particular the Eighth and the proposed Ninth Industrial Imports credits.

3. Mr. Manfred Beutgen will accompany you during this visit.

cc: Mr. Diamond
Miss Dowding

EBCunningham:ebc

India - Drought Prone Areas.

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: INTBAFRAD
NEW DEHLI

DATE: October 3, 1973

CLASS OF SERVICE: telex RCA

COUNTRY: INDIA

TEXT:
Cable No.: 483

FOR REYNOLDS

REFERSCAB 421 DO NOT UNDERSTAND CHIDAMBARAMS POSITION. DPAP DISCUSSED WITH HIM IN BOMBAY ON SEVERAL OCCASSIONS FEB-MAY BY BROWN AND CUNNINGHAM AND WE ARE AWARE OF HIS DISCUSSIONS WITH AURORA. RE FINANCING CHANNEL, SOME COMPONENTS MAY BE SUITABLE FOR COMMERCIAL FINANCING VIA ARC, BUT IDA POSITION UNCHANGED THAT PRINCIPAL FOCUS OF FUNDING SHOULD BE GOI TO STATES AND DISTRICTS.

PREPARATION DOCS REC'D TODAY. PLEASE ARRANGE DELIVERY OF FIVE ADDITIONAL SETS TO OBEROI FOR USE OCT 14.

GRATEFUL YOU ARRANGE MEETINGS WITH SHIVARAMAN AND SHROFF FOR OCT 15 PM. OR 16.

ELZ

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Dieter Elz, Acting Section Chief

DEPT. Asia Projects

SIGNATURE D. Elz
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JBrown:st

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc and cleared Cunningham and Elz

For Use By Communications Section

Checked for Dispatch: VO

DISPATCHED

Oct 3 8 37 PM 1973

COMMUNICATIONS SECTION

ELS

FOR OCT 15 FM. OR 16.

GREATLY YOU ARRANGE MEETINGS WITH SHIVARAMAN AND SHROFF

WITH ADDITIONAL SEATS TO OBTAIN FOR USE OCT 11.

PREPARATION DOCS RECD TODAY. PLEASE ARRANGE DETAILED OF

OF MEETING SHOULD BE GOI TO STATES AND DISTRICTS.

FINANCING AIV ARC, BUT IDA POSITION UNCHANGED THAT PRINCIPAL FOCUS

BE FINANCING CHANNEL, SOME COMPONENTS MAY BE SUITABLE FOR COMMERCIAL

BROWN AND CUNNINGHAM AND WE MADE USE OF HIS DISCUSSIONS WITH TABORA.

DATA DISCUSSED WITH HIM IN BOMBAY ON SEVERAL OCCASSIONS FEB-MAY BY

KEENERSCAB JSI DO NOT UNDERSTAND CHIDAMBARAMS POSITION.

FOR KENNEDY

Cable No.: 483

TEXT:

COUNTRY: INDIA

SERVICE:

CLASS OF

DATE: October 3, 1973

TO: INTERAGENCY

MEM DEPTT

ONTGOING WIRE

ASSOCIATION
INTERNATIONAL DEVELOPMENT

RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL BANK FOR

CORPORATION
INTERNATIONAL FINANCE

Form No. 33
(3-70)

(IMPORTANT: See secretary guide for paragraph form)

ORIGINAL (file copy)

Checked for dispatch

REFERENCE: STOMM:af

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

SIGNATURE

DEPT: Data Projects

NAME Draft ELS, vaccine section cable

AUTHORIZED BY

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India - Drought Prone Areas

October 2, 1973

Mr. R. Raghunathan
Deputy Economic and Statistical
Adviser
Directorate of Economics and
Statistics
Ministry of Agriculture
Government of India
New Delhi

Dear Mr. Raghunathan:

re: Your D.O. 3-8/72-CWS-ES
A Study of India Weather Data

You will recall our letter of April 19, 1973 to Shri Ram Saran and your reply as referenced above. Our mission to appraise a proposed Drought Prone Area Project will be in India from mid-October and would need the results of this study for the districts of Jodhpur, Bijapur, Sholapur and Anantapur. The mission will be reviewing your weather - crop research work in these districts and also in Nagaur, Rajasthan and Ahmednagar and Maharashtra.

We would be most grateful if you could expedite the completion of the gamma rainfall probability function for these districts for the use of this mission.

Yours sincerely,

William H. Spall
Chief, Section III
Agriculture and Rural
Development Division

cc: Shri Ram Saran - Directorate of Economics and Statistics
Ministry of Food and Agriculture
Krishna Bhavan, New Delhi

cc: Mr. J. Brown

Dorris D. Brown/irl