

PD-ANQ-713

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D.C. 20523

March 26, 1985

MEMORANDUM

TO: See Distribution *LV*
FROM: NE/TECH/AD, Leland Voth
SUBJECT: Drought Recovery Credit Project Paper
608-0184, Morocco

Attached herewith is the final green cover edition of the subject project. It includes the NEAC reporting cable and a covering memo with a reference to the loan terms.

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KA 38171

PROJECT PAPER

Project 608-0184

DROUGHT RECOVERY CREDIT

000127

Morocco

November 1984

UNCLASSIFIED
Department of State

OUTGOING
TELEGRAM

PAGE 01 STATE 368256

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STATE 368256

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ORIGIN AID-00

NEGOTIATE WITH CNCA AN INTEREST RATE OF AT LEAST 7 PERCENT TO BE APPLIED TO RESCHEDULED LOANS.

ORIGIN OFFICE NETC-04

INFO NEPD-04 AANE-01 NEDP-03 NENA-03 OFDA-02 PPCF-01 PDPR-01
GC-01 GCFL-01 GCNE-01 CHGT-02 CTR-02 RELG-01 MAST-01
/028 A4 314

3. IT IS ALSO SUGGESTED THAT THE END-OF-PROJECT-STATUS IN THE LOGFRAME BE STATED IN MORE MEASURABLE TERMS WITHIN THE LIFE OF THE PROJECT, I.E., ITEM (2) "MOST RESCHEDULED LOANS ----" COULD READ "OF THE TARGETED BENEFICIARIES (22,000) 95 PERCENT WILL RESCHEDULE THEIR OUTSTANDING LOANS AND OF THE LATTER 90 PERCENT WILL RECEIVE NEW LOANS".

INFO OCT-00 ED-08 NEA-07 L-03 /018 R

4. THE NEAC DISCUSSED A NUMBER OF OTHER ISSUES, ONE OF WHICH WAS THAT THE POLICY REFORM AGENDA ASSOCIATED WITH THIS PROJECT SUPPORT SHOULD BE MORE CLEARLY SPECIFIED. THE NEAC ACKNOWLEDGES THIS TO BE AN UNFULFILLED AGENDA WITH THE MISSION BUT BELIEVES IT IS A BROADER CDSS ISSUE. IT WAS SUGGESTED THAT THE MISSION ADDRESS THIS UNANSWERED AGENDA BY CABLE IN THE FUTURE.
DAM

DRAFTED BY: NEAC/AD: LEE VOTH: DM
APPROVED BY: NEAC/AD: W. ANTOINETTE FORD
AID/DAI: [REDACTED]
AID/NE/DI: [REDACTED]
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AID/PPC/PDPR: E. LIJEWSKI

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FM SECSTATE WASHDC
TO AMEMBASSY RABAT PRIORITY

UNCLAS STATE 368256

AIDAC

E.O. 12356: N/A

TAGS:

SUBJECT: NEAC REPORT: DROUGHT RECOVERY CREDIT PROJECT
PAPER 608-0184

1. THE NEAR EAST ADVISORY COMMITTEE MET ON NOVEMBER 20, 1984 WITH BRAD LANGMAID AS CHAIRPERSON AND REVIEWED THE PP. THE MISSION WAS VERY ABLY REPRESENTED BY MALCOLM PURVIS, ADD. IT WAS ALSO VERY HELPFUL TO HAVE TWO MEMBERS OF THE DESIGN TEAM PRESENT, NE/TECH/SARD, JOHN GRAYZEL AND JEAN-JACQUES DESCHAMPS, DAI CONTRACTOR, TO FURTHER AMPLIFY DISCUSSIONS ON THE PROJECT AND HELP RESOLVE QUESTIONS CONCERNING THE ISSUES. THE PP WAS WELL WRITTEN, ABUNDANTLY SUPPLIED WITH FACTS AND ORGANIZED IN A COHERENT MANNER. USAID/MOROCCO AND THE DESIGN TEAM ARE TO BE COMMENDED.

2. THE NEAC APPROVED THE DROUGHT RECOVERY CREDIT PROJECT PAPER 608-0184 PENDING INCORPORATION OF THE FOLLOWING ISSUES:

A. THE MISSION SHALL INCLUDE IN THE LOAN AGREEMENT A CONVENANT THAT IN FORM AND SUBSTANCE ESTABLISHES THE USE OF THE RETAINED EARNINGS BY CNCA ARRIVING FROM THE SPREAD BETWEEN ITS COST OF FUNDS PROVIDED THROUGH THIS

PROJECT AND THE INTEREST AT WHICH FUNDS ARE LENT TO CLIENTS, LESS THE CNCA'S DIRECT COST OF LENDING. THE NEAC SUGGESTED THAT THESE SPREAD EARNINGS BE RESERVED BY CNCA AS PROVISION FOR BAD DEBTS AND THAT OTHER OR FUTURE USES WOULD BE SUBJECT TO PRIOR WRITTEN APPROVAL BY USAID/RABAT.

B. THE MISSION IS INSTRUCTED TO NEGOTIATE WITH CNCA A PERIOD FOR THE RESCHEDULED LOANS NOT OF A FIXED TEN YEAR BUT ONE WHICH REFLECTS THE BALANCE OF SHORT TERM AND MEDIUM/LONG TERM LOANS BEING RESCHEDULED BY EACH CNCA CLIENT. IT IS SUGGESTED THAT UP TO FIVE YEARS FOR SHORT TERM LOANS WOULD BE APPROPRIATE TERMS FOR THE RESCHEDULED LOANS. THE MISSION IS FURTHER INSTRUCTED TO TRY TO

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AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT DATA SHEET		1. TRANSACTION CODE <input checked="" type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete	Amendment Number N/A	DOCUMENT CODE 3
2. COUNTRY/ENTITY MOROCCO		3. PROJECT NUMBER 608-0184		
4. BUREAU/OFFICE USAID/MOROCCO		5. PROJECT TITLE (maximum 40 characters) DROUGHT RECOVERY CREDIT PROJECT		
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 06 30 88 (est.)		7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4) A. Initial FY 85 B. Quarter <input type="checkbox"/> C. Final FY 85		

8. COSTS (\$000 OR EQUIVALENT \$1 = 9,00DH)

A. FUNDING SOURCE	FIRST FY 85			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	1,150	13,850	15,000	1,150	13,850	15,000
(Grant)	(1,150)	(350)	(1,500)	(1,150)	(350)	(1,500)
(Loan)	()	(13,500)	(13,500)	(-)	(13,500)	(13,500)
Other U.S.	1.					
	2.					
Host Country (CNCA Capitalization)		11,000	11,000		11,000	11,000
Other Donor(s) (See block 16 below)						
TOTALS	1,150	24,850	26,000	1,150	24,850	26,000

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ESF	210	041	044	-	-	1,500	13,500	1,500	13,500
(2)									
(3)									
(4)									
TOTALS						1,500	13,500	1,500	13,500

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)
 N/A

11. SECONDARY PURPOSE CODE
 180

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
 A. Code N/A
 B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

(1) To assist drought-stricken farmers to restore the productive capacity of their farming operations by providing temporary relief on unpaid loans and access to fresh credit; and (2) To strengthen the capability of the CNCA to promote and assist the development of small/medium-scale dryland farming operations, by providing (a) lending capital for drought-stricken farmers, and (b) technical assistance, training and commodities.

14. SCHEDULED EVALUATIONS Audit of Loan Component**

Interim	MM YY	MM YY	Final	MM YY
	10 85			10 87

15. SOURCE/ORIGIN OF GOODS AND SERVICES (Waiver for short Term Training)
 000 941 Local Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

There is no other donor cofinancing of this project. However, additional resources are being provided to the CNCA as follows.

- *- \$20.0 million EEC loan grant for a small farmer credit project
- * - \$115 million IBRD loan for regular lending capital, equipment and technical assistance

USAID/Morocco Controller's approval of proposed methods of implementation and financing

Mark S. Matthews

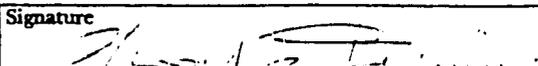
17. APPROVED BY	Signature 	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY 11/05/84
	Title Acting Director, USAID/Morocco	

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LIST OF ACRONYMS AND DEFINITIONS

Acronyms

AID	Agency for International Development
B/G	Borrower/Grantee
CDSS	Country Development Strategy Statement
CLCA	Caisse Locale de Credit Agricole
CMV	Centre de Mise en Valeur (Extension Center - Irrigated Areas)
CNCA	Caisse Nationale de Credit Agricole
CRCA	Caisse Regionale de Credit Agricole
CT	Centre de Travaux (Extension Center - Non-irrigated Areas)
Dh	dirham
EDP	electronic data processing
EEC	European Economic Community
FERTIMA	Société Marocaine de Fertilizants
FY	Fiscal Year
GDP	Gross Domestic Product
GNP	Gross National Product
GOM	Government of Morocco
ha	hectare
HYV	high-yielding variety
IBRD	International Bank for Reconstruction and Development (The World Bank)
IFAD	International Fund for Agriculture and Development
KfW	Kreditanstalt fur Weideraugbau (German AID)
MARA	Ministère de l'Agriculture et de la Reforme Agraire
MIS	management information system
MT	Metric Tons
PACD	Project Activity Completion Date
PIO/T	Project Implementation Order/Technical Assistance
PID	Project Identification Document
SODEA	Société pour le Développement Agricole
SOGETA	Société pour la Gestion des Terres Agricoles
SONACOS	Société Nationale de Commercialisation des Semences
TDY	temporary duty
USAID	The AID Mission in Morocco

Definitions

Adopted exchange rate:	9 Dh/U.S.\$
Annual exchange rates:	1981: 5.17 Dh/U.S. \$
	1982: 6.15 Dh/U.S. \$
	1983: 7.25 Dh/U.S. \$
	1984: 8.73 Dh/U.S. \$
GOM Fiscal Year:	Calendar year
CNCA Fiscal Year:	September 1 to August 31
AID Fiscal Year:	October 1 to September 30
normal growing season (dryland wheat and barley):	October to June

USAID PROJECT COMMITTEE

M. Purvis	Agricultural Development Officer
P. Crawford	Agricultural Economist
J. Smith	Program Economist
M. Matthews	Controller
J. Grayzel	AID/W
JJ. Deschamps	Consultant to USAID Project Committee
Development Alternatives, Inc.	

USAID REVIEW COMMITTEE

R. Chase	Director
H. Petrequin	Deputy Director
M. Purvis	Agricultural Development Officer
J. Rhodes	Program Officer
M. Mattheaws	Controller
A. Williams	Regional Legal Officer
S. Nevin	Regional Contracts Officer

PROJECT REVIEW COMMITTEE

Chairperson: NE/TECH/AD, L. Voth
NE/DP, J. Manarolla
NE/DP, L. Downing
NE/DP/E, J. Wills
NE/NENA, J. Roberts
NE/PD, S. Lintner
NE/TECH/AD, J. Dunn
NE/TECH/SARD, J. Grayzel
PPC/PD, E. Hughes-Leonard
PPC/PDPR, E. Lijewski
GC/NE, S. Narkin
S&T/AGR, P. Church

VII
UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

20 DEC 1984

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR, NEAR EAST
FROM: NE/TECH, Kenneth H. Sherper *KS*
SUBJECT: Drought Recovery Credit Project 608-0184, Morocco

PROBLEM: The Project Authorization needs to be signed.

DISCUSSION: The Near East Advisory Committee (NEAC) under the Chairperson of Mr. Bradshaw Langmaid, Jr., DAA/NE, approved the subject project on November 20, 1984.

The project will assist drought-stricken farmers to restore the productive capacity of their farming operations and will strengthen the capability of Morocco's principal agricultural credit bank (CNCA) to promote and assist the development of small and medium-scale dryland farming operations.

The NEAC's discussion centered on the following points, here summarized: 1) The loan agreement shall include a covenant that establishes the use of retained earnings by CNCA deriving from the spread between its borrowing and lending rates, less costs of lending. The NEAC suggested that these spread earnings be reserved by CNCA as provision for bad debts. 2) The Mission should negotiate with CNCA a period for the rescheduled loans, not of a fixed ten years, but one which reflects the balance of short-term and medium/long-term loans being rescheduled. The Mission should also negotiate an interest rate of at least seven percent to be applied to rescheduled loans.

The Mission Agriculture Development Officer attended the NEAC and concurred on the issues and discussions concerning actions stemming from the issues.

An Advice of Program Change was forwarded to Congress indicating the life-of-project funding level, the intent to obligate \$15,000,000 (\$13.5 M loan and 1.5 M grant) in FY 85 from ESF, with loan terms of 40 years (10 years grace at 2% and a repayment period of 30 years at 3%). The notification waiting period will expire on December 29, 1984. There are no current human rights issues under Section 116 of the Foreign Assistance Act that would preclude provision of this assistance to Morocco.

V10

The Project Paper included a two page draft Project Authorization (extracted and here attached with the NEAC modifications) which needs your signature to complete the approval process.

RECOMMENDATION: That you sign the attached Project Authorization for a life-of-project total of \$15,000,000 for the Drought Recovery Credit Project 608-0184.

Attachment: a/s

NE/TECH/AD: LVoth:lms: 12/18/84:632-9262: Doc. 1397I

12

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D C 20523

PROJECT AUTHORIZATION

Name of Country: Morocco

Name of Project: Drought Recovery
Credit Project

Number of Project: 608-0184

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Drought Recovery Credit Project for Morocco (the "Cooperating Country") involving planned obligations of not to exceed \$13,500,000 in loan funds and \$1,500,000 in grant funds over a one year period from date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is three years and six months from the date of initial obligation.

2. The project consists of the provision of assistance to the National Agricultural Credit Bank (Caisse Nationale de Credit Agricole--CNCA) to enable it to reschedule loans to small and medium-sized farmers affected by the drought and to make new loans to these same farmers for the crop season 1984/85. Such assistance consists of loan funds which are to be relent to these farmers and grant funds for the provision of technical assistance, training, and commodities.

3. The Project Agreement(s) which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of Services

Commodities financed by A.I.D. under the project shall have their source and origin in Morocco or in the United States except as A.I.D. may otherwise agree in writing. Except for ocean shipping and short-term training, the suppliers of commodities or services shall have Morocco or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Short-term training in Code 935 countries is authorized.

Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States. The requirements of the Cargo Preference Act will be met with respect to all commodities financed by A.I.D. that are transported on ocean vessels.

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b. Conditions Precedent

The Project Agreement shall have conditions precedent in substance as follows:

1. Prior to disbursements under the Grant Component of the Project for the procurement of computer equipment, the CNCA shall provide to A.I.D., in form and substance satisfactory to A.I.D., a statement designating the CNCA employee who will be the full-time counterpart to the Agricultural Credit /Agribusiness Specialist and make office space available for this latter individual.
2. Prior to disbursements under the Grant Component for the procurement of computer equipment, the CNCA must have selected the type of equipment to be procured for the overall computer system to be financed by the IBRD. Computer equipment procured with A.I.D. funds shall be compatible with that procured for the overall CNCA computer system.
3. Prior to disbursements under the Grant Component for the initiation of Training activities and the development of the Training Center and Technical Library, the CNCA shall provide A.I.D., in form and substance satisfactory to A.I.D., assurance that adequate facilities are available to house these activities.

c. Covenants

The Project Agreement shall have covenants in substance as follows:

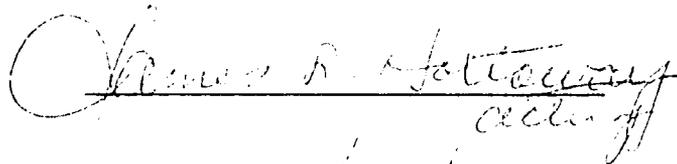
1. The terms and conditions at which the GOM will on-lend funds provided by A.I.D. to the CNCA will be established in the Project Agreement.
2. The terms and conditions at which the CNCA will on-lend these funds to farmers will be established in the Project Agreement.
3. The GOM will make the dirham equivalent of the loan available to CNCA within seven (7) days of receiving the loan.
4. The CNCA will disburse the loan funds to eligible farmers within 90 days of receiving the funds and will document these disbursements.
5. The retained earnings by CNCA arriving from the spread between its cost of funds provided through this project and the interest at which funds are lent to clients, less the CNCA's direct cost of lending, shall be reserved by CNCA as provision for bad debts, and other or future uses would be subject to prior written approval by USAID/Rabat.

2

6. The terms and conditions of rescheduled loans are such that the period for the rescheduled loans of eligible farmers (see below) not be of a fixed ten years but one which reflects the balance of short-term and medium/long-term loans being rescheduled, and an interest rate of at least seven (7) percent be applied to rescheduled loans.
7. The CNCA will make its accounting books, records, and other documentation relevant to the Loan and Grant Components of the Project available to A.I.D. staff upon request.
8. The total amount of loan funds received by the CNCA under the Loan Component of the Project will be disbursed to eligible farmers.

Eligible farmers are those who:

- a) Are clients of CRCA's
- b) As individuals, have a fiscal revenue of less than 6,000 DH; and,
- c) Received approval by CRCA credit committees for rescheduling, based upon an assessment that non-repayment of their loans was directly attributable to the drought conditions which have prevailed since 1980/81.



DATE

12/25/84

MOROCCO

DROUGHT RECOVERY CREDIT PROJECT (608-0184)

I. PROJECT SUMMARY AND RECOMMENDATIONS

- A. Grantee: Government of Morocco
- B. Implementing Agency: Caisse Nationale de Credit Agricole
- C. Amount: U.S. \$15,000,000 of which the full amount is requested for authorization and obligation in FY 1985.
- D. Terms: This activity is to be loan-funded for \$13.5 million from Economic Support Funds, under terms to be determined by AID/W, and grant-funded for \$1.5 million.
- E. Total Project Costs: The total project cost to AID is \$15,000,000, of which the full amount will be obligated in FY 1985. The GOM contribution is estimated at \$11,000,000. The GOM contribution is estimated to be 42.3 percent of total project costs. There is no other donor cofinancing of this project. However, two other major donors (IBRD and the EEC) have parallel and simultaneous projects with the CNCA which strongly complement the AID project. These are described in the text (Section I.B.4).

F. Summary Project Description:

In 1980/81 Morocco suffered its worst drought in 40 years. In the three following years many areas of Morocco have continued to suffer from drought. The effect on dryland farmers, particularly cereal producers in the southern, south-central, and eastern regions of the country, has been disastrous.

The drought has destroyed the ability of many farmers to repay production loans to the Caisse Nationale de Credit Agricole (CNCA), the principal source of agricultural credit in Morocco. Not only are farmers unable to repay their old loans but, because they have unpaid debt or are up to their loan ceilings, they cannot take on new credit for the coming year's crop. These farmers are losing confidence in their capacity to continue to manage institutional credit.

As more and more farmers have defaulted on their loans in the wake of the drought, the CNCA's long-term financial viability has become increasingly threatened. CNCA is unable to collect unpaid loans caused by natural disaster and cannot afford to simply forgive debts. Therefore, in order to reduce the repayment burden on farmers, and to recover as much of these loans as possible, the CNCA has developed with USAID a program to reschedule overdue loans to farmers in drought-stricken regions, and to provide new credit to those farmers who agree to the rescheduling process.

The Project Purpose is two-fold: (1) To assist drought-stricken farmers to restore the productive capacity of their farming operations by providing them with temporary relief on their unpaid loans and access to fresh credit; and (2) To strengthen the capability of the CNCA to promote and assist the development of small- and medium-scale dryland farming operations, by providing it with (a) additional lending capital for drought-stricken farmers, and (b) appropriate technical assistance, training and commodities.

AID funds will be specifically targetted to the smaller clients of CRCAs (Caisses Regionales de Credit Agricole). These will be small- and medium-sized dryland farmers, with fiscal incomes of between 3,000 and 6,000 Dh. The beneficiaries of this Project will in general have farms ranging in size from 15 to 45 hectares. The majority of the smaller, more marginal farmers (those with less than 15 hectares of land and fiscal incomes of less than 3000 Dh) are clients of the Caisses Locales de Credit Agricole (CLCAs). A rescheduling program to assist these farmers is being funded by a \$20 million loan/grant from the European Economic Community.

Rescheduling stretches out the repayment period of an overdue loan. It benefits the borrower by reducing the size of his periodic payments. Thus, the borrower can more easily meet these installments from his future income. The borrower is thus able to take on new loans which, in turn, contributes to restoring his or her productivity, output, and income. Rescheduling benefits the national economy by maintaining farmers in production, restoring agricultural output after the drought, and by increasing the recovery of otherwise bad debts.

The rescheduling of loans and the provision of new production credit to drought-stricken farmers are tightly linked. The project, by also financing new loans, will permit farmers to purchase cash inputs, such as seed, fertilizer, tractor services, and animal feed, and to restore farm production and incomes to pre-drought levels. The project will further assist the CNCA to survive the current crisis and to continue its growth as a vital institution of Moroccan agriculture.

The Project consists of a \$13.5 million loan to enable the CNCA to reschedule overdue loans and provide new loans to drought stricken farmers. The Project will also provide a \$1.5 million grant to strengthen the CNCA as an institution.

The AID loan will be administered as a two-step loan (to the GOM and then on-lent to the CNCA). Disbursement is expected to occur within six months of the signing of the Project Agreement. These loan funds will be on-lent to drought-affected farmers who have rescheduled debts, at the CRCA's usual rates of interest (9-11 percent for short term loans and 12-13 percent for medium/long term loans). The rescheduled debt will carry a 6 percent rate of interest and a 10 year payback period. The grant component of the Project will fund technical assistance (a long-term Agricultural Credit Specialist and TDY), training, and commodities, (a limited amount of computer equipment for CNCA's training program and management information system). The grant component will be funded as a three-year activity and administered under a Host Country Contract

G. SUMMARY OF ISSUES RAISED BY THE NEAC REVIEW OF THE PID

The Guidance Cable from the Near East Advisory Committee Review of the Project Identification Document is included as Annex 6. The following are the major issues raised and references as to where they are addressed in the text of the Project Paper.

<u>Issues</u>	<u>Reference Pages</u>
1. Availability of agricultural production inputs and linkages to ongoing AID projects	71-73, 117-18
2. Financial Analysis of the CNCA	41-59
- Magnitude of farmers' loan arrearages,	61-62
- AID funds going to new loans or rescheduling	26
- Potential demand for new loans	60-62, 36
- Effect of rescheduling on level of non-performing debts	52-55
- Ability of CNCA to absorb potential losses	55-59
- Cash flow needs of CNCA	33
- Existing terms of CNCA loans	50
3. Relationship between the project and the World Bank's Fifth Agriculture Credit Project	17-20
- Policy dialogue goals	20-21
4. Interest rates charged on loans to beneficiaries and on funds to CNCA	50, 55
- Modality of the AID loan -- two step	25-27, 33, 55-57
- Grace periods versus interest rate subsidies	47-52
5. Institutional development/detail of use of Grant funds	27-31, 131-34
6. Social Analysis	60-70, 83-107
7. Evaluation/Assessment of Economic Impact	28-31, 77-78
8. Financial Analyses to meet 611 (a) requirements	32-36, 41-59
9. Loan disbursement rates	33

H. RECOMMENDATIONS

1. USAID/Morocco has reviewed the Drought Recovery Credit Project Paper (608-0184) and recommends that this \$15 million activity be approved.
2. USAID/Morocco recommends that the project authorization include a waiver as justified in the Project Paper, for short term Third Country Training.

I. PROJECT BACKGROUND AND RATIONALE

A. The Agricultural Sector in Morocco

1. Traditional Patterns of Production¹

Morocco's population is estimated at 22 million (1982) of whom about 57 percent live in rural areas. During the last ten years, population growth has averaged 2.6 percent per year (4.4 percent in urban areas and 1.4 percent in rural areas, with rural-urban migration accounting for most of the difference). About 52 percent of the total labor force is employed in agriculture. An estimated 45 percent of rural families live at or below the absolute poverty level (US \$238 per capita in 1978-80). The absolute number of rural poor was 5.4 million in 1980 and has probably increased since then.

As in many developing countries, agriculture in Morocco can be divided into two sectors. The small, rapidly developing and highly productive modern sector is based on irrigated agriculture and large coastal farms, producing fruits and vegetables for the export market. The much larger traditional sector is based on rainfed agriculture, produces the bulk of the country's basic food supply, and supports most of the agricultural population. In the traditional sector productivity is low and output has stagnated. Cereal, pulse, olive, and red meat production, which comes predominantly from the rainfed sector, has not grown significantly since the late 1960s.

The majority of farm families operate at or near subsistence levels. It is estimated that nearly two-thirds of the total cereal production in Morocco is consumed on the farm, with less than 10 percent being marketed through official channels. Land distribution is highly skewed and, due to traditional inheritance practices, holdings are highly fragmented among numerous owners. The situation is exacerbated by ecological limitations (such as variations in soil fertility and water availability) that encourage crop diversification. Thus, a single farm may be made up of five or six small, non-contiguous parcels growing a variety of crops.

The low productivity of rainfed agriculture is partly due to problems of low soil fertility and limited and variable rainfall. However, it also results from uneconomic land tenure and land use patterns, poor farming practices, lack of new technologies and inadequate support services. There is evidence that certain cultural practices common in the traditional agricultural sector, such as hand broadcasting of seed and inadequate rotation, could be modified with new technical inputs to increase cereal production. Further, as pressure on the land augments, cereals are increasingly being grown on lands which are marginal, if not totally unsuitable, for crop production. Finally, the rainfed agricultural sector is under-capitalized, with inadequate supplies of inputs and implements. For instance, most dryland farmers are dependent on animal traction, with implements limited to a crude plow. Even on farms with access to tractors, power tillage methods and tools commonly are wasteful of energy, land, and water resources. Most farms use neither commercial fertilizer nor improved seed. For example, only 25 percent of the wheat and almost none of the barley is sown with improved seed.

^{1/} See Annex 3 for an overview of the agriculture sector in Morocco.

Nevertheless, there appears to be significant potential for increased production in the rainfed agriculture sector. Currently, much of the rainfed land in Morocco is producing at no more than 30 to 40 percent of its capacity. An FAO study estimated that, with proper policies and programs, and employing existing technology, cereal production could be increased by 40 percent within 18 years (from 4 million MT to 7 million MT per year).

2. The Effects of the Drought

2.1 Effects on Agricultural Production

The drought that has affected Morocco over the past four years has not been uniformly felt all over the country nor equally severe in all years. The current drought began during the 1980/81 agricultural year (September to August) with precipitation being near normal in the southern agricultural areas, but 40 to 60 percent below normal in the central regions. Average annual rainfall in Morocco for the 1980/81 season was 286 mm (compared to an average annual rainfall over the preceding ten years of 425 mm). Cereal production for 1980/81 reached only 2.071 million MT (a decline of over 53 percent from the 4.428 million MT achieved in 1979/80, a "normal" year. The effects of the 1980/81 drought, which was said to have been the worst in 40 years, have continued to be felt.

The second year, 1981-82, severe precipitation deficiencies occurred in selected areas, especially in the east, which had been the least affected by the previous year's drought. Cereal production for the country as a whole was, however, above normal, at 4.87 million MT.

The third year, 1982/83, again had deficient amounts of precipitation nationwide, with 40 to 80 percent below normal levels over wide areas. There were two long drought periods (mid-December to early February and the end of February to the end of March), with the southern and eastern parts of the country particularly hard hit. Cereal production fell to 3.54 million MT (a drop of 27.3 percent). However, the decline in cereal production in some provinces was particularly great (for instance, the provinces of Settat, Marrakech, and El Kelaa registered declines in cereal production of 88, 74, and 96 percent, respectively).

For the most recent agricultural season, 1983/84, the principal problem was, again, the inadequate distribution of rainfall during the crop production season. The rains began late (rainfall in September and October averaged 11.3 mm, as opposed to an average of 43.5 mm for the period 1973-83). Then, abundant and widespread rainfall in November and December briefly held out the promise of an improvement in the weather pattern over that of the previous year. As a result, the acreage planted to cereals was only slightly less than normal. However, in January and February, a critical period for plant growth and development, rainfall was only 37 percent of normal. Good rains in late-March, April and May came after much of the land sowed to barley and wheat, especially in the dryer, southern regions, had already been harvested or abandoned.

The 1983/84 drought seriously affected agricultural production in the majority of the country's provinces (See Figure 1-1: Map of Morocco). Cereal production was slightly above the previous year's levels, at 3.63 million

metric tons, but still 23 percent below the "normal" harvest of about 4.7 million metric tons. Table 1-1 presents a breakdown of the production of major cereals by province, comparing it with production in 1981/82, the most recent "normal" year. As cereals are the principal rainfed crops, these figures provide an indication of which provinces have been the most severely affected by the drought.

2.2 Impact on Farmers in Drought-Stricken Areas

The areas most severely affected by the 1983/84 drought are in the southern, south-central, and eastern regions of the country, where losses averaged almost 50 percent of normal cereal production. The severity of the drought in these areas was confirmed during field trips undertaken by the USAID project design team. For example, of the farmers from drought-stricken provinces interviewed during the course of the project design, only one reported any yield at all from dryland wheat and barley, this sole exception receiving less than a fifth of the seed that he had originally planted.¹

The drought has seriously affected both the asset base and incomes of farmers in these stricken areas. As a case in point, all of the farmers interviewed by the Project Paper design team (and from whom farm budget information was obtained) received negative net cash incomes from cultivation and other farming activities during the 1983/84 season, with the average loss amounting to \$1760 (See Annex 4: Illustrative Farm Budgets). A major factor contributing to this loss was the investment that farmers made, averaging \$855, in seed, fertilizer, hired labor, and tractor rental on rainfed wheat and barley that produced no yield, whatsoever.

The inadequate rainfall since 1980/81 has also reduced the amount of water available through the irrigation systems of the country. This, in turn, has decreased production of irrigated crops. During the three agricultural years, 1980/81, 1981/82 and 1982/83, the cumulative precipitation deficiency was 33 percent below normal, equivalent to the loss of the normal precipitation for an entire year. Consequently, as of March 1984, reservoir levels were only 22 percent of normal (51 percent in the north of the country, 19 percent in the east, 11 percent in the central region, and 14 percent of normal in the south). The average operating capacity of 15 of the major irrigation systems in the country stood at approximately 24 percent of normal in May 1984. In some areas strict water rationing has become necessary. Major areas previously irrigated from rivers and reservoirs are undergoing well-drilling and deepening campaigns which have only exacerbated the groundwater problem. The situation has become so acute in the Settat area, for example, that the Government has attempted to restrict further well development in that area.

^{1/} During the preparation of the Project Paper, members of the design team visited the provinces of Beni Mellal, El Kelaa, Marrakech, Settat and Fes (the latter was not a drought-stricken province). Interviews were conducted with local CLCA and CNCA personnel and with almost two dozen farmers. Detailed farm budgets were prepared for six farms which were considered representative of CRCA clients. These detailed farm budgets are presented as Annex 4: Illustrative Farm Budgets.

Table 1-1: 1983/84 Cereals Production by Province Compared to 1981/82 ¹

<u>Province</u>	<u>Cereals Production in 1981/82 (MT)</u> ²	<u>Cereals Production in 1983/84 (MT)</u>	<u>Percent Change</u>
<u>Drought Stricken Provinces</u>			
Agadir	147,610	78,120	- 47
Azilal	124,380	74,840	- 40
Ben Slimane	111,540	65,430	- 41
Beni Mellal	240,300	89,770	- 63
Casablanca	50,980	25,460	- 50
El Kelaa	259,970	113,220	- 56
Errachidia	16,830	8,920	- 47
Essaouira	149,500	80,100	- 46
Goulimine (Guelmim)	2810	380	- 86
Khenifra	151,440	49,420	- 67
Khouribga	152,060	22,650	- 85
Marrakech	328,700	93,420	- 72
Ouarzazate	96,120	34,230	- 64
Oujda	87,860	60,700	- 31
Safi	298,790	160,420	- 46
Settat	252,830	171,810	- 32
Tata	1,520	1,060	- 30
Taza	177,930	118,510	- 33
Tiznit	27,130	890	- 97
Subtotal/Avg	2,513,590	1,277,560	- 49
<u>Less Drought-Affected Provinces</u>			
Al Hoceima	83,560	80,900	- 3
Boulemane	12,540	9,590	- 24
Chefchaouen	32,980	52,230	+ 58
El Jadida	200,370	215,240	+ 7
Fes	148,780	169,200	+ 14
Figuig	5,400	7,390	+ 37
Kenitra/Sidi Kasem	592,850	620,800	+ 5
Khemisset	326,400	267,320	- 18
Meknes/Ifrane	236,710	288,830	+ 22
Nador	49,750	70,640	+ 42
Rabat (HQ)	35,590	50,400	+ 42
Tanger	23,040	47,940	+108
Taounate	254,740	323,340	+ 27
Tetouan	88,140	86,880	- 1
Subtotal/Avg	2,253,560	2,262,490	0
TOTAL/AVG	4,767,150	3,540,050	- 26

^{1/} Production for the four major cereals, breadwheat, durum wheat, barley, and maize. No cereal production statistics were available for the provinces of Tan Tan or Taroudant. In addition, the four provinces in the Western Sahara are not included. Finally, for 1983/84 another 88,040 MT of maize production (which was not disaggregated by province in the GOM statistics) should be included, bringing the overall level of production to 3,628,090 MT.

^{2/} Production in 1981/82, the only non-drought year of the last four, was above normal. Nevertheless, it serves as an adequate standard against which relative 1983/84 production can be compared.

The effects of declining water availability on production is illustrated by the problems facing a number of the farmers interviewed during the Project design. One farmer (Annex 4, Case Study No. 4) was forced to abandon a farm in 1981/82 because the well there had completely dried up. Although he had resettled nearby and dug a new well, the amount of water it supplied permitted only limited crop irrigation. Another farmer (Annex 4, Case Study No. 5) abandoned his olive and fruit trees in order to provide enough water for his hectares of grapes, a high-value cash crop. Though necessary in the short term to ensure an adequate income, it will take eight to ten normal rainfall years to replace the olive and fruit trees which consequently died from lack of water.

Drought-related livestock losses since 1980 have also been significant. Between 1980 and 1983 the number of cattle in Morocco declined by 28 percent, the number of sheep by 23.6 percent, and the number of goats by 20.2 percent. One of the farmers interviewed had owned 17 dairy cows prior to the 1980/81 drought, but was forced to sell them at rock-bottom prices because he could not feed them (Annex 4, Case Study No. 6). In 1983 a farmer in El Kelaa had 6 cattle, 35 sheep, and 5 goats. During 1984 all of his cattle and sheep died. The farmer sold the 5 goats (Annex 4, Case Study No. 1). To compensate for the decreased forage available from the rangelands and from crop aftermath, farmers have been forced to purchase forage, or to produce it on the farm, instead of grain. In addition, farmers in drought-stricken areas, in order to maintain their livestock, have sent them to northern Morocco, where forage is more readily available and less expensive.

Successive years of drought have not permitted a replenishment of seed supplies, especially of those held on the farm. According to recent GOM figures, just over 64,000 MT of selected seeds is available for the upcoming 1984/85 campaign. This is only 56 percent of the amount of seed that was available for the 1983/84 season. Consequently, farmers will have to rely increasingly on non-selected seed, which generally has a lower yield, even under normal conditions. Information is not available on the amount of seed stored on Moroccan farms. However, it is reasonable to assume that these supplies have also diminished significantly. Consequently, the availability of seed, in particular barley seed, could be a problem in the coming campaign. Production levels may remain lower than normal as farmers decrease the amount of land planted to cereals and reduce the density of seeding. (See Economic Analysis Section - Prospects for the 1984/85 Crop Season).

2.3 Effect of the Drought on Overall Economic Performance

The severe short-term economic problems currently faced by Morocco have had a number of domestic and external causes. However, the impact of successive years of drought on Moroccan agriculture has been a major contributor to these problems. The lack of growth in the agricultural sector, which employs more than half of the population, provides a major source of export revenue and feeds Morocco's growing population, has acted as a drag upon the performance of the other sectors of the Moroccan economy.

Real per capita GNP in Morocco grew at a respectable real annual rate of 2.5 percent per year between 1960 and 1980, reaching \$900 in 1980. Then, per capita GNP fell to \$870 during 1981, primarily because of the severe drought of 1980/81. In 1982, the IBRD estimate of per capita GNP remains at \$870. (Though the IBRD's method for estimating the dollar value of GNP changed in

1982 and, consequently, the 1981 and 1982 figures are not totally comparable). However, the substantial rise in the value of the dollar in 1982 hides what was in fact a 5.6 percent real growth in terms of dirhams. This growth was largely due to the improved performance in agriculture, although this, in turn, was somewhat distorted by the slump in reference year 1981. In 1982 the agriculture sector (including forestry and fishing) increased in value by 19 percent in constant dirhams, and accounted for 18.1 percent of GDP compared to only 14.9 percent in the 1981 drought year. The increase in agricultural output represented 35 percent of the increase in real GDP growth in 1982.

In 1983, the production of cereals declined by 27.3 percent. This, combined with the effects of government austerity measures, led to a year of very modest growth in real GDP (2.25 percent). As a result, real per capita income declined, since the rate of population growth is at least 2.6 percent.

The successive years of drought have been a principal cause of the increase in food imports which have exacerbated Morocco's external payments gap. In 1980 approximately 1.78 million MT of cereals (primarily breadwheat) were imported. In 1981 cereal imports were 2.66 million MT, in 1982 over 1.91 million MT, and in 1983 imports were 1.94 million MT. Preliminary figures indicate that over 2 million MT of cereals will be imported in 1984. With the continuation of drought conditions in 1984, it has been predicted that 1985 cereals imports may exceed 3 million MT, triple what they were in 1976.

The drought has also increased unemployment and forced the GOM to divert scarce resources into employment-generating activities. About a third of all rural families own no land at all, and many farms are too small to meet even subsistence needs. Even larger farms do not necessarily fully employ available family labor. Consequently, a large segment of the rural population depends upon income as farm laborers. The adverse effects of the drought on agricultural production, therefore, have decreased the demand for rural labor.

The GOM estimated that some 58 million workdays in 1983/34 were lost because of the drought (an average loss of employment of 150 days per farm worker). In response to the increase in drought-related unemployment, the GOM earmarked one billion Dh (U.S. \$110 million) for a series of job-creating emergency measures. In 1984, 150,000 people will be employed in public works, including the construction and maintenance of public buildings, roads, irrigation channels and reservoirs, water supply systems, reforestation, and soil management.

3. The Role of Rural Credit

3.1 Overview

Of the approximately 1.5 million farmers in Morocco, 420,000, or 28 percent, receive institutional credit from the CNCA. No statistics are available on the number of farmers who use informal credit. Approximately 55 percent of the institutional credit received is short-term. It is primarily obtained to purchase seed, fertilizer, and animal feed, and to pay for costs of hiring labor or tractors for land preparation and harvesting the crop. Medium-term credit is used to purchase livestock, equipment, construct stables and other farm buildings, develop tree crops, maintain irrigation systems, dig

wells and purchase motor pumps. Four types of investment represented more than 75 percent of total term lending by the CNCA in FY 1983: livestock (34 percent), construction (9 percent), mechanization (25 percent), and draft animals (9 percent).

3.2 The CNCA

The Caisse Nationale de Credit Agricole (CNCA) was founded in 1961 as a wholly government-owned institution with independent legal status and financial autonomy. Annex 2 presents a detailed institutional analysis of the CNCA. The CNCA lends to farmers, farmer associations, cooperatives and companies for investments in agricultural production, marketing, agricultural service industries and food processing. The CNCA is a pyramid-shaped credit bank made up of a head office, 38 regional branches (Caisses Regionales de Credit Agricole - CRCAs) and 97 local branches (Caisses Locales de Credit Agricole - CLCAs). An additional 146 seasonal and/or mobile branches of CLCAs are in operation. The head office lends to a few very large farmers but mainly conducts business with state-owned production and marketing companies, private agro-industrial enterprises and the irrigation development offices.

The CRCAs comprise almost 58% of the CNCA's total loan volume and service about 18.5 percent of the total number of CNCA clients. Figures available indicate that the 38 existing CRCAs are reaching around 80 percent of their potential clients. The 97 CLCAs are reaching an estimated 24.8 percent of their potential clients.

During the past four years the CNCA has taken several actions aimed at lessening the effects of the drought on farmer incomes. Following the poor 1981 harvest the CNCA implemented a stopgap program of rescheduling debt for 1 year on \$44 million worth of loans for 217 thousand clients, of which 84% were clients of the CLCAs. The 1982 and 1983 harvests resulted in a further \$25 million of installments which farmers could not meet due to the drought. Consequently, in 1982 the CNCA began to restructure these debts over a 3-year period for its larger customers, and over a 5-year period for the clients of the CLCAs. Unfortunately, with the poor 1984 harvest, the situation has deteriorated further, hence the proposed rescheduling program.

3.3 Credit from Commercial Banks

There are, at present, no commercial banking institutions in Morocco that provide significant amounts of medium- and long-term credit to the agricultural sector. Commercial banks' lending to agriculture is mostly short-term. They participate, under the strict control of the Ministry of Finance, in the syndicated financing of production and marketing operations of state-owned agricultural enterprises. In effect, a relatively small share of the country's total credit goes to agriculture. In 1983, for example, only 3.5 percent of all large-scale loans (those over 100,000 dh) made by commercial institutions (including the CNCA) went to that sector. Additionally, that credit which is extended by commercial banks to the agricultural sector does not go to small farmers.

Commercial bank lending to agriculture is limited because: (a) the banks are profit maximizers and avoid making small loans with relatively high

transaction costs; (b) they lack adequately trained agricultural specialists; (c) their lending is usually restricted to borrowers keeping sizeable deposit balances and offering significant guarantees; and (d) their branches are mostly located in urban centers along the Atlantic coast (for example, a quarter of the banking offices in Morocco are located in Casablanca, where 42 percent of deposits are raised).

3.A Credit from Informal Sources

Apart from the CNCA and private commercial sources, farmers obtain credit from money lenders, merchants, and friends and relatives. In addition, farmers will borrow in cash or in kind, such as seed, and repay it in cash or with a share of the crop at harvest time. Such credit can play a large role, especially after a bad harvest, in meeting consumption needs. However, little is known about the amount, terms and adequacy of credit from informal sources. While charging interest is against Islamic law, it has been estimated that the effective compounded interest rate on small production loans (e.g. to buy ordinary seed and a few bags of fertilizer) from private creditors may range from 20 to 30 percent. As discussed in the Social Analysis, however, the use of informal credit appears to be declining. This is attributed to the availability of formal credit, more attractive alternative uses of private investment capital, and the continuing effect of the drought, which has reduced privately available resources.

B. Project Rationale and Objectives

1. Objectives

1.1 To Assist Drought-stricken Farmers

The principal objective of this Project is to help farmers in rainfed cereal-producing areas, particularly in dryland areas of southwestern and eastern Morocco, recover from the economic consequences of several years of abnormally severe and prolonged drought. These farmers may either be independent, private operations or be members of Agrarian Reform Cooperatives. Though these farmers generally have viable farm operations, the recent drought has severely reduced their income flows and cash savings. Not only are these farmers unable to repay their loans but, because they have unpaid debt or are up to their loan ceiling, they cannot take on any new credit for the next year's crop. In order to return farm output and incomes to their pre-drought levels, farmers must be able to finance cash inputs, principally seed, fertilizer, and tractor services, through new credit to be made available by the Project.

Table 1-2 presents, by province, the percentage of outstanding CRCA and CLCA loans to be rescheduled. In the most severely drought-stricken provinces, an average of 24.3 percent of outstanding CRCA loans and 25.6 percent of outstanding CLCA loans will be rescheduled. By contrast, in the less affected provinces an average of only 3.8 percent of outstanding CRCA loans and 5.6 percent of outstanding CLCA loans will be rescheduled. These figures clearly confirm: (1) that the effects of the drought on farm production and income have, indeed, been severe; and (2) that the loan rescheduling program, as proposed by CNCA, is both justified and directed to the areas most severely affected by the drought.

Table 1-2: Debt Reschedulings and Overall Loans Outstanding by Province, as of September 14, 1984
(Figures in millions of dirhams) ¹

Province	CRCAs			CLCAs		
	Reschedulings Approved	Total Loans Outstanding	Reschedulings as % of Outstanding	Reschedulings Approved	Total Loans Outstanding	Resheduling as % of Outstanding
<u>Drought-Stricken Provinces</u>						
Agadir	52.3	154.1	33.9	-	2.6	-
Azilal	1.4	19.2	7.3	2.0	34.4	5.8
Ben Slimane	13.8	63.7	21.7	2.4	13.4	17.9
Beni Mellal	21.7	143.4	15.1	11.8	90.5	13.0
Casablanca	2.7	43.5	6.2	0.6	2.2	27.3
El Kelaa	24.1	74.2	32.5	27.5	66.7	41.2
Errachidia	0.7	5.3	13.2	0.2	4.8	4.2
Essaouira	4.5	15.4	29.2	2.4	17.7	13.6
Goulmine	2.0	28.2	7.1	0.3	3.1	9.7
Khenifra	2.0	55.8	3.6	1.7	56.2	3.0
Khouribga	17.1	72.4	23.6	14.3	49.0	29.2
Marrakech	21.9	57.8	37.9	13.9	48.1	28.9
Ouarzazate	1.3	9.8	13.3	1.2	10.7	11.2
Oujda	3.9	174.9	2.2	2.7	47.2	5.7
Safi	28.7	56.3	51.0	10.7	34.5	31.0
Settat	114.6	236.0	48.6	68.9	103.9	66.3
Tan Tan	-	-	-	-	0.6	-
Taroudant	22.6	185.7	12.2	-	5.1	-
Tata	-	-	-	0.1	3.5	7.9
Taza	13.8	39.3	35.1	1.8	36.6	4.9
Tiznit	-	-	-	0.1	4.2	2.4
Subtotal/Avg	349.1	1435.0	24.3 %	162.6	635.0	25.6 %
<u>Less Drought-Affected Provinces</u>						
Al Hoceima	-	2.1	-	-	0.7	-
Boulnmane	4.3	15.4	27.9	0.8	20.0	4.0
Chefchaouen	-	-	-	-	8.3	-
El Jadida	11.5	73.3	15.7	9.8	62.7	15.6
Fes	5.5	71.2	7.7	2.1	26.1	8.0
Figuig	-	-	-	1.3	9.4	13.0
Ifrane	-	45.9	-	-	20.1	-
Kenitra	-	69.7	-	-	77.1	-
Khemisset	3.0	31.7	9.5	8.6	44.1	19.5
Meknes	-	63.9	-	-	21.3	-
Nador	0.3	13.9	2.2	-	7.1	-
Rabat (HQ)	2.1	298.1	0.7	-	10.7	-
Sidi Kacem	-	-	-	-	34.7	-
Tanger	-	-	-	-	4.1	-
Taounate	3.6	46.4	7.8	0.9	64.8	1.4
Tetouan	-	62.8	-	-	10.9	-
Subtotal/Avg	30.3	794.4	3.8 %	23.5	422.1	5.6 %
TOTAL	379.4	2,229.4	17.0 %	186.1	1,057.1	17.6 %

^{1/} The Project will support the rescheduling programs of CRCAs in both drought-stricken and less affected provinces. Even in the latter category, there will be selected areas where drought conditions seriously lowered output, thereby justifying the reschedulings.

1.2 To Maintain CNCA's Viability

The CNCA is presently burdened with around 169,000 uncollected loans accumulated since the first 1980-81 drought. These loans involve approximately 85,000 separate clients and amount to 565 million dh (approximately \$63 million). These loans cannot be merely attributed to the usual level of delinquent loans which may accumulate from year to year, but are directly attributable to the drought. This is demonstrated by the fact that the overwhelming majority of delinquent farmers in target areas have been long-standing customers of the CNCA, with unblemished credit records prior to 1980. Furthermore, CNCA's overall collection performance has clearly deteriorated since 1980, particularly in drought-stricken areas (see Chapter 4, Table 4.2), despite substantial improvements in institutional efficiency overall.

CNCA is an efficient, long-standing rural credit institution. It benefits from international recognition from both donors and the banking community at large. It clearly is a competent and appropriate financial institution to carry out the objectives pursued by the Project, as they relate to farmers. The Project, therefore, seeks to maintain the long-term viability of the CNCA as an institution. The CNCA cannot simply carry bad debt without impairing its financial soundness and its ability to continue normal lending. It must either foreclose on farmers or reschedule their debt until farmers' ability to repay loans is restored. Foreclosing on small farmers in the face of a national disaster is unacceptable and would destroy the carefully-built reputation of CNCA with small farmers and increase political instability. To support the exceptional rescheduling of debt and relending to those CNCA clients who are victims of the drought, new funding is necessary. In the absence of fresh loan capital, CNCA's basic financial security will also be weakened and its domestic and international borrowing capabilities jeopardized. The Project will support CNCA's ability to underwrite new loans needed by these farmers for next year's crop, and thus provide greater assurance that they can mobilize the resources necessary to respond to a return to normal rainfall patterns. The CNCA will reschedule the unpaid debt of small farmers caused by the drought since 1980/81. This will allow farmers to better manage debt repayment and continue investment in crop and livestock output-increasing activities. It will also reinforce or revive positive borrowing/repayment practices by these small farmers by avoiding simple, but damaging, debt forgiveness by the CNCA.

The Project will also lay the groundwork for a longer-term relationship between the CNCA and USAID. Through this relationship, USAID will aim at helping the CNCA continue its successful development as a reliable credit institution. Further, by building a sound rural development institution to deliver needed credit services to small farmers in viable and effective ways, the Project will help Morocco address the longer-term credit constraint faced by traditional farmers. The CNCA also offers promise as a vehicle for addressing other sector development initiatives, such as the development of new supervised credit and innovative lending programs directed towards agro-industry, women, land consolidation, and so forth. The Project will provide a vehicle for engaging CNCA in a policy dialogue aimed at credit reform and, in conjunction with other donors, bring about further institutional development of the CNCA.

2. Relationship to GOM Priorities

This Project is directed at two objectives of Morocco's economic development strategy: 1) development of dryland agriculture, and 2) strengthening of the Caisse Nationale de Credit Agricole (CNCA) as a viable semi-autonomous credit institution reaching large numbers of small farmers.

Morocco's 1981-85 Development Plan placed priority on investment in agriculture. In addition, a significant reallocation of resources was sought within the sector in favor of traditional rainfed agriculture, and away from large scale irrigation projects. Such a shift would more adequately reflect the relative importance and potential of the different sectors. The Plan also seeks to improve the country's self-sufficiency in food, through increased production of staple food, particularly cereals. This Project, by helping dryland cereal-producing farmers remain viable, would support these objectives.

The 1981-85 Plan also calls for shifting a larger share of the financing of investments in agriculture to the private sector and expanding the role and lending activity of the CNCA. The Project would support this goal. The need for the private sector to generate new economic activity is underscored as the government finds its own resources increasingly strapped.

3. Consistency with the CDSS

The Project focuses on small- and medium-sized, viable farmers in dryland areas whose capacity for repaying past loans and for taking on new credit has been adversely affected by drought. It also provides support for the institutional and policy development of the CNCA. These are key components of successful efforts to increase cereal production in Morocco. Farmers to be assisted will be in low rainfall, dryland areas. These activities are clearly within the scope of the Mission's approved Rainfed Agriculture Sector Assistance Strategy and strongly reinforce activities being undertaken by other projects in the portfolio (See Annex 3).

This activity will reinforce the overall CDSS strategy in other significant ways. It will provide fast-flowing foreign exchange assistance to ameliorate the balance-of-payments problems of the Moroccan economy. It will provide a foundation for the development of AID assistance programs in the realm of agro-industry and other private sector activities. Further, it will serve as a vehicle for close collaboration on policy issues with other major donors to Morocco, particularly the World Bank. While the above do not constitute objectives of the Project, per se, they are fundamental reasons for supporting the addition of this Project to the AID program in Morocco.

4. Coordination with Other Donors

The Project holds substantial potential for the establishment of meaningful coordination with other donors, specifically the World Bank and the EEC.

4.1 CNCA Performance Under Other Donor Projects

CNCA's principal experience with foreign donors has been its involvement as implementing institution of five World Bank Agricultural Credit Projects, dating back to 1966. The First Agricultural Credit Project consisted of a \$10 million loan to finance investments and equipment to benefit medium and large farms. The loan produced mixed results, due to CNCA's shortage of qualified staff and to GOM insistence that the CNCA finance mostly smaller farms, contrary to project objectives.

Under the Second Agricultural Credit Project (1973-76), a \$34 million loan was provided for similar purposes. This time a number of institutional improvements were emphasized, such as the need to increase profitability and reliability of financial data. The results were favorable. In particular, the CNCA increased its interest rate levels for the first time under this loan.

The Third Agricultural Credit Project (1977-79) consisted of a \$35 million loan, again for medium- and long-term lending. However, the range of beneficiaries was enlarged to include Agrarian Reform Cooperatives, farmer pre-cooperative groups, and small farmers. The project had a positive impact on beneficiary incomes and on the economy as a whole. It also resulted in further institutional improvements in the CNCA, such as the establishment of a monitoring and evaluation system, further increases in interest rates on sub-loans, an increase in the number of CRCAs and CLCAs, and greater decentralization of lending decisions.

The Fourth Agricultural Credit Project (1979-82) provided the CNCA with \$70 million from the World Bank, \$50 million from Germany's KFW, and \$25 million from IFAD. The project was generally successful. However, a number of shortcomings were identified. For example, lending to Agrarian Reform Cooperatives and to agroindustries, the latter being a major thrust of the project, amounted to only 32 percent and 21 percent, respectively, of initial projections. In addition, although interest rates were further raised, they remained negative in real terms, and insufficient to ensure adequate profitability. Finally, the monitoring and evaluation unit was found to be inadequate and disbanded in 1980.

Under the Fifth Agricultural Credit Project, the World Bank is providing a \$115 million loan that will address those problems encountered in the previous project and further strengthen the CNCA. This loan will finance lending operations, the development of CNCA's physical infrastructure, the purchase of EDP equipment, and technical assistance. With respect to CNCA's institutional development, the World Bank project is giving particular emphasis to:

- Improving the CNCA's internal Management Information System (MIS) and establishing a new, streamlined, subloan monitoring system;
- Developing a training program for CNCA staff;
- Adjusting on-lending rates to allow the CNCA to generate sufficient revenues to build up adequate provisions and protect its equity from monetary erosion; and

- Increasing access to credit for small farmers, by expanding branch network coverage experimenting with new credit policies and procedures.

4.2 Coordination with the World Bank

A convergence of goals does indeed exist between AID and the World Bank with respect to the CNCA. This is particularly true in terms of: (1) the application by CNCA of positive interest rates in real terms; (2) the creation of an efficient Management Information System, in particular through computerization; (3) the improvement of the CNCA's monitoring and evaluation capacity; and (4) the financing of private sector initiatives and, in particular, agro-industry.

With respect to interest rates, both the World Bank and AID have, over the past ten years, been proponents of the application of positive and/or market level interest rates on loans granted by rural credit institutions in the developing world. During the three most recent Agricultural Credit Projects, the IBRD has encouraged the CNCA to increase its interest rates to levels which are now certainly positive in real terms and not far from rates currently applied by Moroccan commercial banks. ¹

The proposed AID Project provides for standard CNCA interest rates on new loans (9-11 percent for short-term and 12-13 percent for medium/long term loans). The fact that the interest rates on the loans being rescheduled is subsidized should not prove detrimental to these positive interest rate policies, nor jeopardize past accomplishments in this area. The clear purpose of the Project is to help drought-stricken farmers reschedule their overdue loans and obtain needed new loans. Aside from this emergency program, it is clear, as already stated, that CNCA management is still committed to its interest-rate policy. This is evidenced by their recent hike in interest rates, which occurred in November 1983. Moreover, the CNCA is committed, under the Project Agreement to the Fifth Agricultural Credit Loan, to review, and if necessary revise, its interest rate structure annually, based on inflation and other criteria, to insure that interest rates continue to provide adequate return and maintain the institution's financial stability.

In the other three areas of focus mentioned above, the AID Project will reinforce policy options already encouraged by the IBRD's Fifth Agricultural Credit Project. The Project will assist the creation of an efficient Management Information System to support credit reform. It will also contribute to the strengthening of CNCA's Monitoring and Evaluation capacity, through the appointment of a long-term Advisor to the institution. Finally, it is designed to prepare the ground for future policy initiatives that will be linked to the private sector and, in particular, to agro-industry.

^{1/} The base rate applied by Moroccan banks to its best clients is currently 14 percent.

4.3 Coordination with the EEC

At the time of the PID, AID was considering the creation of a common pool of funds with the EEC, out of which CNCA would have extended loans to drought-stricken clients of both the CRCAs and CLCAs. Since then, the EEC, which had a head start in developing its project, decided to forsake the idea of a funding pool and fund exclusively drought-stricken CLCA customers.

This new approach stemmed from policy decisions by the EEC to: (1) make its funds available to the smallest CNCA clients, that is those of the CLCA; and (2) to demand that these farmers receive highly subsidized interest rates of 2 percent on the rescheduling of their loans (new lending using EEC funds will, nevertheless, be at standard CLCA levels). As CNCA administrative costs are estimated at 3 percent, the 2 percent interest rate requirement means that the CNCA will not cover these costs. Apart from these two requirements, the involvement of EEC in monitoring and participating in the program is limited.

Since the rescheduling needs of CLCA clients are largely being met with EEC assistance, AID has decided to target its assistance to the next higher income tranche. These are CRCA clients with fiscal revenues of less than Dh 6,000 (note that the ceiling on CLCA clients was recently raised from 3000 Dh to 6000 Dh). This shift in AID's target group, however, is not detrimental to the achievement of project objectives, nor to the fulfilment of AID's mandate to help the rural poor. As is demonstrated in the Social Analysis, drought-stricken CRCA clients merit AID assistance on strictly poverty grounds. Furthermore, there are reasons to believe that CRCA clients are an even more appropriate target group for AID assistance than CLCA clients. As is shown in the Social Analysis, lower income CRCA clients are more likely to have potentially economically viable operations, and thus more likely to effectively use available new credit to purchase inputs, and so forth. CLCA clients, on the other hand, are generally more oriented to subsistence agriculture, or are part-time farmers who receive a major part of their income from non-farm activities.

An original objective of AID in promoting the pooling of AID and EEC funds was the hope that the two organizations would cooperate on policy issues being discussed with the CNCA. However, given the EEC's insistence on highly subsidized interest rates and the clear bias of its program towards welfare, rather than production-oriented credit, it appears that EEC and AID objectives and views on policy issues differ significantly. Under this project AID will cooperate with the EEC to the extent possible.

5. Establishing a Policy Dialogue with the CNCA

AID funds will allow the CNCA to reschedule unpaid loans at subsidized rates of interest. Further, AID has been encouraging financial institutions, particularly in the rural credit area, to apply positive rates of interest in real terms and to emulate market rates as closely as possible. This policy will be pursued. The CNCA has been working with the World Bank on this particular issue since 1973. As a result of this dialogue, substantial benefits, including improved overall profitability, have already been derived by the CNCA from higher interest rates. CNCA management now defends the

positive interest rate policy as its own. This policy should continue to be followed in the near future, barring a sudden GOM demand for a lowering of interest rates.

Meaningful policy dialogue on other important issues mentioned in Chapter II.C.2., such as a review of current lending purposes or an examination of new lending activities, should be greatly facilitated by the recent creation of a central Monitoring and Evaluation Unit, reporting directly to the Director General. Although clearly dependent on the availability of yet-to-be selected EDP services throughout the organization, the Unit appears to have set for itself a rigorous, yet realistic, work-plan for the future

II. PROJECT DESCRIPTION

A. Goal and Purpose

The Project Goal is to ensure the long-term viability of small- and medium-scale dryland farming operations in Morocco, many of which have been severely affected by the prolonged drought.

The Project Purpose is two-fold: (1) To assist drought-stricken farmers to restore the productive capacity of their farming operations by providing them with temporary relief on their unpaid loans and access to fresh credit; and (2) To strengthen the capability of the CNCA to promote and assist the development of small- and medium-scale dryland farming operations, by providing it with (a) additional lending capital for drought-stricken farmers, and (b) appropriate technical assistance, training and commodities.

B. Anticipated Project Achievements

1. Strategy

The Project will provide \$13.5 million in loan funds to capitalize the CNCA and enable it to extend new loans to drought-stricken farmers located in dryland areas. It will also provide a \$1.5 million grant that will be used to strengthen CNCA as an institution. This assistance will permit both farmers and the CNCA to cope with the emergency situation created by the drought. It will also provide an opportunity for USAID to establish a solid relationship with the CNCA, at both policy and operational levels, and prepare the ground for possible future AID initiatives in the area of rural credit.

2. Benefits to Farmers

The Project's emergency assistance component will involve making fresh loan capital available to CNCA for onlending to farmers. The beneficiaries of such credit will be farmers (including those in Agrarian Reform Cooperatives) for whom the CNCA has approved the rescheduling of unpaid loans. These loan funds will present drought-stricken farmers with an opportunity to start afresh, increase future farm income, and to eventually reconstitute their farm's productive capacity. This is an urgent need. As will be further shown in Chapter V, the Financial Analysis, these farmers have used most of their available cash to carry themselves through the recent drought years. Further, they are in the process of exhausting their accumulated savings, traditionally held in the form of livestock.

AID funds will be specifically targetted to the smaller clients of the CRCA (Caisse Regionale de Credit Agricole). These will include individual farmers with fiscal incomes of between Dh 3000 and Dh 6000, ¹ and those who are members of Agrarian Reform Cooperatives. ² The beneficiaries of the Project will be small- and medium-sized dryland farmers. The majority of the smaller, more marginal farmers (those with fiscal incomes of less than Dh 3000) are clients of the CLCAs (Caisses Locales de Credit Agricole). A rescheduling program to assist these farmers is being funded by a \$20 million loan/grant from the European Economic Community (EEC).

The prime objective of the loan component of the Project is to allow the CNCA to reschedule farmer loans and to provide them with new seasonal loans for the upcoming planting season. Therefore, the first major achievement to be expected from this component of the Project is a renewed commitment by borrowers with respect to the repayment of their rescheduled loans and the reestablishment of a workable and trusting relationship between the farmers and the CNCA. Despite their goodwill, most of these farmers are no doubt rapidly losing faith in their ability to ever repay their loans and, therefore, to maintain an acceptable credit standing with the institution. If adequately motivated by CNCA credit agents, many of these farmers may regain confidence in their capacity to handle institutional credit and will be convinced once again of the advantages of maintaining a long-term client relationship with the CNCA.

In a more indirect but no less meaningful way, the Project will also contribute to the preservation or restoration of the viability of farming operations, thus permitting many of the beneficiaries to remain on their farms, rather than migrate to already overcrowded urban areas. If the project

1/ Between U.S. \$333 and \$666. CNCA uses fiscal income to determine maximum loan amount granted to a given farmer. Fiscal income is determined by the government for tax purposes, and is based on the farmer's assets. However, since the GOM has decided to abolish income taxes for agriculture until the Year 2000, this fiscal income data will no longer be collected by the Ministry of Finance. Therefore, the CNCA must develop alternative methods for calculating maximum loan amount.

There is no direct relationship between fiscal income and real income. The latter may vary from 3 to as much as 20 times fiscal income according to location, size of farm, tenure status, etc. Since the principal determinant of fiscal income is the amount of land and livestock owned by the farmer, however, the difference between real and fiscal income will be much narrower at lower fiscal income levels, such as for those farmers benefitting from this project.

2/ Loans are extended to Agrarian Reform Cooperatives as a unit, and the farmers within a given cooperative will have varying fiscal income levels. Therefore, the fiscal income criteria is not applied to that group. AID will assist the CNCA to reschedule all of the 366 Agrarian Reform Cooperatives for which rescheduling applications have been approved.

preserves the farming status of even a small proportion of its overall beneficiaries, it will have served a valuable social purpose, one consistent with both AID and GOM long-term priorities. Further details of these benefits are contained in Chapter VII, the Economic Analysis.

3. Benefits to the CNCA

As for the CNCA, major project benefits should derive from reestablishing positive borrower attitudes towards repayment. Specifically, the institution will be in a better position to eventually collect many loans which would have proven uncollectable in the absence of a comprehensive loan rescheduling program. In this respect, the break-even analysis shown in Chapter IV.C. gives reasonable assurance that the financial benefits of the Project to the CNCA should, indeed, exceed costs, i.e. that the better recovery rates anticipated from the rescheduling program will more than compensate for the loss of income resulting from the interest rate concessions which will be granted.

Anticipated benefits from the institutional development component of the Project will be spread out over time. Some initiatives may lead to specific, measurable actions, such as interest rate adjustments or new lending programs in the short term. Other benefits, particularly in the areas of staff training and the creation of an efficient Management Information System, may only become apparent over time. The general aim of the Project will be to help build a sound rural development institution capable of delivering needed credit services to small farmers in viable and effective ways. The CNCA is a strong, reputable agricultural credit bank, comparing very favorably with most similar institutions in LDC's. It has made impressive gains in expanding lending to small farmers, through increased numbers of local branches and mobile banks and through simplified loan procedures. It has also increased its interest rates closer to open market rates and, under the IBRD's Fifth Agricultural Credit Project, it is moving further in this direction. It is concurrently attempting to reduce loan processing costs through computerized data processing, to launch or expand innovative lending programs, in particular to agribusiness, and to mobilize rural savings.

The Project will represent a vehicle for engaging CNCA in policy dialogue aimed at certain aspects of credit reform and, in concert with other donors, will promote the development of CNCA as a strong financial institution with policies and programs appropriate to sustained economic growth. The Project will explore with the CNCA its role in undertaking additional development tasks currently being unaddressed or performed ineffectively by the public sector, such as supervised credit or lending for land consolidation and inheritance reform.

C. Project Activities

1. The Drought Recovery Program

1.1 The Concept of the Program

This program will be funded from the local currency proceeds of the \$13.5 million loan to the GOM. However, a clear distinction should be made between the main purpose of the program, which is to allow the CNCA to reschedule the debts of drought-stricken farmers, and use of cash funds made available through the Program. Rescheduling, as a bookkeeping operation, converts overdue maturities into future maturities. Nevertheless, since the need for rescheduling results from non-collection of previously maturing loans, rescheduling of overdue loans creates a shortfall in loan capital resulting from non-collection of past and current installments. This, in turn, affects lending activity. By providing the additional capital needed, this Project will allow the CNCA to avoid sharp cutbacks in its overall lending program, and permit it to extend fresh credit to farmers who have agreed to reschedule and repay their overdue loans.

1.2 Execution of the Program

The Project will become operational at the time the CNCA is credited with the proceeds of the \$13.5 million made available to the GOM by AID. However, since AID funds are not expected to be available to CNCA before early 1985 at the earliest, i.e. well after the start of the new campaign, the CNCA is already making preliminary arrangements to reschedule loans and will start making new loans to eligible beneficiaries of such reschedulings from the resources it has available, as soon as the new planting season is launched. Thus, AID will, at least in part, be "reimbursing" CNCA for advances already made to eligible farmers, probably resulting in the actual disbursement by the CNCA of much of the AID funds available as soon as CNCA receives them.

The CNCA had received and reviewed, as of mid-September 1984, all of the applications for rescheduling received during a rescheduling campaign which took place in July and August, 1984. Thus, the CNCA now knows which loans are to be rescheduled. Until assurance is received that AID funds (and those from the EEC) will indeed be forthcoming, however, the CNCA will only grant temporary one-year extensions on overdue or currently due installments. Since rescheduling was a precondition to obtaining new loans, this was necessary to permit the CNCA to make seasonal loans to eligible clients for the 1984/85 campaign. If AID funds do not become available, the CNCA will still provide the temporary one-year extensions. However, it will encounter liquidity problems in early 1985 and will be forced to curtail its lending later at that time. Rescheduling by the CNCA without fresh loan capital will be a futile exercise, as farmers will not be able to restore their farming operations, and therefore their financial viability, without access to new capital.

Total loans to be rescheduled for clients falling within the above eligibility criteria amount to approximately Dh 215.1 million (or \$23.5 million at a 9 Dh/\$1 exchange rate), and involve a total of 9,751 individual clients, plus up to 12,250 farmers who are members of Agrarian Reform

Cooperatives. ¹ The design team has estimated that individual CRCA clients borrow an average of \$1811 per year and Agrarian Reform Cooperatives borrow an average, per member, of \$549 per year. Thus, the demand for new loans in 1984/85 from the estimated 22,000 Project beneficiaries will be \$24,382,000. Of this, AID will contribute \$13.5 million, leaving a gap of \$10,882,000 to be covered by the CNCA from its own resources (see Section III.C., GOM Contribution).

1.3 Eligibility Criteria

In order to benefit from the rescheduling/new loan program, borrowers with overdue loans must meet the following three preconditions:

- Be individual clients of CRCAs or members of Agrarian Reform Cooperatives that are clients of CRCAs;
- If individuals, have a fiscal revenue of less than Dh 6,000; and,
- Received approval by the local CRCA credit committee for rescheduling, based upon an assessment that their failure to repay their loan(s) is directly attributable to the drought conditions which have prevailed since 1980/81.

1.4 Characteristics of the Program

New loans The CNCA will not grant new loans to farmers who have overdue loans unless overdue loans have been rescheduled. Therefore, a prerequisite for a farmer to benefit from a new seasonal loan(s) will be that his application for rescheduling has been approved. The exact amount of the new loan(s) will be derived through CNCA's normal review process, and will be governed by applicable CNCA lending norms. Additionally, the amount of the new loan(s) will take into account the farmer's reasonable projected repayment capacity, including future installments on his rescheduled loan(s). In contrast to the rescheduled loans, the new loans, whether seasonal or medium-term, will carry the currently-applicable CNCA interest rates and other terms and conditions of any normal new loan.

Rescheduled loans Insofar as the rescheduled amount of each loan is concerned, the borrower will benefit from a rescheduling of all amounts overdue (interest included) up to the 1984 maturities. Installments on medium-term loans or previous "consolidation" loans falling due in 1985 and beyond will not be included. On the other hand, currently due installments on consolidation loans granted during the 1981-84 period may be included, since many of these have remained unpaid due to the drought.

Rescheduled loans will carry repayment terms of up to 10 years, according to the borrower's present and future debt-repayment capacity. No grace period will be granted, since it is anticipated that, under normal weather conditions, borrowers should be in a position to carry the earlier maturities

^{1/} The exact number of farmers in the 366 Agrarian Reform Cooperatives that will be benefitting from rescheduling assistance is not known. This estimate is based on an national average of 33.5 members/cooperative.

(see the Section IV.B., Analysis of the Rescheduling Program for a discussion of this issue). As for loan conditions, a 6 percent interest rate is proposed on rescheduled amounts (refer again to the Section IV.B., for an analysis of the appropriate interest rate structure, both from the CNCA's and from the borrower's standpoint).

1.5 Use of Reflows

One of the justifications for the Project is to compensate for the shortfall of the CNCA's loan capital resulting from the drought, and thus to reduce, as much as possible, the impact of the drought on the institution's overall lending activity. Therefore, no restrictions will apply to the use, by the CNCA, of reflows (repayments of principal and interest) from the original loans granted to drought-stricken farmers.

2. Strengthening CNCA as an Institution

A major component of the Project Purpose is to promote the long-term capacity of the CNCA, as a credit institution, to effectively provide needed credit services to Moroccan farmers. This is to be achieved by funding a number of separate, discrete activities. These will include: (1) technical assistance, including assigning a long-term technical advisor to CNCA; (2) specialized studies designed to assess the impact of current CNCA lending practices or explore possible new approaches to lending; (3) a range of training activities focusing on subjects critical to CNCA's long-term development, namely credit evaluation, loan monitoring, accounting, electronic data processing and control; and (4) the procurement of a number of micro-computers to improve the efficiency of several critically-important departments at the head office. Also, two project evaluations will be funded under this institution-strengthening component.

2.1 Long-term Technical Assistance

The presence of a long-term Agricultural Credit/Agribusiness Technical Advisor will serve two purposes. First, he/she will be available to the CNCA to help assess the effectiveness and appropriateness of current lending policies; to make full use of the findings and recommendations of the specialized studies carried out under the Project (see paragraph 2.2 below); and to help define strategies for the future. This long-term Advisor will, in particular, assist the CNCA in the development of a comprehensive program for lending to agribusiness. Second, the Advisor will ensure adequate contact and a flow of information between CNCA and AID, thereby creating a knowledge base for possible future project activities and policy initiatives on the part of AID, particularly in the areas of agro-industry and assistance to the private sector.

As shown in the proposed scope of work (see Annex 5), the Advisor will be a agricultural credit specialist, with fluent French language capability, experience working in developing countries and, preferably, with private sector expertise. Extensive experience in banking and finance would be very useful. Since the CNCA is a well-established and highly efficient institution, with highly professional senior staff, it will be critical to select a highly qualified and experienced candidate. Much of the success of the institution-strengthening component of this project will depend upon this

individual. Therefore, he must have the credentials and experience to command the respect of senior CNCA management. Finally, it would be advantageous if the Technical Advisor were familiar with data management. CNCA's management style and decision-making will, no doubt, be profoundly affected by the gradual computerization of its head office and field units, a process which will, in turn, open up new opportunities for improving institutional efficiency, measuring staff productivity, and so forth. The Technical Advisor, who will work in close collaboration with CNCA management, will be funded for a period of three years.¹ This amount of time is considered a prerequisite to affect the CNCA's long-term strategies in a positive way and to conceptualize new policy orientations for AID.

2.2 Specialized Studies

Detailed analyses of the impact of current CNCA lending activities and the socio-economic conditions affecting CNCA credit will be undertaken. An assessment of current CNCA policies requires a clear understanding of why CNCA is financing certain types of activities (particularly at the CLCA level), how effective these interventions are from the farmer's point of view, and what new policies would be both desirable and feasible in the future. The objective of these studies will be to produce specific recommendations to be subsequently implemented by the CNCA, as well as to create a knowledge base for AID.

A comprehensive list of the studies to be undertaken will be developed upon the arrival of the long-term Advisor. Critical issues or concerns that may be investigated were identified during the course of the project design. These include:

- Reviewing actual and potential CNCA lending to agribusiness and identifying policy and programmatic changes that could increase the range and effectiveness of such credit.
- Assessing macro and micro-economic benefits of credit;
- Identifying the relationship between rural credit and agricultural production, and eventually between credit purpose and actual credit usage;
- Examining the appropriateness of overall lending policies (type of credit, loan terms, and so forth) with respect to the specific characteristics and needs of particular regions or types of clients;
- Reviewing the linkage between credit and the "viability" of the borrower, particularly when dealing with marginal farmers at the CLCA level, and the effectiveness of unsupervised credit to the small farmer vs. the anticipated benefits, but higher cost, of supervised credit;
- Exploring the development of special credit programs directed towards land reform, and to the improvement of collective lands;

^{1/} The Advisor's counterpart would be the Head of the newly-established and critically-important Monitoring and Evaluation Unit.

- Developing a long-term credit strategy to deal with drought conditions, if indeed such conditions were to continue over the coming years; and,
- Creating an efficient Management Information System in conjunction with CNCA's ongoing computerization effort.

It is anticipated that, in all, approximately ten special studies will be carried out, each involving roughly six person-weeks of effort. Ideally, in order to allow for an in-depth review of these critical issues, each team will be comprised of at least two people, an expatriate and a Moroccan. Professional expertise, available within Morocco in several of the above areas, should be tapped as required. It is proposed that a comprehensive plan for the special studies be developed by the long-term Advisor, working in conjunction with the CNCA's newly-created Monitoring and Evaluation Unit. This should be accomplished within three months following his arrival in country. This plan will clearly identify the subject of each study, establish priorities among the various studies proposed, determine the amount of time required, the composition of each team, and the preferred expertise of team members, and suggest a timetable for completing the studies prior to the project completion date. This plan will then be endorsed by the Mission before actual commissioning of each specific study.

2.3 Review of the Credit Needs of Women in Moroccan Agriculture

In addition to the above studies, which would be conducted out of the CNCA evaluation office, the Project proposes to conduct a special study on the potential for providing agricultural credit to women on small farms. Such an effort would be ideally completed by an agricultural economist, two social scientists, and an agricultural technician with field experience in small-scale agriculture and livestock production projects.

Over a three-month period, the team would investigate, in three different regions of Morocco: 1) the present total labor contribution (both family and wage labor) of Moroccan farm women; 2) the specific roles of these women in agricultural production activities; 3) the existing skills and the need for skill improvement of such women; 4) the applicability of experience from other countries to the Moroccan situation; 5) the social, economic and technical feasibility of introducing new activities; 6) possible areas of immediate limited research for rapidly implementable activities; and 7) the attitudes and need for participation of male family members in implementing any proposed activities, and suggested means of obtaining their necessary cooperation.

The special status given to this study stems from the review team's assessment that inadequate consideration has been given to developing specific interventions appropriate to women family members who, in fact, provide major labor and even management inputs. It is recommended that this study be conducted with Moroccans, but outside of the immediate structure of the CNCA. This is because AID should possess hard data and solid proposals prior to attempting to persuade the CNCA of the legitimate need for special action in this area.

2.4 Training

Training is a particularly critical activity for CNCA at this stage of the institution's development, given the planned renovation of its accounting system and computerization of its entire operations. In anticipation of this, a comprehensive training plan has been developed, whereby professional field staff will be attending seminars and workshops at the head office of the CNCA.

Training Center Unfortunately, the CNCA's Training Center, which has been established in Rabat and consists of one large and two smaller rooms, lacks adequate training aids and equipment. Hence, AID has been requested to help equip this center. Particular needs include: (1) a video system, including a TV screen and camera; (2) a slide projector; (3) a still camera; (4) an overhead projector; (5) a photocopier to reproduce teaching materials; (6) a microphone and amplifier; and (7) a set of magnetic boards.

Technical Library The CNCA currently has a small technical library. However, it is vastly under-equipped due to budget constraints. AID funds will help buy technical books and enable the CNCA to subscribe to specialized magazines, in order to make them available to its professional staff, in full support of other training activities.

Computer-assisted Training Since computer training will be one of the major focuses of the Training Center in the coming years, the CNCA wishes to install five micro-computers for simulation of real-life situations which bank staff will face later on in the field. The CNCA will need to procure hardware which is compatible with software that has been provided by the World Bank and by the Paris-based International Center for Training of Bank Professionals.

Observation Training Overseas At this stage in its development, upper-management CNCA staff would benefit from the opportunity to observe rural credit programs in a fairly advanced stage of development. The most relevant experiences will be in industrialized countries of Western Europe and North America or in countries in an intermediate stage of development such as in Latin America. CNCA has requested AID to cover the expenses of three observation tours overseas, each involving teams of five people.

Short-term Training Overseas Technical training, lasting an average of three months, is required in the areas of electronic data processing (five programmers or analysts), project evaluation, control, monitoring, banking and accounting. Such training will most likely be provided either in the U.S. or in France. If training in France is deemed necessary and justified, a waiver will be sought.

Training of Educators The CNCA is currently relying on external educators, as well as on bank professionals who have exhibited teaching abilities, to provide on-going training to its staff. In order to carry out its ambitious training program and make its Training Center fully operational, the CNCA now needs to train a corps of full-time, fully-trained educators. The CNCA wishes, in a first stage, to train an educators for each of five areas, credit evaluation, loan monitoring, accounting, electronic data processing and audit/control, respectively. Such training, which would also take place either in the U.S. or in Europe, would average three months in duration.

2.5 Micro-computers

Initial computerization of the CNCA's entire network will be financed by the World Bank's Fifth Agricultural Credit Loan. This will include the design of an electronic data processing (EDP) system, as well as an allocation of \$1 million for the initial purchase of micro-computers for 20 CRCAs. However, CNCA has requested AID to provide up to 7 additional micro-computers for technical departments at the head office, in order to allow them to complete their respective tasks more efficiently and to be fully synchronized with computerized field offices. These micros are needed for the following CNCA departments or units: Special Studies, Monitoring and Evaluation, Credit, Treasury and Banking Activities, Personnel, Equipment and Supplies, and Accounting. This equipment will have to be compatible with the type of equipment selected for field offices, i.e. read the diskettes sent in to head office.

2.6 Evaluation Activities

Evaluation activities, which are fully described in Chapter VIII, Project Implementation, will be financed under the grant component. An audit will be undertaken in October 1985 to verify that the loan funds provided by AID have been disbursed on a timely basis to eligible beneficiaries. An evaluation in October 1987 will assess the success of the project, as a whole, in meeting its Goal, Purpose, and Output objectives. These two evaluations are included under the Project's institution strengthening component because they will provide useful baseline data on project activities and, therefore, will be useful as a management tool by all parties involved in the Project.

III. FINANCIAL PLAN

A. Estimate of Expenditures

The Project's plan for projected expenditures, covering the various activities listed in Chapter II, is as follows.

1. Drought Recovery Program

The Drought Recovery Program will involve a \$13.5 million contribution in the form of a loan to the GOM, at terms and conditions to be mutually agreed upon by AID and the Government. These funds will then be on-lent by the GOM to the CNCA. The CNCA will in turn use this money to fund sub-loans to project beneficiaries. As already pointed out, these are emergency funds which will be disbursed in a single installment during FY 1985 to cover seasonal and investment loans granted to farmers during the 1984/85 agricultural campaign (refer to Section B. below for a justification of such disbursement in a single installment).

2. Institution Strengthening Activities

In addition to the \$13.5 million loan to the GOM, a \$1.5 million grant will be made to the CNCA to cover the institution-strengthening activities described in Chapter II. In view of the variety and complexity of the tasks to be undertaken under this particular component, particularly with respect to the long-term technical assistance and to the specialized studies, and the high level of coordination required between these various activities, a single institution will be sought to carry out the assignment. The proposed breakdown of the \$1.5 million grant component as shown below therefore includes any overhead costs and other fees likely to be applied by an outside contractor.

a.	Long-term Advisor (3 years):	\$400,000
b.	Specialized Studies:	\$300,000
	10 studies x 12 person-weeks per study (assuming an average 50 percent expatriate and 50 percent local time)	
c.	Review of the Agricultural Credit Needs of Women: (four persons x three months, involving two expatriates and two Moroccans)	\$100,000
d.	Training	
	Equipment for Training Center	\$ 15,000
	Books and supplies for Technical Library	\$ 10,000
	Five micro-computers for Training Center	\$ 50,000
	Observation Training (3 teams of 5 people for two weeks)	\$ 50,000
	Short-term Training for Computer Staff (5 people for 3 months)	\$ 60,000
	Short-term Training overseas for Technical Staff (5 people for 3 months)	\$ 60,000
	Training of Educators overseas (5 people for 3 months)	\$ 60,000

e.	Micro-computers for Technical Departments at head office: 7 micros including ancillary equipment and maintenance contract	\$150,000
f.	Evaluation Activities (23 person-weeks for an audit and an evaluation)	\$ 70,000
g.	Contingency Fund	<u>\$175,000</u>
	<u>Total</u>	\$1,500,000

B. AID Project Financial Plan

Table 3-1 shows project expenditures broken down by fiscal year. It is assumed in these projections that loan funds will be available in early March 1985. The \$13.5 million will be disbursed in a single installment, since CNCA's projected cash flow for the current fiscal year shows a sharp negative balance, and therefore an urgent need for new loan funds by February 1985. After taking into account the EEC funds, which are expected to be entirely available by February, the negative cash flow is projected to be Dh 89 million (\$9.9 million) by the end of February and Dh 137 million (\$15.2 million) by the end of March 1985; availability of AID loan funds by that date would thus allow CNCA to avoid any substantial cut-back in its projected lending program. Moreover, most of the sub-loans to be funded through the Drought Recovery Program will have already been disbursed by that time, making AID funds "claimable" by CNCA.

C. Methods of Implementation and Financing

The USAID/Morocco's 'Financing Policy and Procedures' document prepared by the USAID/Morocco Controller stipulates existing methods of financing USAID activities in Morocco. Project Implementation and Financing information is contained in Table 3-2. The loan will be disbursed via an AID/Washington Direct Reimbursement to the borrower. The Loan, which is the main portion of the planned project expenditure, will be negotiated by the Mission to ensure that terms and procedures are appropriate to local practices and AID policy. The total amount of the Loan is anticipated to be \$13,500,000. In light of the GOM's severe austerity measures, the GOM does not have the financial resources available to make timely payments for AID-funded goods and services and to seek reimbursement from USAID.

Rather, USAID has selected the Direct Letter of Commitment method for short-term technical services, commodity procurement, and short-term training. As most of these contract services will be provided in Rabat, Morocco, adequate monitoring and oversight will be assured. Internal control is deemed to be good. For these categories of expenditures, \$1,255,000 has been budgeted.

The USG Project contribution covering evaluation/monitoring/auditing services will be secured via an AID/W IQCs. USAID/Morocco will issue a PIO/T for specific scopes of work under these existing IQC arrangements to reduce the administrative burden of full competition and duplication of effort. Direct payment will be made to the contractor. For the audit, \$24,000 has been budgeted. For the evaluation, \$46,000 has been budgeted.

Table 3-1: AID Project Financial Plan (\$ '000)

<u>Activity (Starting-Ending date)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>Total</u>
1. <u>Loan Fund (March 1985)</u>	13,500				13,500
2. <u>Grant Component</u>					
a. Long-term Technical Assistance (March 1985 - March 1988)	90	128	128	54	400
b. Specialized Studies (Two in FY 85, four in FY 86, four in FY 87)	60	120	120		300
c. Review of the Credit Needs of Women (FY 86)		100			100
d. Training					
- Equipment for Training Center (FY 85)	15				15
- Books/Technical Library (FY 86)		10			10
- Five Micro-computers for Training Center (FY 86)		50			50
- Observation Training (One tour in FY 85, One in FY 86, one in FY 87)	16	17	17		50
- Long-term Training for Computer Staff (FY 86)		60			60
- Long-term Training for Technical Staff (FY 86)		60			60
- Training of Educators (FY 86)		60			60
e. Seven Micro-computers for Technical Departments (Three in FY 86, four in FY 87)		64	86		150
f. Evaluation Activities (An audit in FY 86, and an evaluation in FY 88)		24		46	70
g. Contingency Fund	<u>40</u>	<u>50</u>	<u>50</u>	<u>35</u>	<u>175</u>
Total	13,721	743	401	135	15,000

Table 3-2: Methods of Implementation and Financing - USAID Contribution

Method of Implementation	Method of Financing	Approximate Value	
		(\$ '000)	Percent
Two-Step Loan -- First step is in dollars to GOM. Second step is from GOM to CNCA in dirhams.	AID/W Direct Reimbursement to the Borrower.	13,500	90.00
Technical Assistance -- Long- and short-term TA; Short term training; and Commodities. Host Country Contract with U.S. firm or institution.	Direct Letter of Commitment	1,255	08.37
Audit -- Short-term technical assistance (IQC AID TDY, or direct contract with an auditing firm)	Direct payment.	24	00.16
Evaluation. -- Short-term technical assistance (IQC, AID TDY, or direct contract.	Direct payment.	46	00.31
Contingency	To be determined.	175	1.16
TOTAL USAID CONTRIBUTION		15,000	100.00

Finally, 1 percent of the USG contribution is held for contingencies, estimated at \$175,000. The method of financing will be determined as required, but will comply with the USAID's "Financing Policy and Procedures" document.

It is believed that the above methods of implementation and financing are the most effective, provide thorough oversight by U.S. Direct Hire personnel, and are expeditious. The "Project Officer Checklist for Administrative Approval of Vouchers" (see page 10 of AA/M "payment Verification Policy Implementation Guidance" memo of 12/30/83) will be used by USAID.

The USAID/Morocco Controller concurs with Project 0184's Method of Implementation and Financing Plan and has been delegated the authority to approve the Project Paper authorized in the field and by USAID/Morocco's Director. The Controller's approval appears on the Project Data Sheet.

D. GOM Contribution

The GOM contribution to this project will be in the form of (a) lending capital, over and above that provided by AID, that will be extended to project beneficiaries during the 1984/85 crop season (estimated at \$10,880,000) and (b) counterpart resources directly related to AID-funded activities aimed at strengthening the CNCA as an institution (approximately \$120,000). Total GOM contribution amounts to an estimated \$11,000,000, or about 42.4 percent of total project cost of \$26,000,000.

CNCA lending capital to project beneficiaries is estimated as follows. Total lending by CRCAs in FY 1983/84 was 1,034,272,000 dirhams (U.S. \$142,660,000 at the 1983 exchange rate of 7.25 Dh to the dollar). Roughly 10 percent of this went to 625 Agrarian Reform Cooperatives (with an estimated 20,938 members). Apart from Agrarian Reform Cooperative members, there are approximately 57,000 individual CRCA clients. Thus, the average loan size in FY 1983/84 was 16,300 Dh (U.S. \$1811) for individual clients and 4,940 Dh (U.S. \$549) per Agrarian Reform Cooperative member (this includes both short- and longer-term loans). The Project design team has estimated that the Project will benefit 9750 individual CRCA clients and 12,250 Agrarian Reform Cooperative members. Assuming that the level of CRCA lending in FY 1984/85 will be comparable that of FY 1983/84, the demand for new loans in the coming season by project beneficiaries will be 219,440,000 Dh (\$24,380,000). AID is providing \$13.5 million, or 55.4 percent of this amount. The remaining demand for new loans by project beneficiaries (farmers that are eligible for AID-financed rescheduling) must be met by CNCA's own resources (including medium- and long-term borrowings by the CNCA).

The counterpart contribution for the \$1.5 million institution-strengthening component of the project is estimated at \$120,000. This includes an estimated 75 person months of project-dedicated CNCA staff time (participation in special studies and short-term training) and 36 person months for the counterpart for the long-term Agricultural Credit Advisor. In addition to this, though it has not been figured into the GOM contribution to the Project, the CNCA is providing \$400,000 in counterpart resources as part of the World Bank Fifth Agricultural Credit Loan. This includes staff salaries for the Training Department and the Monitoring and Evaluation and Special Studies Units of the CNCA, all of which are expected to be heavily involved in AID-supported activities.

IV. INSTITUTIONAL ANALYSIS

A. Overview

The Caisse Nationale de Credit Agricole (CNCA), the Project's implementing institution, was founded in 1961 as a wholly government-owned institution with independent legal status and financial autonomy. Its mandate is to help promote agriculture in Morocco by extending credit for agricultural inputs, farm-oriented investments, and marketing purposes to individual farmers, farmer groups and cooperatives, and agriculture-related industries. The CNCA is controlled by a Board of Directors chaired by the Minister of Agriculture and including representatives of the Ministries of Agriculture, Finance, and Interior, the Bank of Morocco, and farmers. The CNCA has a Managing Committee which reviews loan applications beyond the authority of its various field offices. This Managing Committee is chaired by the Director General, who is appointed by Royal Decree and is charged with the CNCA's day-to-day operations. Although the CNCA is financially autonomous, its yearly lending program requires approval from both the Ministries of Agriculture and Finance.

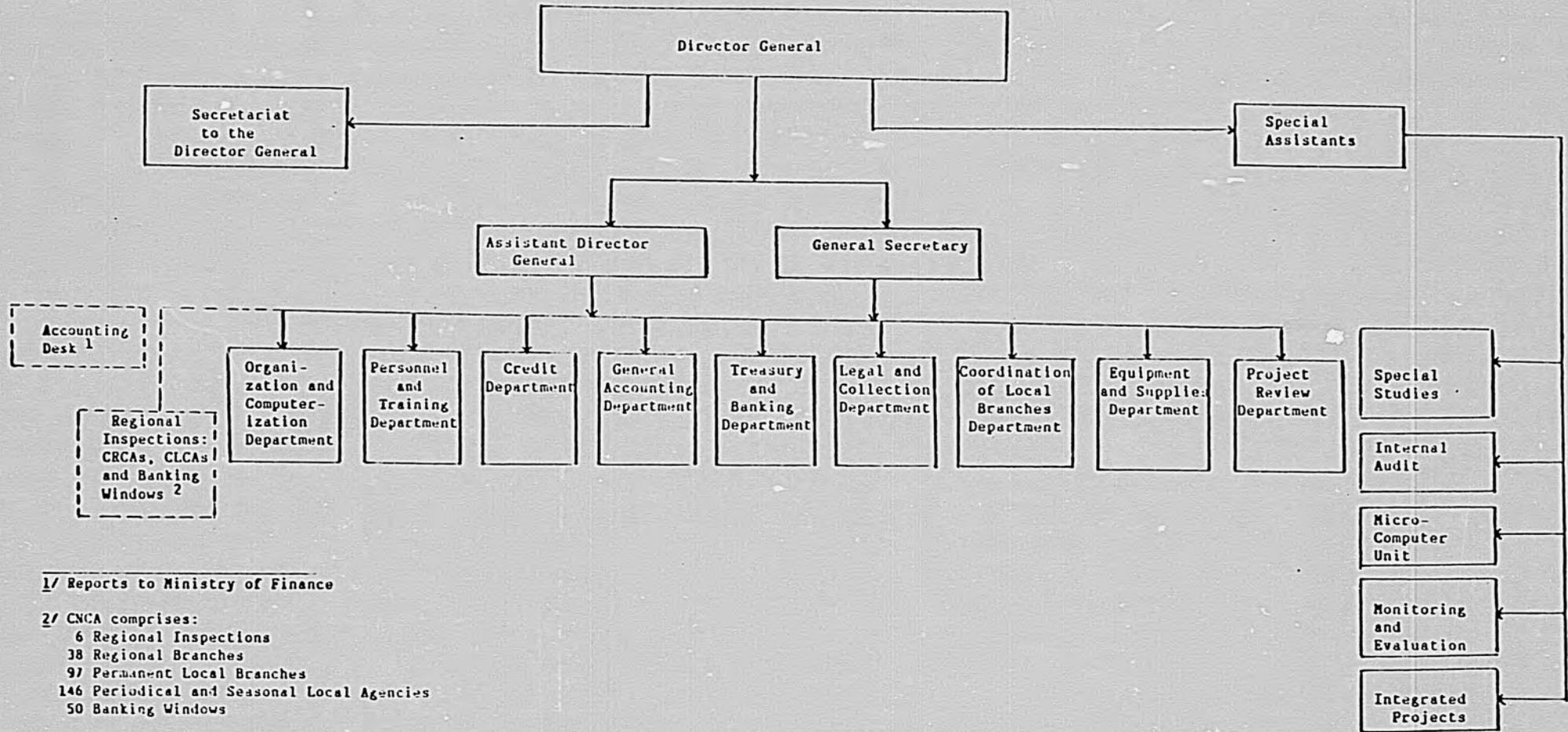
B. Organization and Management

Following its recent reorganization, the CNCA is comprised of nine separate departments reporting to the Director and Deputy Director at the head office, plus six specialized units, including an internal auditing and an inspection unit, which also report directly to top management (see Figure 4-1, Organigram of the CNCA). The Credit Department, which is a key to the effectiveness of the institution's lending activities, is responsible for establishing and updating annually the institution's lending norms and procedures. These lending norms and procedures represent a valuable tool for the evaluation of credit applications by field offices. In addition, the Credit Department is charged with analyzing and presenting to the Managing Committee loan applications which are beyond the delegated powers of the field offices.

CNCA credit is extended through the head office in Rabat, 38 regional offices (Caisses Regionales de Credit Agricole or CRCAs) and 97 local branches (Caisses Locales de Credit Agricole or CLCAs). In addition, 146 seasonal and/or mobile outlets of CLCAs are in operation during peak lending or marketing periods. CLCAs report directly to head office, rather than to CRCAs, although it is understood that the regional offices play a coordinating role within their respective jurisdictions. Both CRCAs and CLCAs are usually comprised of the following three departments: (1) a Loan Department responsible for the analysis of loan applications; (2) an Accounting and Banking Department which keeps track of bank operations; and (3) a Collection and Enforcement Department, which takes over each client one month prior to loan maturity. Field loan departments are normally staffed by agricultural technicians at the CRCAs and by high school attendants at the CLCAs. These levels of education have proven adequate over time to carry on the required duties.

Total CNCA staff currently numbers 2,029 persons, of which around 500 are at the head office. Staff productivity is quite adequate, with 230 loans disbursed per banking staff at the CRCA level and 500 at the CLCA level (1982 figures). All new recruits receive initial training of two to seven weeks.

FIGURE 4-1: Organigram of the Caisse Nationale de Credit Agricole



1/ Reports to Ministry of Finance

2/ CNCA comprises:

- 6 Regional Inspections
- 38 Regional Branches
- 97 Permanent Local Branches
- 146 Periodical and Seasonal Local Agencies
- 50 Banking Windows

In addition, regular bank employees periodically attend seminars and other short courses covering areas such as accounting, loan collection, project analysis and, more recently, electronic data processing. A comprehensive training program for all employees is presently being designed by a newly-created Training Department, under the auspices of the World Bank's Fifth Agricultural Credit Loan. Generally, the CNCA was found to be an efficient organization, staffed with competent professionals, and comparing favorably with similar institutions around the world.

C. Management Information System (MIS)

The CNCA's MIS system is presently in a shambles, due to the unreliability and continuous breakdown of the antiquated computer equipment on which it is based. As a result, most of the data needed by the CNCA is still collected and analyzed manually. In spite of this problem, the amount of important, management-related data available at the head office is quite impressive. Under the auspices of the World Bank Project, the management information system is being entirely overhauled. The first step in this procedure is a comprehensive review of the current accounting system, aimed at streamlining procedures, particularly at branch level. Concurrently, a comprehensive electronic data processing (EDP) system is being developed. This most probably will result in the installation of micro-computers at each regional or local branch. This, in turn, will constitute the basis for the introduction of medium-term management planning and budgeting for each functional unit, and for the establishment of an Internal Management Control Unit, under the direct supervision of the Director General.

Implementation of the above is being undertaken by the CNCA, with the assistance of a Paris-based firm which is providing 55 person-months of technical assistance in the areas of accounting reform and information systems. The latter is being financed under the World Bank Fifth Agricultural Credit Loan, together with \$1 million worth of hardware for the computerization of 20 CRCAs. The system is expected to be fully operational in 1986. The CNCA is already well advanced in the design of the new EDP system which will serve as a base for the entire system. The "architecture" (physical design) of the system is due by the end of 1984. In the meantime, the institution has moved ahead with the procurement of two micro-computers for temporary purposes at the head office.

D. Credit Review and Approval

The CNCA has been actively decentralizing its lending responsibility, simplifying loan procedures, and expanding the range of investments that it will finance. Both at the CRCA and at the CLCA level, the overwhelming majority of loans are approved locally, through Credit Committees made up of representatives of the CNCA, the Ministries of Agriculture and Finance, and farmers.

Lending criteria differ substantially between regional and local levels. At the CLCA level, where precise farm data is mostly unavailable, total credit granted cannot exceed a predetermined ratio of the farmer's fiscal income, that is, 200 percent of fiscal income for short-term credit and 160 percent for long-term credit. However, in those cases where the client has an official title to his land, maximum credit is calculated by applying predetermined norms according to the acreage owned, type of land, and type of

crop (or heads of livestock, if applicable).

The system currently used by CLCAs to determine credit amount will need to be revised, since the GOM will, following its announcement earlier this year of the abolition rural income taxes, cease collecting fiscal income information altogether. The CNCA is currently experimenting with new lending criteria, particularly in the Fes-Karia-Tissa Project. There, credit ceilings applied by CLCAs are linked to yearly installments (including interest) payable by the farmer of no more than 50 percent of his yearly revenues. This method, of course, involves substantially more work on the part of CNCA staff, as detailed information is needed on each farm operation. In addition, each credit review requires an average of 30 minutes against a national average of 10 minutes.

At the CRCA level, appraisal of credit applications is generally substantially tighter. Credit is always based on the farm's actual operation, using specific lending norms applicable to CRCAs. Detailed farm budgets, listing inputs to be financed and anticipated revenues, are systematically prepared for certain types of loans, such as equipment and all other types of investment loans.

Despite the differences noted above between CLCAs and CRCAs, one should point out the importance to each CNCA office of receiving precise lending norms which describe, not only maximum loan amounts according to crop and acreage or other type of activity, but also appraisal criteria, loan terms and conditions and types of lien required. These norms, which are different for CLCAs and CRCAs and are revised annually, constitute a very valuable tool which permits credit agents to safely review credit applications, even in the absence of comprehensive farm data.

E. Credit Monitoring and Collection

Monitoring activities also differ greatly between CRCAs and CLCAs. CLCAs must conduct on-site investigations of 5 percent of all clients annually. CRCAs, on the other hand, are obligated to survey each client at least once every three years with respect to loan utilization (an on-site investigation is compulsory for new clients, medium-term loans, and a number of pre-specified loan purposes). Of course, the data gathered during these surveys will, in turn, be highly valuable when analyzing that particular customer's future loan applications, as most CNCA borrowers are repeat customers.

Timely credit collection begins with adequate initial appraisal and subsequent follow-up. CNCA's efficiency in this area was satisfactory until 1980, the first drought year (See Chapter V, Section A-2.2, Quality of Assets, for a detailed discussion of repayment rates). Loan collection often takes place at local markets during the marketing season, usually in close collaboration with local authorities. After a loan becomes overdue, the CNCA relies on persuasion and, eventually, on the intervention of these local authorities. Only very rarely, however, is legal action or the repossession of land and/or other assets undertaken. Recourse to such actions is viewed by the CNCA as counterproductive in the long-term. Overall, collection policies appear to be adequate, despite the additional burden imposed on field agents by the drought. Timely collection has been an area of constant focus for the CNCA, and is frequently the subject of seminars and other training efforts.

IV. FINANCIAL ANALYSIS

A. Financial Performance of the CNCA

1. CNCA Business Profile

During FY 1983, total loans disbursed by the CNCA amounted to 1,742 million dh (approximately \$194 million), a 16.2 percent increase over FY 1982. For the first time in CNCA history, medium and long-term loans represented over half of the total (872 million dh), reflecting the lengthening of average loan terms for given purposes, as well as a substantial increase in credit limits, particularly for investments. Both of these were designed to allow farmers to reconstitute their productive capacity after several years of drought (for CRCAs taken separately, term credit only represented 46 percent of the total). Overall, term credit went primarily to the purchase of income-producing livestock (34 percent in total and 28 percent for CRCAs only) and to on-farm mechanization (25 percent in total, but 45 percent for CRCAs). Table 5-1 presents a complete breakdown of medium- and long-term credit.

It should be noted that the financing of livestock increased by a hefty 78 percent in FY 1983, reflecting the priority given by the GOM to preserving the existing livestock, on the one hand, and the importation of cattle, on the other. Also, the continuing drought, compounded by a regular fall in the water-table, led farmers to deepen existing wells or dig new ones, producing a 27 percent increase in loans for hydraulic equipment. Concurrently, numerous farmers invested in activities which were less susceptible to climatic changes, such as vegetable gardening (loans for which increased by 61 percent), greenhouses (up 87 percent) and orchards (up 45 percent).

Short-term Credit, the terms of which vary from three to twelve months, helped finance mainly the production of cereals and pulses (34 percent of the total), cattle fattening (20 percent) and cash crops (19 percent). However, in FY 1983 the financing of cereal crops fell by 16 percent from FY 1982 levels, again reflecting the severe lack of rain. From the above, it is apparent that the CNCA has been attempting, in recent years, to reallocate its resources, as best it can, in response to local economic and weather conditions. Table 5-2 provides a breakdown of short-term credit by purpose.

A breakdown of loan activity by branch status shows that total financing provided by CLCAs amounted to Dh 405 million (\$45 million) or 23 percent of the total, while loans disbursed by CRCAs amounted to Dh 1,034 million (\$115 million) or 59.5 percent of the total. The remaining 17.5 percent (Dh 303 million) was disbursed directly from the head office in Rabat. Loan activity for CRCAs increased by 20 percent over FY 1982 levels, as larger CRCA customers invested available cash in new activities that were less affected by the drought.

Table 5-1: CNCA Medium- and Long-term Loan Activity, FY 1981-83 (Dh '000)

	FY 1981	FY 1982	FY 1983	FY 1983 CRCAs Only	Composition of CRCA Funding in FY 1983 (%)
Constructions	69,771	81,067	81,750	33,166	7 %
Land Improvement	15,773	10,640	6,096	2,589	1 %
Wells and Pumps	20,625	34,046	43,092	20,168	4 %
Mechanization	66,805	160,626	214,970	210,673	45 %
Greenhouses	10,352	16,087	30,150	28,720	6 %
Draft Animals	59,057	162,392	77,188	15,351	3 %
Livestock	91,496	168,989	300,399	130,252	28 %
Plantations	24,732	23,257	34,884	6,237	1 %
Agro-Industry	7,110	10,986	24,988	20,777	4 %
Other	<u>5,495</u>	<u>13,568</u>	<u>58,933</u>	<u>3,404</u>	<u>1 %</u>
Total	371,819	681,658	872,450	471,337	100 %

Table 5-2: CNCA Short-term Loan Activity, (FY 1981-83) (Dh '000)

	FY 1981	FY 1982	FY 1983	FY 1983 CRCAs Only	Composition of CRCA Lending in FY 1983 (%)
Cereals & Pulses	212,218	348,209	291,496	190,105	34 %
Vegetables	54,585	70,118	113,173	99,977	18 %
Industrial Crops Plantation	85,368	126,306	161,242	15,398	3 %
Maintenance	18,944	21,689	30,329	30,026	5 %
Other Crops	4,156	4,659	5,909	5,816	1 %
Cattle Fattening	116,424	133,532	169,631	153,830	27 %
Cattle Feed	61,957	96,921	73,048	52,546	9 %
Poultry and other Animal Production	13,660	7,992	11,422	11,385	2 %
Other Short-term	<u>8,976</u>	<u>7,893</u>	<u>12,917</u>	<u>3,852</u>	<u>1 %</u>
Total	579,718	817,319	869,167	562,935	100 %

2. Financial Condition and Profitability

2.1 Financial Condition

At the end of FY 1983, ¹ total CNCA assets represented Dh 3.8 billion (\$421 million), a substantial 42 percent increase over FY 1982. This increase was made possible by the recourse to additional medium and long-term borrowings (see CNCA's comparative balance sheets in Table 5-3). The CNCA's net worth increased to Dh 532 million (\$59 million), reflecting, in particular, a Dh 41 million net profit for the year. Medium and long-term borrowings jumped quite substantially, from Dh 1.0 to 1.7 billion. This provided the bulk of the CNCA's fresh loan capital (see Table 5-4). Of the total, Dh 781 million represented loans from the World Bank, which has, over the years, financed five successive agricultural credit projects. The last such project, the Fifth Agricultural Credit Loan, is currently being implemented (drawings on the World Bank, alone, increased by Dh 247 million in FY 1983). Other term debt resulted from agreements with the German agency, Kreditanstalt fur Weideraufbau, KfW (Dh 303 million), the Arab Fund for Economic and Social Development (Dh 218 million), and the International Fund for Agricultural Development, (Dh 163 million), as well as from GOM Treasury loans. Customer deposits increased, somewhat, to Dh 551 million (up 20 percent), and consisted mainly of demand deposits. The institution's increased reliance on term borrowings led to a jump in its leverage (debt-to-networth ratio) to 6.12, a still acceptable level for a development bank-type institution.

On the asset side, the CNCA's current assets totaled Dh 2.5 billion, reflecting a satisfactory short-term liquidity (liquidity ratio of 1.56). The overall loan portfolio amounted to Dh 2.7 billion (72 percent of total assets), of which 30 percent was short-term. All in all, CNCA's financial condition at the end of FY 1983 was generally sound, as most of the debt used to finance term loans carried extended repayment terms.

2.2 Quality of Assets

The quality of CNCA's loan portfolio has undoubtedly suffered from the prolonged drought. Loan collection ratios (repayment rates), which were as high as 84 percent in FY 1979 and still stood at 76.7% in FY 1981 (excluding unpaid loans which were rescheduled to 1982 because of the drought) fell to 63 and 64 percent respectively in FY 1982 and 1983. See Table 5-5. Initial data for FY 1984 (excluding the head office) points to an improvement in the CNCA's collection performance to 72 percent (excluding the new reschedulings that were tentatively approved). However, if one takes into account new reschedulings, the ratio further deteriorates to 53.6 percent.

^{1/} CNCA's fiscal year ends on August 31st.

Table 5-3: Comparative Balance Sheets, FY 1980-83 (Dh '000)

	Aug. 31 1980	Aug. 31 1981	Aug. 31 1982	Aug. 31 1983
<u>ASSETS</u>				
Cash and Bonds	107,280	381,112	108,834	103,256
Treasury Bills	-	-	-	350,000
Other Short-term Investments	5,278	8,162	24,665	23,588
Short-term Loans	458,997	604,445	810,597	808,277
Medium-term Loans Maturing				
Within One Year	345,200	387,800	285,017	641,000
Other Short-term Assets	<u>100,009</u>	<u>215,443</u>	<u>285,147</u>	<u>562,957</u>
Total Current Assets	1,016,764	1,596,962	1,514,260	2,489,078
Medium and Long-term Loans	545,536	695,671	1,140,067	1,278,264
Fixed and Other Assets	<u>19,418</u>	<u>19,301</u>	<u>19,301</u>	<u>20,155</u>
Total Assets	<u>1,581,718</u>	<u>2,311,934</u>	<u>2,673,628</u>	<u>3,787,497</u>
<u>LIABILITIES AND CAPITAL</u>				
Deposits	302,576	406,299	458,359	551,198
One-year Bonds	-	470,760	544,250	650,500
Rediscounted Notes	100,000	-	-	80,000
Other Short-term Liabilities	138,276	153,922	162,698	173,969
Annuity of Term Borrowings	<u>88,100</u>	<u>115,900</u>	<u>62,727</u>	<u>145,000</u>
Total Current Liabilities	628,952	1,146,881	1,228,034	1,600,667
Medium and Long-term Debt	501,653	703,886	951,057	1,573,115
Provision for Bad Debts	34,061	39,470	53,606	81,569
<u>NET WORTH</u>				
Capital		375,603	375,603	425,603
Reserves		41,450	46,094	65,328
Profit for Year		<u>4,644</u>	<u>19,234</u>	<u>41,215</u>
Total Net Worth	<u>417,052</u>	<u>421,697</u>	<u>440,931</u>	<u>532,146</u>
Total Liabilities & Capital	<u>1,581,718</u>	<u>2,311,934</u>	<u>2,673,628</u>	<u>3,787,497</u>

Table 5-4: Statement of Sources and Applications of Funds, FY 1982-83
(Dh '000)

	FY 1982	FY 1983	% of Total (FY 1983)
<u>1. SOURCES</u>			
Net Income for Year	19,134	41,215	4 %
Depreciation	2,788	2,920	-
Increase in Provision for Bad Debts	14,136	27,963	2 %
Exchange Rate Adjustment	-	100	-
Loan Capitalization for CLCA's	-	50,000	4 %
Long-term Borrowings	280,210	522,561	45 %
Exchange Rate Adjustment on Term Debt	25,134	237,133	20 %
Special Funds	528	5,021	-
Increase in Current Liabilities	8,248	6,249	1 %
Loans from Banks	73,490	186,250	16 %
Deposits	52,060	92,839	8 %
Sale of Assets	210	132	-
Maturing Bonds	-	3,000	-
Total Sources	475,938	1,175,383	100 %
<u>2. APPLICATIONS</u>			
Repayment of Short and Long-term Debt	111,346	55,362	5 %
Loans	547,764	491,860	42 %
Purchase of Fixed Assets	2,998	3,707	-
Purchase of Other Assets	-	199	-
Treasury Bonds/Other Investments	16,504	351,923	30 %
Increase in Current Assets	69,604	277,909	23 %
Total Applications	748,216	1,180,961	100 %
<u>3. NET CHANGE IN CASH (1-2)</u>			
	(272,278)	(5,578)	-

Table 5-5: Comparative Collection Performance, FY 1981-84 (Dh '000)

	FY 1981	FY 1982	FY 1983	FY 1984 ¹
<u>1. Amount to be Collected</u>				
1.1 Loans Overdue from Previous Years	244.8	224.5	632.7	N/A
1.2 Loans Maturing During Fiscal Year	1,144.3	1,599.2	1,537.4	N/A
1.3 Total Before Extension or Rescheduling	1,389.1	1,823.7	2,170.1	2,182.1
1.4 Loans Benefiting from Extended Terms or to be Rescheduled	374.2	123.7	132.4	562.3
1.5 Net Amount to be Collected (1.3 - 1.4)	1,014.9	1,700.0	2,037.7	1,619.8
<u>2. Amount Collected</u>				
2.1 On Overdue Loans	177.1	133.7	385.5	N/A
2.2 On Maturing Loans	600.9	931.0 ²	909.7 ²	N/A
2.3 Total	778.0	1,064.7	1,295.2	1,169.7
<u>3. Repayment Rates</u>				
3.1 On Overdue Loans (2.1 : 1.1)	72.3 %	59.6 %	60.9 %	N/A
3.2 On Maturing Loans				
- Before Extension or Rescheduling (2.2 : 1.2)	52.5 %	58.2 %	59.2 %	N/A
- After Extension or Rescheduling (2.2 : 1.2 - 1.4)	78.0 %	63.1 %	64.7 %	N/A
3.3 Total				
- Before Extension or Rescheduling (2.3 : 1.3)	56.0 %	58.4 %	59.7 %	53.6 %
- After Extension or Rescheduling (2.3 : 1.5)	76.7 %	62.6 %	63.6 %	72.2 %

1/ Head Office excluded.

2/ Includes amounts collected on loans initially maturing the previous fiscal year and extended due to the drought.

All in all, accumulated provisions constituted to cover bad debts amounted to Dh 81.6 million, or 3 percent of total loans outstanding, a still quite acceptable level in itself. ¹ However, it should be pointed out that no provisions for bad debts are constituted by CNCA on rescheduled loans, as these are not technically overdue. If one assumes that 30 to 40 percent of these loans, which amount to approximately Dh 650 million (including those rescheduled in FY 1983), will never be recovered, the ratio of bad debts to total outstandings would then stand at around 11 percent.

2.3 Profitability

CNCA's operating profits amounted to Dh 51.2 million (\$5.7 million) in FY 1983, a 73 percent increase over FY 1982 (see Comparative Income Statements in Table 5-6). This operating income represented satisfactory returns of 1.14 percent on the loan portfolio and of 1.58 percent on total assets (see detailed analysis of profitability ratios in Table 5-7). Reflecting the upward adjustment in interest rates, interest income on loans averaged 10.38 percent, against a current local inflation rate of around 7-10 percent. Since the latter ratio is still partly affected by medium-term loans made several years ago at lower interest rates, the average yield on loans currently extended can be assumed to be even higher (see Table 5-8 for a detail of CNCA's current interest rate structure). The average cost of resources has fallen regularly over the years to 3.6 percent, as concessionary funds have been made available by international and bilateral agencies. The resulting average spread between interest collected on loans and cost of funds was a high 6.7 percent, more than necessary to cover operating expenses of 5.47 percent. However, one should again stress that, if and when rescheduled loans are adequately provisioned, substantial one-time losses will be incurred by the institution.

B. Analysis of the Rescheduling Program

1. Type of Concession

1.1 Interest rate concessions

Loan rescheduling is an exceptional measure which does not obey "normal" market criteria. Through the process of rescheduling, the lending institution is attempting to revive the borrower's commitment, and thus reestablish a trust, both of which have been negatively affected by the latter's incapacity to repay. In its attempt to secure the borrower's goodwill, it is essential that the institution offer something in return. In general this takes the form of interest rate concessions or even forgiveness of part of the interest due (depending on the borrower's solvency). These concessions stem from a rational assumption by the bank or credit institution that it must give up some of the interest in order to recover most of the principal.

^{1/} Provisions for bad debts are constituted as follows: 50 percent provision on all loans which have been overdue for 15 to 25 months, 75 percent for loans that have been overdue for 25 to 38 months, and 100 percent for those overdue by over 38 months.

Table 5-6: Comparative Income Statements, FY 1980-83 (Dh '000)

	FY 1980	FY 1981	FY 1982	FY 1983
<u>INCOME</u>				
Interest on Short-term Loans	33,539	38,115	71,432	76,519
Interest on Medium-term Loans	74,849	88,038	121,165	174,117
Other Interest	13,373	19,546	20,919	26,523
Fees	2,663	2,907	4,322	5,379
Government Subsidies	8,861	9,586	-	-
Other	<u>5,252</u>	<u>7,710</u>	<u>2,702</u>	<u>8,029</u>
Total Income	<u>138,538</u>	<u>165,902</u>	<u>220,540</u>	<u>290,567</u>
<u>EXPENSES</u>				
Interest on Deposits	6,230	8,546	11,677	12,865
Interest on Borrowings	60,482	69,086	81,798	100,790
Other Financial Expenses	<u>2,395</u>	<u>9,891</u>	<u>4,069</u>	<u>2,582</u>
Total Financial Expenses	69,107	87,523	97,544	116,237
Salaries	52,554	56,171	64,826	75,445
Other Operating Expenses	11,907	12,461	14,376	19,686
Provisions for Bad Debts	<u>2,926</u>	<u>5,409</u>	<u>14,136</u>	<u>27,963</u>
Total Expenses	<u>136,494</u>	<u>161,564</u>	<u>190,882</u>	<u>239,331</u>
<u>OPERATING INCOME</u>	2,044	4,338	29,658	51,236
Adjustments	<u>(1,525)</u>	<u>306</u>	<u>(10,424)</u>	<u>(10,021)</u>
<u>NET INCOME</u>	<u>519</u>	<u>4,644</u>	<u>19,234</u>	<u>41,215</u>

Table 5-7: Ratios Reflecting Financial Condition and Profitability,
FY 1980-83 (Figures as percentages, except ratios)

	FY 1980	FY 1981	FY 1982	FY 1983
<u>FINANCIAL CONDITION</u>				
Liquidity Ratio	1.62	1.39	1.23	1.56
Debt to Net Worth Ratio	2.79	4.48	5.06	6.12
<u>PROFITABILITY</u>				
Income				
-On Loans	8.92	8.51	10.06	10.38
-On Total Assets	9.37	8.52	8.85	8.99
Interest Cost				
-On Deposits	2.21	2.41	2.70	2.55
-On Borrowings	7.77	6.98	5.74	5.03
-On Total Resources	4.67	4.49	3.91	3.60
SPREAD				
-On Loans	4.14	3.93	6.06	6.71
-On Total Assets	4.70	4.03	4.94	5.39
OPERATING COSTS				
-On Loans	5.55	4.99	4.87	5.47
-On Total Assets	4.56	3.81	3.75	3.81
OPERATING INCOME				
-On Loans	(1.41)	(1.06)	1.19	1.14
-On Total Assets	0.14	0.22	1.19	1.58
RETURN ON EQUITY	0.49	1.03	6.88	10.53

Table 5-8: Interest Rate Structure of the CNCA

Object	1980-81 (%)	1981-82 (%)	1982-83 (%)	1983-84 (%)
<u>CLCA</u>				
Short-term				
Cereals/pulses ¹				7.5
Other				11.0
Medium/Long Term				10.0
<u>CRCAs/Headquarters</u>				
Short-term				
Commodity Purchase Financing	6.5	6.5	7.0	7.0
Integrated Projects	9.0	9.0	9.0	11.0
Cereals/Pulses	8.0	8.0	8.0	9.0
Other Short Term	10.0	10.0	10.0	11.0
Medium-term ²				
Agrarian Reform				
1st to 4th Years	8.5	8.5	8.5	
5th year	9.5	9.5	10.0	
6th year	10.0	10.0	10.0	
Other Medium Term	10.0	10.0	10.0	

1/ 2.5 percent for harvest loans.

2/ For 1983/84 medium term interest rates are 12 percent for loans less than 10 years in duration and 13 percent for loans over 10 years in duration. These rates hold for all loans, no matter what the purpose or the category of borrower.

Commercial banks know this well. Consequently, they routinely offer concessional terms after a client's short-term solvency has become seriously undermined. In supporting the rescheduling of CNCA loans at subsidized rates of interest, AID is therefore in effect following normal banking procedures, not going against them. In this respect, a farmer's reaction should not be any different from a commercial borrower's. In allowing the CNCA to go ahead with its rescheduling program at subsidized rates of interest, AID is in effect providing CNCA with the means to deal with the debt problem in the most opportune way, given current conditions.

1.2 Level of Subsidization

Once the principle of interest rate concessions on rescheduled loans is accepted, the adequate level of subsidization remains to be established. In rescheduling loans, determining of the optimal interest rate is a matter of judgement. Moreover, the optimal level of subsidy would vary from one client to the next according to the severity of the financial hardship incurred. Unfortunately, it is not feasible for CNCA to tailor the concessions granted to each of the thousands of borrowers benefitting from the program. This would be administratively difficult for the CNCA and would expose the program to the subjectivity of individual credit officers, and possibly to outside influence. As a consequence, the "adequate" interest rate level will have to be determined based on a general assessment of the borrowers' financial condition and foreseeable repayment capacity.

Although no precise data is available on anticipated borrowers' income flows should rainfall be adequate in coming years, discussions with CNCA staff, both at head office and in the field, and data gathered during interviews with farmers, indicate that rescheduled CRCA clients would be both able and willing to bear interest rates higher than the 2 percent rate being charged to CLCA clients under the EEC-sponsored program. Indeed, the CNCA had proposed a rate of 5 percent after a careful assessment of the situation facing CRCA clients.

From the approximately two dozen field interviews undertaken by the design team, comprehensive financial data was collected on a small sample of clients to be rescheduled (see Annex 4). Analysis of this data shows that, if these clients benefitted from repayment terms of up to 10 years on their rescheduled loans, their estimated yearly debt repayments (including interest) would average 13.2 percent of their projected net income from farm operations for a "normal" year, after payment of all farm-related expenses. This fairly low debt-burden ratio would leave these farmers with an average net disposable income of Dh 4,406 (or \$490) per month, an adequate level of income to cover the normal consumption expenses of a large family in rural Morocco. For only one of the six clients interviewed, would the repayment of the rescheduled loans appear to be a serious burden. His yearly debt burden represented up to 41.2 percent of his net farming income, leaving him with a net disposable income of only Dh 1,811 (\$200) per month. The above data is indicative of the basic viability of CRCA clients under normal weather conditions.

Based on the above analyses, it is proposed that rescheduled loans carry interest rates of 6 percent. Such an interest rate represents, in the design team's view, a "minimal" concession necessary to reestablish trust and revive the borrower's commitment. This is especially true since many of the loans

being rescheduled were extended as far back as 1980, at rates no higher than 8 percent. A 6 percent interest rate adequately reflects the current financial situation and earning potential of CRCA customers, as described above. At the same time, a 6 percent rate would provide an adequate spread to cover the marginal costs of administering the rescheduling program. Such an interest rate does not represent as significant a shift away from current CNCA rates, as the 2 percent rate being granted to CLCA clients benefitting from the EEC-sponsored program. Finally, the 6 percent interest rate is not far out of line with the current local inflation rate.

1.3 Interest rate concessions versus grace periods

In its guidance cable (State 261817) responding to the PID (see Annex 6), the Near East Advisory Committee Bureau stated that the Near East Bureau strongly prefers use of grace periods, rather than interest rates, to affect a subsidy on rescheduled loans.

Before recommending that a 6 percent interest rate be applied to rescheduled loans, the Project Paper design team carefully considered the relative merits of interest subsidies versus grace periods as a means of lessening the debt repayment burden on farmers. Grace periods are justified when the returns from an investment are delayed, as a means of correlating installment payments on a loan with the delayed income flows anticipated from the investment. In the present situation, however, the use of grace periods to effect a subsidy would let the rescheduled client "off the hook" for a number of years, and engender a feeling that the CNCA had, indeed, forgiven the loan. Ultimately, this could result in an increase in the default rate on rescheduled loans, to the financial detriment of the CNCA.

Further, the use of grace periods is not compatible with the farmers' current situation. Since 1980, drought-stricken farmers' inability to repay their loan(s) has stemmed from inadequate income flows, not from the absence of grace periods, which CNCA routinely grants on medium-term loans. Similarly, there is no reason to believe that the average farmer's income flows will be substantially higher during the latter years of the rescheduling program than during the earlier years. It is possible that farmers benefitting from a grace period during several years of normal weather would then be hit with another drought just as the grace period ended. The critical need is to reschedule loans over a period of time long enough so as to not exceed each borrower's reasonable repayment capacity. The CNCA intends to achieve this objective by granting terms of up to 10 years on rescheduled loans according to each individual farmer's projected income flows.

C. Financial Impact of the Project on the CNCA

As already stated, the rescheduling process is, in itself, a mere entry in CRCA books extending repayment terms on outstanding loans. It does not imply any actual disbursement of funds. Thus, AID funds will be actually used to grant new seasonal and equipment loans to customers being rescheduled. However, since the entire rescheduling process could not be undertaken, at least under the conditions envisaged, without AID or EEC funds being available for new loans, one must first consider the impact on CNCA of the rescheduling exercise as a whole, and then the separate impact of AID's contribution of loan funds to the rescheduling program.

1. Impact of the Rescheduling Program

1.1 Break-even Point

The following analysis will attempt to determine whether the rescheduling program presently considered by CNCA is a viable proposition from a financial standpoint. For that purpose, one can consider that the rescheduling program is viable if the lost revenue from interest concessions granted to the borrowers is more than offset by higher recovery rates and, therefore, lower default rates on the overdue principal rescheduled, than would have been experienced in the absence of a rescheduling program. At the program's break-even point, the financial equation will thus be:

(1) Principal plus interest collected from rescheduled loans =
Principal plus interest collected in the absence of a rescheduling program

- If:
- B^1 is the bad debt rate on rescheduled loans,
 - B^2 would have been the bad debt rate in the absence of a rescheduling program,
 - \$33,500,000 is the total amount rescheduled (AID and EEC loans amalgamated),
 - 10.38% is the average interest yield on loans (based on FY 1983 figures), and
 - \$20 million are being rescheduled at an interest rate of 2 percent (EEC funds) and \$13.5 million at 6 percent (AID program)

Then equation (1) above becomes (figures in dollars):

$$\begin{aligned} \$33.5m (1-B^1) + (1-B^1)(\$20m \times 2\% + \$13.5m \times 6\%) \\ = \$33.5m (1-B^2) + \$33.5m \times 10.38\% (1-B^2) \end{aligned}$$

or: $B^1 = B^2 \times 1.06532 - .06532$

Based on the above and taking a 70 percent bad debt rate in the absence of rescheduling as the base case, the rescheduling program will prove viable, from a financial viewpoint, if it produces an improvement of a least 2.0 percent in CNCA's collection rate on subject loans.

1.2 Sensitivity Analysis

From the above formula, it is apparent that the program's break-even point varies with the assumed level of bad debt originally adopted in the absence of a loan rescheduling program. Using this formula, one can analyse the extent to which the break-even point varies with this assumed level. The program's break-even points are presented in Table 5-9.

Dased the last column of Table 5-9, one may conclude that the rescheduling program's break-even point may vary, from a 0.7 percent improvement in bad debt rate achieved through rescheduling in the case of an original rate of 90 percent, to a 3.9 percent improvement in the case of an original rate of 40 percent. It is the Mission's belief that, if adequately

Table 5-9: Break-even Points of the Rescheduling Program

Assumed Bad Debt Rate Before Rescheduling	Bad Debt Rate at Break-even Point	Net Difference
40 %	36.1 %	3.9 %
50 %	46.7 %	3.3 %
60 %	57.4 %	2.6 %
70 %	68.0 %	2.0 %
80 %	78.7 %	1.3 %
90 %	89.3 %	0.7 %

Table 5-10: Pro-forma Operating Expenses as a Percentage of Portfolio
(figures in percentages)

	FY 1981	FY 1982	FY 1983
Average Loan Portfolio	100.0	100.0	100.0
<u>Income</u>			
Interest on Loans	8.3	9.8	10.1
Loan Application Fees	0.2	0.2	0.2
Other	<u>2.4</u>	<u>1.6</u>	<u>1.4</u>
Total Income	10.9	11.6	11.7
<u>Expenses</u>			
Financial Expenses	5.8	5.4	4.7
Administrative Expenses	4.5	4.0	3.8
Provisions for Bad Debts	<u>0.4</u>	<u>0.7</u>	<u>1.1</u>
Total Expenses	10.6	10.1	9.6
<u>Net Income</u>	<u>0.3</u>	<u>1.5</u>	<u>2.1</u>

managed, the rescheduling program will allow CNCA to improve its collection rate on targetted overdue loans by well over 10 percent, and very possibly by as much as 20-25 percent, thereby easily making the rescheduling program viable from a financial standpoint.

2. Analysis of Spread

It appears from Table 5-10 that, in FY 1983, CNCA's total administrative expenses represented 3.8 percent of the average loan portfolio for the year, while the provisions for bad debts stood at 1.1 percent of the latter. If one considers the \$13.5 million loan fund provided by AID alone, CNCA will be disposing of funds costing 3 percent to the institution (if indeed such are the terms agreed upon by AID/W on the one hand, and the GOM on the other), and relending them at currently applicable interest rates, assumed to be 11 percent.¹ The resulting 8 percent spread will easily cover the above-mentioned 3.8 percent average level of administrative expenses, leaving a 4.2 percent margin to cover bad debts.

As already pointed out, the level of bad debt which can be anticipated from the rescheduling program will no doubt be substantially higher than the 1.1 percent average rate estimated by CNCA for FY 1983. The exact level cannot be known beforehand and will depend, in part, on the efficiency of the institution's collection policies as applied to drought-stricken farmers. However, the above 4.2 percent spread applied to the \$13.5 million Fund will leave the institution with an estimated surplus of around \$567,000 after payment of the program's operating expenses. Since the entire process of rescheduling old loans and financing new loans will total approximately \$37.0 million (\$23.5 million and \$13.5 million respectively) for CRCAs alone, the above-mentioned surplus of \$567,000 will allow CNCA to absorb up to 1.5 percent of the bad debt that will probably be incurred on the entire program.¹ This is only a modest contribution to the much higher foreseeable bad debt rates that CNCA will face in drought-stricken areas even if weather conditions revert to normal. It should, in turn, justify the granting by AID of the most concessionary loan terms available, i.e. the 3% rate which was adopted as the basic cost-of-funds to CNCA in the above analysis.

3. Overall Impact of the Project

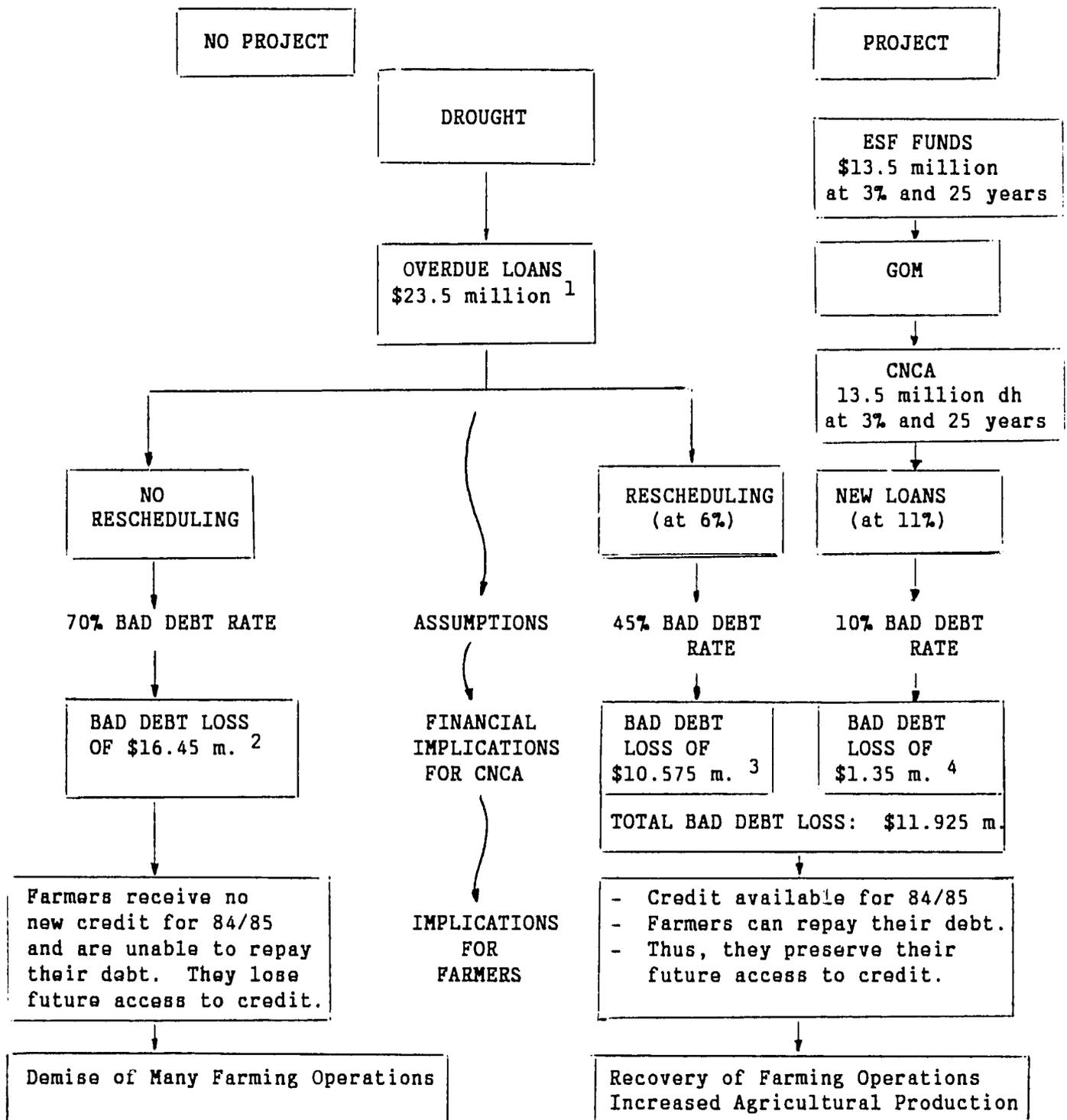
Since AID loan funds will allow CNCA to reschedule overdue loans and lend new loans to the project's target group, an analysis of the project's overall financial impact on CNCA should consider the impact of both the rescheduling program and of the new loans

The project's financial implications for the CNCA are summarized in Figure 5-1. This analysis assumes that:

- The bad debt rate would have been 70 percent on overdue loans in the absence of a rescheduling program;

^{1/} The currently applicable interest rates for CRCAs are 9-11 percent on short-term loans and 12-13 percent on medium- and long-term loans.

FIGURE 5-1: DIAGRAM OF PROJECT BENEFITS



- 1/ Target group of farmers with fiscal incomes less than 6000 Dh + members of Ag. Reform Corps = 22,000 farmers
- 2/ \$23.5 million x 70% bad debt rate.
- 3/ \$23.5 million x bad-debt (interest excluded) 45%
- 4/ \$13.5 million x 10% bad debt rate (interest excluded)

- This bad debt rate will be reduced to 45 percent as a result of the rescheduling program; and
- The bad debt rate will be only 10 percent on new loans extended to the same target group, since it is assumed that they are, under normal conditions, able to repay these new production loans, even if unable to repay their former debt. In addition, since the rescheduled loans will be for a period of up to 10 years, and the bulk of the new loans will be shorter-term (a large portion being seasonal loans with a one year maturity which must be repaid in order to receive credit in the following year), it can be expected that the default rate on new loans will be much less than that on rescheduled loans.

Given these assumptions, the overall impact without rescheduling (excluding interest losses) is:

Net losses based on the above assumptions would be:
\$23.5 million x 70 % = \$16,450,000

On the other hand, the overall impact with rescheduling (excluding interest losses), is:

Net losses on loans rescheduled: \$23.5 million x 45 % = \$10,575,000
Net losses on new loans: \$13.5 million x 10 % = \$ 1,350,000
Total losses: = \$11,925,000

Therefore, given the above assumptions, by granting \$13.5 million of new loans to the project's target group, CNCA can reduce its level of bad debts by \$4,525,000 (\$16,450,000 minus \$11,925,000), which represents a return of 33.5% on the \$13.5 million funds invested.

4. Impact on CNCA's Long-term Financial Viability

Tables 5-11 and 5-12 show, respectively, CNCA's projected balance sheets and projected statement of sources and applications of funds for the FY 84-86 period, assuming AID and EEC funds are, indeed, forthcoming in FY 85. No longer-term projections have been prepared by CNCA. However, since the projected statements do not, in any case, include substantial provisions for bad debts, it is more relevant to analyze separately the likely impact of the prolonged drought on CNCA's long-term financial stability, taking into account current donor programs to alleviate the problem.

1/ Calculated by dividing \$567.000 by \$37.0 million.

Table 5-11: Projected Balance Sheets, FY 1984-86 (Dh million)

	Actual	Projected		
	8/31/83	8/31/84	8/31/85	8/31/86
<u>Assets</u>				
Cash and Bonds	103	236	284	347
Treasury Bills and Other Invest.	374	74	74	74
Other Current Assets	563	533	671	813
Loans ¹	2,645	3,148	4,129	4,906
Fixed and Other Assets	20	26	102	184
Total Assets	3,705	4,017	5,260	6,324
<u>Liabilities and Capital</u>				
Deposits	551	717	867	1,107
One year Bonds	650	752	860	984
Rediscounted Notes	80	-	-	-
Other Current Liabilities	174	174	174	174
Term Debt	1,718	1,815	2,577	3,119
Net Worth	532	559	782	940
Total Liabilities and Capital	3,705	4,017	5,260	6,324

^{1/} Net of provisions for bad debts.

Table 5-12: Projected Sources and Applications of Funds, FY 84-86 (Dh million)

	FY 1984	FY 1985	FY 1986
<u>Sources</u>			
Loan Recoveries	1,245	2,127	2,616
Approved Foreign Borrowings	237	706	716
EEC Loan/Grant	-	185	-
AID Loan Fund	-	121	-
One Year Bonds	102	108	124
Increase in Deposits	166	150	240
Discounted Notes	(80)	-	-
Income on Loans	278	434	558
Other Income	5	22	26
Total Sources	1,953	3,853	4,280
<u>Applications</u>			
Loans Disbursed	1,748	3,108	3,393
Purchase of Treasury Bonds	(300)	-	-
Repayment of Foreign Borrowings	140	142	174
Increase in Fixed Assets/Other Exp.	6	76	82
Salaries and Financial Exp.	256	341	426
Increase in Cash	103	186	205
Total Applications	1,953	3,853	4,280

CNCA's current net worth is approximately \$65 million (Dh 532 million as of year end, FY 83, plus an estimated profit of Dh 50 million in FY 84). This net worth will not be increased by the World Bank-funded Fifth Agricultural Credit Project. Nor will it be increased by this project, since both efforts will allocate funds to the CNCA in the form of loans. On the other hand, approximately \$11.7 million out of the \$20 million of EEC funds will be in the form of a grant, which will increase CNCA's capital base to around \$76.7 million. However, the institution will be rescheduling total loans worth Dh 565.5 million or \$62.8 million (see Table 1-2), and one can assume that a 45% bad debt rate will be eventually incurred on these loans.¹ Therefore, CNCA's capital funds will be reduced to the following levels:

1. Current capital base:	= \$76.7 million
2. Bad debts on rescheduled loans: \$62.8 million x 45%	= \$28.3 million
3. Bad debts on loans to target group: \$33.5 million (EEC and AID included) x 10%	= <u>\$ 3.35 million</u>
4. Resulting capital funds (1.-2.-3.)	= \$45.05 million

1/ It is assumed here that overdue clients with fiscal revenues above Dh 6,000 will also be rescheduled and receive new loans out of CNCA's own capital, allowing the latter to maintain bad debts at the same 45% level. One can thus conclude that, under the assumptions adopted in this project, CNCA's capital base would be reduced by 41.3% as a result of the drought, leaving it in a weaker but still viable position (networth of \$45 million). Of course, the critical assumption is that rains will indeed come back before it is too late. Should the drought continue for an additional couple of years, then most of the \$62.8 million loans being rescheduled, as well as most of the \$33.5 million of new loans being provided, would undoubtedly be lost. This would more than wipe out the CNCA's existing capital base. Under such conditions, there is no doubt that the Government would have to intervene by forgiving the farmers' overdue debt and recapitalizing the CNCA.

VI. SUMMARY SOCIAL ANALYSIS [See Annex 2 for Complete Analysis]

A. Introduction

Every effort has been made to incorporate into this project design the general lessons learned from USAID experience with agricultural credit programs worldwide. In addition, the design has taken into account the particular realities of Morocco, its immediate requirements in the face of drought, and its long-term need to increase agricultural production and productivity. Annex 2, Social Analysis, provides an in-depth explanation of the conclusions, as well as a discussion of the bases upon which these conclusions were reached. In particular, this Annex includes a critical re-examination of the generally accepted statistics upon farm size, distribution, and farm type in Morocco. Upon closer examination, these statistics were found to be biased and to inaccurately reflect the current situation in Morocco. This is because this data has been extrapolated, without adjustment, from official tax records and other sources that are based on declarations by landowners and may, themselves, inaccurately reflect the distribution of land in Morocco.

B. Targetted Beneficiary Group

The CNCA has a total of approximately 424,000 clients, of which 82 percent (346,000) are clients of CLCAs, and 18 percent (78,000) are clients of CRCAs or the head office. The design team estimates that the CNCA currently reaches 30 percent of its potential clients population. CRCAs were reaching 80 percent of their clients and the CLCAs were reaching 24.6 percent of theirs.

The beneficiaries of this project will be: 1) individual farmers with fiscal incomes of less than 6000 Dh who have applied for rescheduling, or 2) Agrarian Reform Cooperatives (and their members) that, because of the drought, are having their overdue loans rescheduled. For CRCAs a total of 48,643 clients were eligible for rescheduling assistance (See Table 6-1). Of this number, 14,897 clients applied for rescheduled loans, and 13,691 of these applications were approved in principal (pending assurance of the availability of funds). ¹

^{1/} The campaign to solicit rescheduling applications was launched on July 1, 1984, with a deadline for application of August 30, 1984. The above figures indicate that only 31 percent of eligible farmers applied. Farmers with overdue loans who did not apply for rescheduling, however, will not be able to receive new loans from the CRCA. Eligible farmers may not have applied because they do not need new loans and, either can pay back their old debts without recourse to additional credit, or have no intention of paying them back. It is also possible that farmers, especially those in more isolated areas, did not hear about the rescheduling campaign or were not able to submit their applications before the deadline. It should be noted, however, that the CNCA made a serious effort to advertise the rescheduling program through press and radio advertisements and by distributing fliers in the local markets and posting notices in public buildings. Rescheduling applications were reviewed by the local credit committees. The decision on whether to approve or disapprove a rescheduling application was based primarily on the level of hardship faced by the borrower as a result of the drought.

Table 6-1: Rescheduling Applications and Approvals as of September 14, 1984

	CRCA's	CLCA's	TOTAL
Potential Applications (¹):			
Number of Clients	48,643	259,296	307,939
Number of Loans	180,207	545,485	725,692
Amount Outstanding (Dh '000)	1,015,091	520,841	1,535,932
Applications Received:			
Number of Clients	14,897	73,359	88,256
Number of Loans	46,046	145,814	191,860
Amount Outstanding (Dh '000)	491,483	198,254	689,737
Applications Approved:			
Number of Clients	13,691	71,156	84,847
Number of Loans	33,206	136,027	169,233
Amount Outstanding (Dh '000)	379,376	186,116	565,492
Applications as Compared to Potential Applications:			
Number of Clients	30.6 %	28.3 %	28.7 %
Number of Loans	25.6 %	26.7 %	26.4 %
Amount Outstanding	48.4 %	38.1 %	44.9 %
Approvals as Compared to Potential Applications:			
Number of Clients	28.1 %	27.4 %	27.6 %
Number of Loans	18.4 %	24.9 %	23.3 %
Amount Outstanding	37.4 %	35.7 %	36.8 %
Approvals as Compared to Actual Applications:			
Number of Clients	91.8 %	97.0 %	96.1 %
Number of Loans	72.0 %	93.3 %	88.2 %
Amount Outstanding	77.3 %	93.9 %	82.0 %

1/ Includes all clientele with farms located in stricken areas.

Of the CRCA applications approved, 9,751 concern individual farmers with fiscal incomes under 6000 Dh (See Table 6-2). These farmers have a total of 23,540 overdue loans to be rescheduled, amounting to Dh 171,901,445 (U.S. \$19,100,161 at the adopted exchange rate). This amounts to roughly Dh 17,600 (U.S. \$1,958) in rescheduled debt per farmer.

In addition, 366 Agrarian Reform Cooperatives have been approved for rescheduling. These Agrarian Reform Cooperatives are included in Table 6-2 as individual clients with incomes exceeding 6000 Dh. However, on an average an Agrarian Reform Cooperative will have approximately 33.5 members. Thus, as many as 12,250 farmers may benefit from reschedulings financed under this project for the Agrarian Reform Cooperatives. The total amount of overdue loans of these 366 Agrarian Reform Cooperatives amounts to 40 million Dh (\$4,445,000).

The 9,751 rescheduled clients with fiscal incomes under 6000 Dh and the estimated 12,250 Agrarian Reform Cooperative members will constitute the beneficiary group to which AID funds will be targetted.

The beneficiaries of this Project, whether individual farmers or members of Agrarian Reform Cooperatives, are the owner/operators of what we have termed "smaller, viable dryland farms". These are small- and medium-sized operations, falling between what are commonly referred to as the "family- or subsistence-oriented" small farms and the larger, modern, entirely profit-oriented farming operations. Smaller, more marginal farmers, that are CLCA clients will benefit from a separate EEC-financed rescheduling program. The larger, modern farmers, because they have a greater resource base and access to commercial credit, have less need for rescheduling through a special CNCA program.

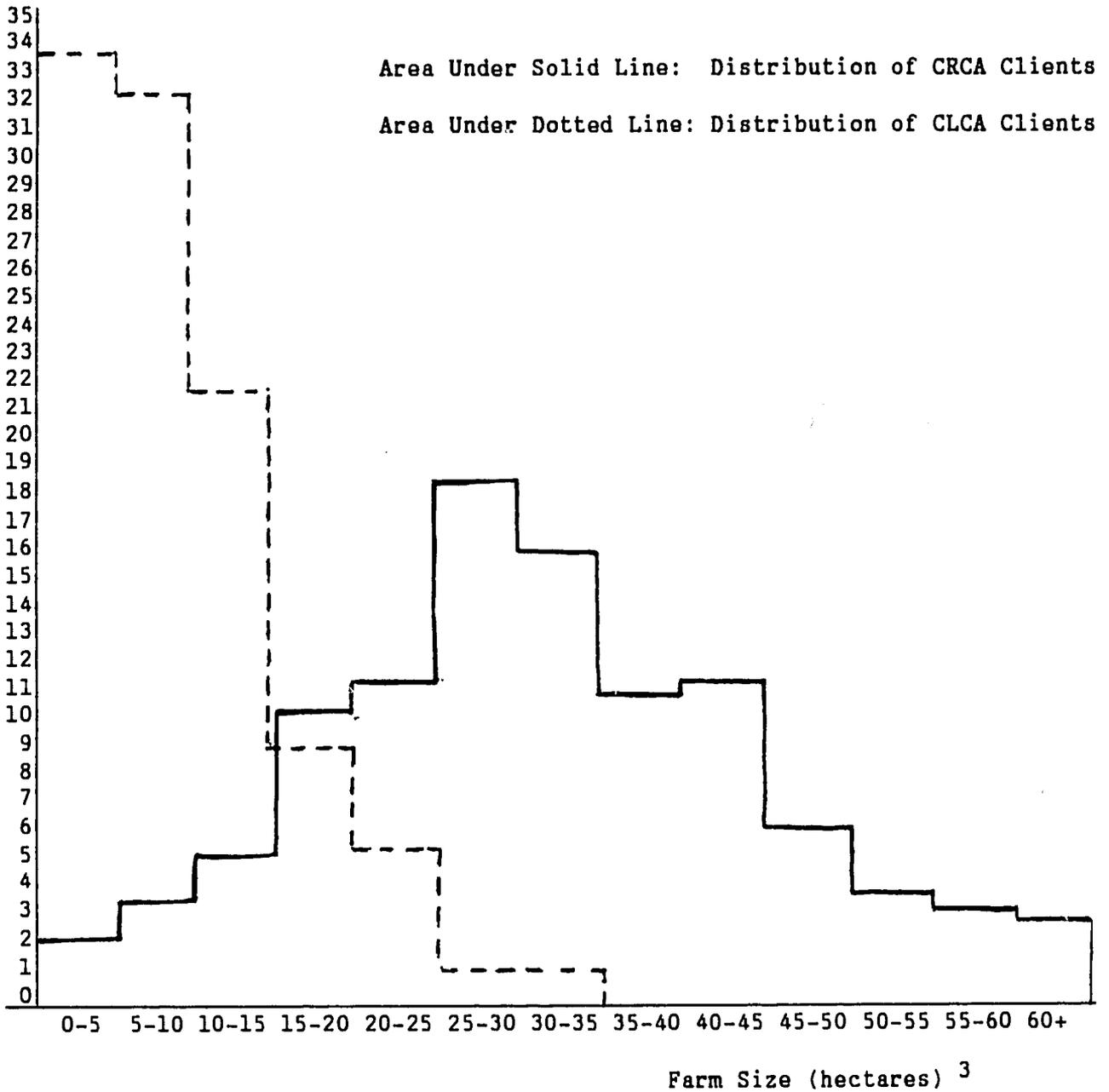
In order for these farmers to receive new loans, they must have their old loans rescheduled. AID funds will provide the capital that CNCA needs to extend these new loans. Given the availability of \$13.5 million in AID funds and up to 22,250 potential recipients (adding members of the Agrarian Reform Cooperatives), an average of around U.S. \$600 per farmer is available for new loans. Farmers are not required to take out new loans, however, in order to have their overdue loans rescheduled.

In terms of farm size, the "smaller, viable dryland farmer" group tends to fall within a range of 15-45 hectares (See Figure 6-1: Distribution by Farm Size of CRCA Clients). Farmers with less than 6000 Dh accounted for 72 percent of individual clients eligible for rescheduling (See Table 6-2). Of a sample of 210 CRCA farmers with fiscal incomes of less than 6000 Dh, 76 percent had farms of between 15 and 45 hectares. These farmers will have between 3000 and 6000 Dh in declared fiscal value of assets.

Official statistics on farm size indicate that 5 hectares is the average farm size in Morocco. Thus, according to these statistics, farms with between 15 and 45 hectares fall within the top 5 percent of farms (See Annex 2: Tables 1, 2, and 3), thus raising the question of whether AID funds are going to the truly needy farmers. However, our own field surveys, discussions with

Figure 6-1: Distribution by Farm Size of CRCA and CLCA Clients ¹

% of Farmers ²



^{1/} Including only CRCA clients with Fiscal Incomes between 3000 and 6000 Dh and CLCA clients with Fiscal Incomes of less than 3000 Dh.

^{2/} For CRCA distribution, percent of CRCA clients, for CLCA distribution, percent of CLCA clients. Based on a sample of 210 CRCA clients and on a sample of 286 CLCA clients.

^{3/} Distribution counts farms at division points against the lower figure (i.e. farms with 5 hectares are counted in the 0-5 group, farms with 10 hectares in the 5-10 group, etc.).

Table 6-2: Distribution of CRCA Rescheduling Approvals by Fiscal Income

<u>Fiscal Income Level</u>	<u>Number of Clients Eligible for Rescheduling</u>	<u>Number of Outstanding Loans</u>	<u>Amount of Loans Outstanding (Dh)</u>
Less than 6000 Dh	9,751	23,540	171,901,445
6001 to 10,000 Dh	1,778	4,629	61,340,049
Over 10,000 Dh	1,258	3,305	84,626,992
Undetermined	<u>688</u>	<u>2,073</u>	<u>58,206,562</u>
Total	13,475	33,547	376,075,048

knowledgeable parties, and an analysis of locally available statistics, casts considerable doubt on the validity of official farm size statistics. In fact, the 15-45 hectare farms appears to be much more representative of farming in Morocco, especially dryland farming, than these official statistics indicate. Indeed, such farms may represent as much as 20-25 percent of the total. In addition, as will be discussed below, this group of farmers is the one which can most effectively use rescheduling assistance and access to new credit. Finally, interviews conducted by the Project Paper design team clearly indicate that, due to the drought, farmers in this group are in serious economic difficulty. Without assistance many may be forced to turn away from profit-oriented agriculture and back to a subsistence strategy. Others may be forced out of agriculture altogether.

C. Agrarian Reform Cooperatives

In 1966 the GOM began to create Agrarian Reform Cooperatives, distributing state, collective, and expropriated lands to small farmers. This land distribution program continued until 1982. A total of 354,599 ha was distributed during this period (almost exclusively from state lands). The number of cooperatives reached 739 in 1982, and included a total of 24,767 farmers (an overall average of 14.3 hectares per Agrarian Reform beneficiary). There are an average of 33.5 farmers per cooperative.

In higher rainfall areas (bour favorable) 16.6 ha farms were created. In drier areas, (bour defavorable), the land was divided into farms of around 22 ha each. It is primarily cooperatives in these two groups that need rescheduling assistance. (In irrigated zones the land was subdivided into farms of approximately 5.8 ha each, while for lands suitable only as pasture, farms of 52.5 ha were created). These farm sizes were considered adequate to provide their operators with annual incomes of 4000 Dh each. By 1982 the average income of farmers in Agrarian Reform Cooperatives reached 12,360 Dh (U.S. \$2,010 at the 1982 exchange rate). In part, the increase was due to the greater use of cash inputs and the diversification of production by these farmers. ¹

1/ There are three types of Agrarian Reform Cooperatives. There are 433 service cooperatives which provide services to members who operate their farms independently. There are 47 production cooperatives, in which small farmers jointly operate the land. In addition, there are a number of service cooperatives which provide services to groups of small farmers who jointly manage the land. Roughly 86.5 percent of the land distributed is in production (including fallow). Of this, 35 percent is dedicated to cereal cultivation, 23.1 percent to pasture, 10.5 percent to pulses, 10.5 to fodder production, 4.9 percent to industrial crops, 3.5 percent to vegetables, and 6.9 percent is in orchards. Farmers in Agrarian Reform Cooperatives own 4.2 percent of the cattle, 3.1 percent of the sheep, and only 0.1 percent of the goats in Morocco.

Agrarian Reform Cooperatives, which account for approximately 10 percent of the total credit provided by CRCAs, take out credit as a group. Between 1977 and 1982, short term credit accounted for 38.5 percent of total CNCA credit provided to Agrarian Reform Cooperatives. This was primarily seasonal credit. The remaining 61.5 percent was medium and long term credit (for mechanization, orchard development, and construction).

An estimated 625 Agrarian Reform Cooperatives are financed by the CRCA. Of these, roughly 366 will be rescheduled by CRCAs, of which 245 are in severely drought-stricken provinces. Thus, given an average of 33.5 members per cooperative, roughly 12,250 Agrarian Reform Cooperative members will benefit from rescheduling assistance financed by AID. The total amount of overdue loans of these 366 Cooperatives is 40 million Dh.

D. The Spectrum of Farm Types and Potential Credit Recipients.

Of even more importance than the precise percentage of farms in the smaller, viable dryland farmer" category, is the role that these farms are playing, and will play, in Moroccan agriculture. These are probably the lowest rung farms on which appropriate modern technology can be fairly easily and profitably introduced. These are the farms that actually provide the highest employment for paid rural labor per hectare. Even more important, these are the farms for which agricultural credit is most likely to become an integral factor in farm operations and a crucial determinate of the level of productivity.

Farms in Morocco can be arrayed along a spectrum based on scale of operation. On the smallest end of this spectrum are found the small, marginal farms. These are the operations that will be assisted by the EEC-financed CLCA rescheduling program. Serious dryland farming usually requires at least seven hectares of land (either owned, rented, or sharecropped). What characterizes farming operations below seven hectares is that they are not the single, or often even the major, focus of family activities. Rather, precisely because their production is limited, farm activities serve primarily to provide goods needed for family consumption. Cash income will be obtained through small-scale commercial activities or through employment as wage labor. This additional income will often be earned outside of the rural area, and sometimes outside of the country. The labor and resources devoted to these small farm operations, therefore, are generally those which are available after other needs are met (hence the large labor input of women and children). The emphasis is on avoidance of risk rather than maximum production. This entails a minimization of cash investment. These small farms face a vast gamut of constraints to increased agricultural production and productivity. They are too small to achieve economies of scale and generally possess less fertile and less easily irrigated lands. Further, these small farms are generally owned by individuals with limited social and economic status. Therefore, they are less able to obtain access to the scarce resources, including technical and material assistance from government services, necessary to operate and improve their operations. As a result, in most cases, agricultural credit assists these small farmers in continuing their ongoing activities. By itself, however, credit can do little to improve their basic situation.

On the other side of the spectrum lie a small number of really large farming operations. Some of these are government operations, state cooperatives budding agro-businesses or large private operations. These are usually over one hundred hectares. A large percentage of these farms are on fertile and productive farming lands formerly owned by French colonial farmers. There is a marked change in operational practices on these large-scale farms. They concentrate on monoculture and maximize the use of mechanization to reduce reliance on paid labor. Because they have a much larger resource base, as well as greater access to commercial credit, these larger private operations are not likely to be dependent on CNCA credit for either their survival or continued operation. For this reason, these large-scale farms will not be recipients of AID assistance under this project.

The targeted beneficiaries of the AID Project lie in between these two extremes. They will have farm sizes of between 15 and 45 hectares of rainfed land. Thus, these farms will have at least the minimum amount of land necessary to begin producing for profit (which will be a function of family size). On the other side, the size of these farms will generally not exceed that amenable to labor intensive management techniques. Statistics indicate that this upper limit is around fifty hectares. (There are comparatively few farms with more than 50 hectares but less than 100 hectares. This latter figure appears to correspond to the minimum area necessary to provide the necessary economies of scale for mechanized monoculture.)

The farms within the 15-45 hectare range account for the majority of the total financial surplus generated by farms in Morocco. A survey undertaken by the Ministry of Agriculture and Agrarian Reform (MARA) estimated the financial surplus generated by different farm categories, and thus the amount available for investment, in 1974. The results are summarized in Table 6-3. Based on these statistics, it appears that farms between 15 and 45 hectares generate almost 56 percent of the total farm-generated financial surplus in Morocco. These statistics also indicate that farms below 5 hectares (which comprise roughly 33 percent of CLCA clients) are totally subsistence-oriented and generate no financial surplus. (It should be kept in mind, as is discussed above, that the farm size statistics used in the MARA study probably overestimate the number and importance of farms smaller than 10 hectares).

The farmers in this category appear to more readily adopt "modern" technologies and practices. They are much more flexible with respect to their particular production orientation at any one time. These farmers will produce for the market, but will diversify crops as a protection against fluctuating market prices, and will rapidly switch emphasis from crop production to livestock production (even in mid-year) in response to climatic conditions and outlook. As already noted, credit is an instrumental part of their operation, in that it provides the capacity necessary for such flexibility.

E. The Socio-Institutional Context of Agricultural Credit

Agricultural credit is well integrated into the Moroccan farm production system. Informal credit exists in the form of loans between private parties and, more importantly, in the form of production through association (arrangements whereby each party contributes some factor of production -- land, labor or capital -- and the proceeds are divided-up as mutually agreed upon). The relative importance of direct private lending of funds, however,

Table 6-3: Financial Surplus Generated by Various Sized Farms

Farm Size (ha of cultivable land)	Number of Farmers ('000)	Disposable Income per Farm Family (Dh)	Minimum Consumption (Dh)	Financial Surplus per Family (Dh)	Total Financial Surplus Dh million
No cult land	345.6	782	782	-	-
0 to 5	834.5	1,251	1,251	-	-
5 to 10	168.4	3,873	3,246	-	105.6
10 to 20	87.1	6,970	4,870	627	182.9
20 to 50	34.0	12,580	6,490	6,090	207.1
50 to 100	5.9	28,525	12,985	15,540	91.7
over 100	<u>1.5</u>	<u>115,735</u>	<u>19,475</u>	<u>96,260</u>	<u>144.4</u>
Total/Avg	1,477.0	2,260			731.7

Source: "Evaluation de la capacité de financement du développement par l'agriculteur", Ministry of Agriculture and Agrarian Reform, 1977. Cited in the World Bank, Staff Appraisal Report, Kingdom of Morocco, Fifth Agricultural Credit Project, November 22, 1983, p. 7.

seems to have significantly decreased, especially in the last few years. This is, in part, because of the drought, which has reduced the availability of private capital in the rural areas. However, the availability of alternative investment opportunities, particularly in urban areas, and the increased availability of institutional credit have also contributed to this trend.

The current system is made up of both CLCAs and CRCAs. CLCAs provide easy access to very small loan amounts for poor farmers. These farmers must obtain co-signers, (more to attest to the character of the borrower, than to actually guarantee payment). CRCAs, on the other hand, provide more substantial loans. While many CRCA clients must also obtain cosigners, CRCA loan amounts are also based on projected productivity, available collateral, and the ability of the borrower to provide a significant percentage of self-financing.

The cut-off point for use of the CLCA and entry into the CRCA has progressively risen over time. It was originally set at 1523 Dh of assessed fiscal value, then raised to 3000 Dh, and recently raised again to 6000 Dh. However, once someone's dossier is entered into the CRCA system, it remains there. As a result, the majority of farmers who interest this Project (within a fiscal income range of 3000-6000 Dh) are within the CRCA system. However, new CNCA clients within this fiscal income range must open their accounts at CLCAs. (It is possible for a client to request a transfer to CRCA provided various, not always easy to fulfill, requirements are met).

Unfortunately, raising the cutoff point for entry into CRCAs exacerbates the pattern of providing assistance, but not inadequate productive credit, to poorer farmers. In the case of very poor farmers this may, in fact, be prudent as a viable dryland technological package has not been developed that would justify their assuming more debt. However, it is probably counterproductive for the 3000 Dh to 6000 Dh farm operator. CNCA personnel, themselves, are aware of the unsatisfactory nature of the present situation, and are open to studying and attempting to introduce new standards and procedures that would take greater recognition of production potential as a basis for loan determination. Consequentially, the grant portion of this project will look at the adequacy of credit limits for both CRCA and CLCA borrowers.

F. Farmer Attitudes Towards the CNCA

Of significant importance is the almost universal endorsement given to both the CLCA and CRCA by farmers interviewed during the design of the Project. Various suggestions were advanced by these farmers as to how services could be improved. These included raising the loan limit for small farmers, providing quicker access to funds, allowing more flexibility in use, and not demanding payment so soon after the harvest when prices are generally depressed. However, in spite of these suggestions, the farmers interviewed felt that the CNCA's basic loan practices were financially realistic and that the continued availability of credit was critical.

The interviews with farmers indicated a willingness on their part to repay CNCA loans, once conditions improve. There is no question, however, that this positive attitude is partially conditioned by the assumption, shared by both CNCA clients and its staff, that the CNCA should not demand repayment

when it is obvious that farmers cannot repay. In fact, were an aggressive collection policy to be enforced at this time, it would likely result in a very damaging loss of farmer confidence in the CNCA.

G. Conclusion: The Social Feasibility of the Project and the Future Potential for Expansion

The proposed project should accomplish its immediate purposes and should not have negative social or productive consequences. The beneficiaries will not be subject to unbearable indebtedness, as a result of the project. They should be capable of productively using new loan funds, while shouldering the debt burden from previous loans. The beneficiaries are honestly in need of the assistance provided by this project. The objectives of the Project are compatible with the development of a more productive agricultural sector.

The selection of the beneficiary group for the proposed Project does not, however, imply a denial of assistance to other groups to whom assistance should be funneled. A number of activities that would address the needs of a broader range of the rural population have been identified. These include assistance to groups holding collective lands, supervised credit for poorer farmers, interventions specifically tailored to rural farm women, special loan strategies for subsistence farmers who are on the threshold of becoming viable, profit-oriented operators, and support for agrarian reform and land consolidation. While it is beyond the scope of the project to address all of these needs at this time, the project will lay the groundwork for further efforts in this area through research and analyses undertaken under its grant component.

VII. ECONOMIC ANALYSIS

A. Production Prospects for the 1984/85 Crop Season

The main determinant of agricultural production for the upcoming crop season (1984/85) will be weather. If normal and timely precipitation is not received, production levels will remain at their present depressed levels and farm income and net worth will decline even further. However, a return to normal weather conditions will not be sufficient, in and of itself, to return agricultural output to pre-drought levels. Rather, there will be a delay in production response, due to a number of factors, several of which are discussed below. By decreasing the repayment burden on farmers from past loans and by ensuring the availability of credit to purchase needed inputs for the coming agricultural campaign, the proposed project should decrease this lag time in production.

The production response to a return to normal rainfall will be affected by several factors. First, many farmers will be cautious about risking more of their increasingly limited resources until they have some certainty of an improvement in the weather. Based on experience, Moroccan farmers believe that normal and drought years go in cycles. With the present situation, given successive years of drought, farmers will be cautious about investing in the coming campaign. Should 1984/85 prove to be a year of normal precipitation, however, farmers will be far more willing to commit their resources in the subsequent 1985/86 season, under the assumption that it, too, will be normal. One of the farmers interviewed during the research undertaken for the Project design, for example, planned to plant durum wheat on only half of the land that he would normally use. The remainder he planned to leave in fallow. If 1984/85 turned out to be a good year, he planned to sow more land to durum wheat the following year. On a nationwide basis, it has been estimated that the amount of land planted in the 1984/85 season in bread wheat, durum wheat, and barley will decline by 8 percent, 15 percent, and 3 percent, respectively, relative to 1983/84 levels.

Secondly, it will take several normal seasons for farmers to be able to reconstitute their assets, in particular to rebuild their livestock herds. During a drought, the returns to livestock production are greater than the returns to dryland crop production. Therefore, for many farmers seeking a cushion against further drought, rebuilding livestock herds will be the first priority.

The design team believes, based on its assessment of the situation, that availability of credit will be a constraint (though not the only constraint) to increased productivity in the coming campaign. In order for production to return to normal levels farmers will have to obtain funds to purchase adequate amounts of seed, fertilizer, and other cash inputs. No concrete data is available on the input or cash reserves available in the rural areas for investment in the upcoming crop campaign. Since informal credit is generally extended by local farmers and merchants, who themselves have been hurt by the drought, it is logical to assume that less credit will be available from informal credit sources. Thus, the availability of formal credit from the CNCA becomes that much more important.

Other constraints to increasing agricultural production will exist, however. Annex 3 provides an overview of Moroccan agriculture (land use, cropping patterns, cultivation practices, performance of the sector, and so forth), and discusses the major problems facing Moroccan agriculture (access and use of inputs, price and marketing policies, inadequate research and extension, and such) and what AID is doing, under the aegis of other projects, to address these problems. As discussed below, the principal concern for the proposed Project will be the availability of production inputs, primarily seeds, for the upcoming crop season.

The drought has severely hampered Morocco's efforts to multiply selected seeds, resulting in a substantial decline in the amount of selected seed available for the coming campaign. Based on the most currently available statistics, a total of 42,000 MT of selected seeds (improved) are available for the coming campaign. Of this, 36,000 MT will go to farmers (12,750 MT of durum wheat, 20,950 MT of breadwheat, and 4,300 MT of barley). Another 6,000 MT will be delivered to selected farmers for multiplication. The supply of non-improved selected seeds is 22,000 MT (of which 7,000 MT is barley and 15,000 MT is bread wheat). Another 800 MT of cereals was donated by F.A.O. This amounts to 64,800 MT of selected seeds available for the upcoming campaign, only 56 percent of the amount of seed available for the 1983/84 season. The lack of selected seed will force a larger percentage of farmers to switch from selected to traditional seed varieties, with a corresponding reduction in production potential.

Little information is available on the amount of traditional seed stored on Moroccan farms. However, it is reasonable to assume that these supplies, too, have diminished significantly. Consequently, the availability of traditional seed varieties may be a problem for many farmers in the coming campaign. This may become a particular concern with respect to barley seed in the drought-stricken southern provinces. Most farmers in dryland areas rely on traditional seed varieties, saving some grain from each crop as seed for the following year. Those farmers who received no output from last year's crop will be forced to purchase from more traditional grain markets, which will be supplied from areas in Morocco that were not as badly hit by the drought. Nevertheless, production levels may decline as farmers decrease the amount of land planted to cereals and reduce the density of seeding, in response to the scarcity and higher price of seed.

It is impossible to assess, at this time, how serious the seed availability problem will be in the 1984/85 campaign, or what affect it will have on production. If output levels are severely reduced, the ability of farmers to repay their rescheduled and new loans could, conceivably, be jeopardized. The Project Design team believes that, while seed availability may be a constraint in the coming agricultural campaign, it should not reduce yields such that the profitability of the farm operations is jeopardized. This assumption is included in the Logical Framework of the Project.

In contrast, the availability of the other major production input, fertilizer, does not appear to be a problem for the coming campaign. Roughly 711,000 MT of fertilizer will be available. This is a decrease of 7.5 percent from the previous year's level. Almost 53 percent of this fertilizer will be produced within Morocco. The remaining 47 percent will be imported. Domestic fertilizer production decreased by 16 percent from 1983/84 levels. However, imports increased by 5 percent to partially compensate for the deficit.

The government has not yet decided on the level of output prices. In 1983/84, however, the support prices for farm products were increased in response to that year's drought (wheat prices were increased by 7 percent, barley by 10 percent, and corn prices were increased by 30 percent). If the GOM decides to increase farm support prices again this year, these changes will probably not be large. In any case, the prices farmers get for their outputs should be comparable, if not better, than those which they have received in previous years.

The situation with respect to other potential constraints, such as input price levels, lack of appropriate technological packages, poor extension, farm fragmentation and inequitable land tenure, has not deteriorated significantly in recent years. These constraints should not, therefore, decrease crop production relative to previous years.

B. Economic Benefits of the Project

The target farms of this Project are commercially viable enterprises under normal conditions. Many of them may be forced out of business, however, through a very unusual succession of bad years. It would be economically disruptive for these farms not to survive as productive enterprises, because alternative activities in which their resources (labor, land, some equipment) could be as effectively employed do not exist. In other words, the drought should not be perceived as nature's way of speeding up the transformation of agriculture. The drought has adversely affected both efficient and inefficient farming operations, and is not comparable to economic forces which reward well-managed farms with profits and force poorly-run farms out of the sector.

The returns to investment in short-term inputs in Moroccan agriculture are not well-known, but the high demand for such credit indicates farmers themselves expect a return in normal years which exceeds the direct interest costs and the imputed costs of the farmer's time and travel required to obtain the credit. Thus, the expected return on investment is at a minimum the 11 percent which the CRCA charges its clients for short-term credits.

The only data available on the financial and economic returns to medium- and long-term credit in Morocco comes from the World Bank's appraisal of the Fifth Agricultural Credit Project. Eleven representative farm models and budgets were developed for each major type of on-farm investment (e.g. livestock purchases, well construction, mechanization). Analysis of these on-farm investments was based on data collected at the farm level on actual investments financed by the CNCA between 1977 and 1982. The financial rates of return to farmer's resources obtained in the analysis averaged almost 43 percent for CLCA clients and 24.6 percent for CRCA clients. These rates suggested that farmers would have no difficulty in repaying their loans.

Similarly, the World Bank's analysis of the economic rates of return to these same medium and long-term agricultural investments indicated that they would be economically, as well as financially, viable. The analysis indicated economic rates of return averaging 41.5 percent for CLCA clients and almost 20 percent for CRCA clients. The World Bank report noted that mechanization and livestock investments generated a lower rate of return to Morocco's economy

than to farmers because of subsidies provided by the Government on meat and milk prices and on agricultural equipment. Investment in irrigation equipment and fruit trees, on the other hand, generated higher ERRs than FRRs, suggesting price distortions against agriculture. [See World Bank, Staff Appraisal Report, Kingdom of Morocco, Fifth Agricultural Credit Project, Main Text, pp. 43-50, and Annex 13.]

Some reasonable approximations can be made of the production impact of the project. It is estimated that the Project will benefit up to 22,000 farmers (9750 individual farmers and 12,250 Agrarian Reform Cooperative members). It is estimated that, in terms of cultivated area, the farms of individual CRCA clients average 25 ha/farm, while those for Agrarian Reform Cooperative members average 18 ha/farm. Thus, the combined cultivated area of these farmers together is 464,250 has. Based on data available from Annex 3, Table 4, approximately 45 percent of this land will be dedicated to cereal production. Of this, 50 percent will go to barley, 29 percent to durum wheat, and 10 percent to bread wheat. Thus, it is estimated that 209,000 hectares of cereal production (roughly 5.4 percent of the total area planted to wheat and barley in Morocco) will be affected by this Project (117,458 ha of barley, 68,134 ha of durum wheat, and 23,408 ha of breadwheat).

In the seven years prior to the 1980/81 drought, the average yield of barley was 9.8 qx/ha, for durum wheat 10.17 qx/ha, and for bread wheat 9.09 qx/ha. Thus, the potential production from this land, assuming normal rains and that farmers have the credit inputs necessary to expand production, will be 115,108 MT of barley, 69,292 MT of durum wheat, and 21,278 MT of bread wheat. At current prices (\$122 per MT for barley, \$165 per MT for durum wheat, and \$155 per MT for bread wheat, it would cost Morocco \$33,655,000 to import this amount of grain. It can be conservatively assumed that, without credit, production on the beneficiary farms would be at least 10 percent lower than with the project. Hence, the economic benefit to Morocco in the first year of the project alone is \$3,365,500 or a return of 24.9 percent on the \$13.5 million in credit. The capital, less bad debt already allowed for, remains intact for future reinvestment.

No attempt has been made to quantify the benefits of the project in averted urban migration. However, significant costs are associated with reallocating resources from their current use in agriculture to less remunerative alternative uses, to the extent that these resources can be reallocated. (Labor can move to secondary towns and cities, but installed capacity on the farm, such as wells and stables, would probably be used below capacity). Nor has there been any attempt to quantify the intangible social benefits of the project in terms of employment generation, distribution of income, and so forth. Nor has any attempt been made to quantify the economic benefits to the Moroccan economy of a strengthened CNCA, which should result from the investments being made under the grant component of the Project.

Finally, the policy dialogue activities to be undertaken in the project should have long term benefits that are not quantified here. However, these could have broad economic implications. There are numerous examples where modifications in policies might have significant impact on the performance of the Moroccan economy. For example, credit to the parastatal agricultural

entities, SODEA and SOGETA, SONACOS and FERTIMA, is one avenue of approaching the larger debate over the appropriate role of the state in agriculture.¹ Other issues of long-run importance include the relation between credit and water use policy; credit as it affects the management of rangelands; the structure of the input supply distribution system and how input availability affects the demand for short-term credit and the productive capacity of the sector. This list is not exhaustive and is meant to suggest that there is an agenda of items which go beyond our current investigation of agricultural product pricing to broader set of constraints to increasing agricultural productivity and output.

1/ SODEA - Société pour le Développement Agricole, a public enterprise which manages approximately 65,000 ha of irrigated land; SOGETA - Société pour la Gestion des Terres Agricoles, a public enterprise that operates approximately 97,000 ha of non-irrigated land (formerly "colon" farms); SONACOS - Société Nationale de Commercialisation des Semences, a seed distribution parastatal; and FERTIMA - Société Marocaine de Fertilizants, a fertilizer distribution parastatal.

VIII. PROJECT IMPLEMENTATION

A. Mission Management and Monitoring

1. Monitoring Plan

The monitoring of this Project will be performed by a USAID Agricultural Project Officer who will be in frequent, but not daily, contact with the CNCA. CNCA Headquarters are in Rabat, a short distance from USAID's offices. The Project Officer will depend substantially on the Agricultural Credit Specialist for analysis and provision of project data. The Project Officer will draw upon the Regional Legal Advisor, the Regional Contracting Officer, the Program Economist, and, in particular, upon the Controller to assist in project monitoring. The principal assistance of the Controller will be to monitor disbursements under the loan during the first six months of the project, in accordance with the terms and covenants of the Project Agreement. The Controller will also assist in planning for the Project Audit (see Evaluation Plan). The project will require about 25 percent time of a Project Officer in the first year and 10 percent thereafter. Annual Project Reviews will be held between senior management of CNCA and Mission Management to monitor overall project implementation and to identify specific followup actions need to resolve any problems that arise.

B. Implementation Plan

1. Loan Component

The \$13.5 million Loan Component of this Project will be implemented as a two-step loan, under a Loan Agreement with the Ministry of Finance. The dollar Loan will be made to the Government of Morocco at ESF rates to be established by AID/W. Terms are expected to be no harder than 25 years, 5 years grace, 3 percent during the grace period and 4 percent during the 20 year repayment period (see Section V.C.2., Analysis of Spread). These are the terms referred to in this Project Paper for expositional purposes. [It should be noted that both the rate and period were not determined at the time of Project Paper submission. Minor changes in the terms can be accomodated, however, without disturbing the project design.]

The second step will make the dirham equivalent of \$13.5 million available to the CNCA on the same terms. The CNCA will use these funds to finance new loans to eligible farmers at prevailing CNCA interest rates (currently 9-11 percent for short term loans and 12-13 percent for medium/long term loans for CRCA clients). Farmers receiving these loans will have had their drought-induced debt rescheduled for 10 years at a 6 percent rate of interest. The CNCA will provide documentation to USAID verifying the new lending to eligible farmers. The CNCA may include under this program new lending to eligible farmers made after October 1, 1984, but prior to the signing of the Project Agreement. A major disbursement of the loan is expected to occur almost immediately after the Project Agreement is signed. Full disbursement will occur within six months. Details of eligibility and disbursement of the loan will be addressed in the Project Agreement by Covenants (see Chapter VI. Conditions and Covenants). Funds repayed by farmers on new loans will be returned to CNCA's general funds and may be used for financing agricultural credit needs of clients of the CNCA.

2. The Grant Component

The Grant Component is comprised of long and short term technical assistance, training, and commodities. It will be implemented under a Grant Agreement with the CNCA. This is a three year activity which will involve the completion of special analyses of credit-related issues, in-country credit training, and the provision assistance to address policy and operational issues facing the CNCA. The Grant Component will assist the CNCA in its efforts to establishing an effective Management and Information System (including support for electronic data processing equipment, software, and training). It will be implemented under a Host Country Contract between the CNCA and a U.S. supplier of the needed services (Title XII universities, consulting firms, and specialized U.S. credit institutions will all be encouraged to bid). A draft scope of work for the Grant-funded technical assistance is included as Annex 6.

The Host Country Contract is recommended in light of the close working relationship that needs to be established between the contractor and the CNCA on matters related to CNCA internal management and policies. The technical assistance currently being received under the World Bank's Fifth Agricultural Credit Loan by the CNCA's Evaluation Unit is also under a Host Country Contract.

C. Evaluation Activities

In view of the complexity of the Project, and its three-year duration, it is proposed that two separate evaluation/audit activities be undertaken. The first, an audit, will be in October, 1985. Its objective will be to confirm that the loans were disbursed to the beneficiaries as defined in this project and in conformity with all other undertakings of the CNCA (covenants, conditions precedent, etc.).

The second activity will be an end-of-project evaluation, which will take place in October 1987. This evaluation will focus on:

- Assessing the economic benefits of the project, both on a macro-economic level and at the level of the sub-loan beneficiary. (This review will of course be complementary to the special study to be undertaken on the overall benefits of rural credit activities in Morocco, and will aim at eventually confirming its findings.);
- Analyzing the findings of all special studies completed to date, and the extent to which their recommendations have actually been (or are being) implemented;
- Evaluating the quality of the technical assistance provided to CNCA and its appropriateness to the institution's needs;
- Reviewing the level of completion of project activities, and the competence with which they were carried out by CNCA; and
- Taking a critical look at new initiatives already undertaken or being considered by the Mission in the areas of rural credit and/or investments in the agriculture-related private sector.

This second evaluation will require a three-person team, consisting of a rural credit specialist/financial analyst, an agricultural economist, and a sociologist for five weeks. The evaluation will be charged with making recommendations for follow-on activities.

Table 8-1: Project Implementation Calendar

<u>Date</u>	<u>Action</u>
November 1984	Project Authorized
January 1985	Project Agreement Signed. RFP issued.
March 1985	Host Country Contractor Selected
April 1985	Host Country Contractor Starts Work.
June 1985	First Annual Work Plan and Review (Grant Component)
July 1985	Loan Disbursement completed certified to USAID.
October 1985	Audit of Loan Component
April 1986	First Annual Report
June 1986	Second Annual Work Plan and Review (Grant Component)
April 1987	Second Annual Report
June 1987	Third and Final Annual Work Plan and Review (Grant Component)
October 1987	Project Evaluation
April 1988	Final Report and close out
June 30, 1988	Project Completed (PACD)

IX. Conditions and Covenants

Conditions Precedent

The Project Loan Agreement shall have conditions precedent in substance as follows:

- (1) Prior to first disbursement under the Loan, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Borrower will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D., a copy of the executed loan agreement between the Borrower and CNCA.

The Project Grant Agreement shall have conditions precedent in substance as follows:

- (1) Prior to disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the CNCA shall provide to A.I.D. in form and substance satisfactory to A.I.D.:
 - (a) A statement designating the CNCA employee who will be the full-time counterpart to the Agricultural Credit/Agribusiness Specialist and make office space available for such specialist; and
 - (b) A Copy of the executed contract between the CNCA and the contractor who will implement the project.
- (2) Prior to disbursement under the Grant for the procurement of computer equipment, the CNCA shall have selected the type of equipment to be procured for the overall computer system to be financed by the IBRD. Computer equipment financed by A.I.D. shall be compatible with that procured for the overall CNCA computer system.
- (3) Prior to disbursement under the Grant for the development of the Training Center and Technical Library, the CNCA shall provide to A.I.D., in form and substance satisfactory to A.I.D., assurance that adequate facilities are available to house these activities.

Covenants

The Project Loan Agreement shall have covenants in substance as follows:

- (1) The Borrower agrees to on-lend the funds provided under this Loan to the CNCA under the same terms and conditions governing this Loan.
- (2) The Borrower agrees to make the dirham equivalent of the Loan available to the CNCA within seven (7) days of receiving disbursement under the Loan.

The Project Grant Agreement shall have covenants in substance as follows:

- (1) The CNCA agrees to on-lend the funds received by it under the A.I.D. loan to the Borrower to individual farmers and members of Agrarian Reform Cooperatives in amounts determined through CNCA's normal review

process, and at those interest rates and other terms and conditions currently applied by the CNCA to new loans.

- (2) The CNCA agrees to on-lend the funds received by it under the A.I.D. loan to the Borrower to eligible farmers only. Eligible farmers are defined as those who: are clients of the CRCAs or members of Agrarian Reform Cooperatives that are clients of CRCAs; if individuals have a fiscal revenue of less than 6,000 Dh; and received approval by local CRCA credit committees for rescheduling, based upon an assessment that non-repayment of their loans was directly attributable to the drought conditions which have prevailed since 1980/81.
- (3) The CNCA agrees to reschedule the loans of eligible farmers at an interest rate of 6 percent and with repayment terms of up to 10 years.
- (4) The CNCA agrees that it will disburse the funds received by it under the A.I.D. loan to the Borrower to eligible farmers within 90 days of receiving the funds and that it will adequately document these disbursements.
- (5) The CNCA agrees that Standard Provision B.5 will apply to the funds it receives from the Borrower and on-lends to eligible farmers, as well as to the funds provided by this Grant.

ANNEXES

ANNEX 1: DROUGHT RECOVERY CREDIT PROJECT: PROJECT PAPER LOGFRAME

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program Goal:</u> To ensure the long-term viability of dryland farming operations in Morocco, many of which have been severely affected by the prolonged drought.</p>	<p><u>Measures of Goal Achievement:</u> 1) The farming status of rescheduled CNCA clients is preserved and their farming operations are restored to at least their pre-drought production levels.</p>	<p>1) Surveys undertaken by CNCA's monitoring and evaluation unit. 2) AID's end-of-project evaluation of the impact of the rescheduling program. 3) Ministry of Agriculture and other GOM agricultural and economic data.</p>	<p>1) Drought does not continue. 2) Adequate amounts of inputs, especially seeds, are available to rescheduled farmers.</p>
<p><u>Project Purpose:</u> 1) To assist drought-stricken farmers to restore the productive capacity of their farming operations by providing temporary relief on unpaid loans and access to fresh credit. 2) To strengthen the capability of CNCA to promote and assist the development of small- and medium-scale farming operations by providing it with (a) additional lending capital for drought-stricken farmers, and (b) appropriate technical assistance.</p>	<p><u>End-of-Project Status:</u> *</p> <p>1) Farmers are able to finance the purchase of required agricultural inputs for the upcoming campaign. 2) Most rescheduled loans and new loans provided by the CNCA to farmers are eventually repaid. 3) CNCA visibly strengthened as a credit institution (management improved, loan costs reduced, counterproductive policies changed, positive interest rates applied, and so forth). 4) CNCA taking on new and/or expanded functions in small farm agriculture and agribusiness.</p>	<p>1) Annual Report of CNCA. 2) Audit/Evaluation in Year 2. 3) Special studies. 4) Monitoring of project by AID.</p>	<p>1) Drought does not continue. 2) Rescheduling program creates renewed sense of commitment to the CNCA on the part of delinquent farmers.</p>
<p><u>Outputs:</u> 1) Small farmers' debt rescheduled in drought-affected regions. 2) New loans extended to target group of farmers during 1984/85 season, leading to restoration of their farming operations. 3) Special studies, training and other institutional development activities completed by end of Year 3.</p>	<p><u>Magnitude of Outputs:</u> 1) loans for 9,750 individual farmers consolidated and refinanced by CNCA. 2) loans for 366 Agrarian Reform Cooperatives consolidated and refinanced by CNCA. 3) \$13.5 million worth of new loans extended to eligible farmers during 1984/85 agricultural campaign. 4) Policy dialogue taking place with CNCA and other donors. 5) Training courses completed by 30 mid-level managers of CNCA. 6) 11 special studies completed.</p>	<p>1) Evaluation/Audit in Year 2. 2) Annual Reports and Accounts of CLCA. 3) Special studies reports. 4) Monitoring of project by AID.</p>	<p>1) Recommendations of special studies are, indeed, implemented. 2) Continued AID cooperation with IBRD and other donors in assistance to institutional development of CNCA. 3) IBRD computerization program is implemented on schedule.</p>
<p><u>Inputs:</u> 1) Loan funds to extend agricultural credit to farmers. 2) Long- and short-term technical assistance (TA). 3) Short-term training for CNCA staff members. 4. Commodities.</p>	<p><u>Implementation Target (Years 4 and 5):</u> 1) \$13.5 million loan provided to CNCA. 2) \$1.5 million in grant funds provided. Grant will pay for: - 36 person months of long-term TA - 42 person months of short-term TA - Equipment for technical library and training center (including 10 micro-computer). - 52.5 person months of short-term training.</p>	<p>1) Evaluation/Audit in Year 2. 2) CNCA Reports and Accounts. 3) Monitoring of project by AID.</p>	<p>1) Project authorized in early FY 1985 (first quarter).</p>

* See NEAC Reporting Cable; State 368256

ANNEX 2

SOCIAL ANALYSIS

Part 1: The Configurations of Farming Systems in Morocco

Agricultural Credit, its values and problems, is not new to Morocco. Credit arrangements, both traditional and modern, are an integral and indispensable part of Moroccan agricultural production systems. The structure of credit tends to reflect general production systems, in terms of loan conditions, use of funds, identity and relation of lender and borrower, and the nature and distribution of benefits to both the immediately concerned parties and the general rural economy. Any effort, aimed at either increasing the efficacy of present practices or introducing new policies and procedures must consider present circumstances and past experiences, prior to determining when to follow, and when to divert from, the already well worn grooves of established practices.

A. The Traditional Verses Modern Dichotomy in Moroccan Agriculture

1. The Basic Split

Almost every discussion of Moroccan agriculture begins with the division of the sector into two distinct production systems. The differences, as we shall see, can be characterized by significant variation in labor input, cultivation practices, economic strategies, and access to, and use of, resources. The divergences are real and their effects are cumulative. A clear understanding of the consequences of this is crucial to understanding how credit operates, the nature of present problems, the future promise of the agriculture sector, and the challenges facing innovations in policy and practice.

However, prior to delineating these differences it is crucial to understand the extent to which this characterization is a conceptual simplification of a very complex situation, and the extent to which biases in both practices and data presentation obscure crucial areas of dynamic change, grey areas of mixed practices, and transitional stages in farming strategies. Unfortunately, this is rarely done. The result is that statistics and descriptions that are substantially skewed presentations of reality are accepted as fact. To avoid this, preliminary clarification of several major areas is advisable.

2. Qualifications and Characteristics of Farm Types

2.1 Land Tenure

The land tenure situation is constantly cited as a major obstacle to improving agricultural production in Morocco. Critical factors are an adherence to Islamic laws regarding inheritance, coupled with generally large families and the desire of many people to maintain a rural foothold for the sake of economic survival, family unity, psychological orientation or productive investment, regardless of the actual worth of the land in question. The result is that, upon an owner's death, his single holding is

parcelled out to his surviving spouse and children, resulting in rapid fragmentation of ownership and managerial rights. Depending on how ownership claims are settled, the land itself is either divided into a number of smaller, individual parcels, given to one party for use but not ownership, or managed as common property. The final arrangements, themselves, can be effected by either an informal agreement or a legal determination.

2.2 Farm Size, Value and Distribution

Most agricultural reports and policy papers cite figures purportedly reflecting the distribution of land holdings in Morocco. In general, none make clear how the original data was generated, nor the strong qualifications that should be applied to assessing its validity.

For example, Annex 4, Tables 1, 2, and 3, present three different breakdowns of land distribution. Table 1 presents data from the World Bank's Appraisal of the Fifth Agricultural Credit Loan. Table 2, taken from the 1981 USAID Dryland Agriculture Study, presents a somewhat different distribution. Finally, in Table 3 still another breakdown of farm size is presented. This was based on data gathered in the Haute Chaouia region (around Settat) by the socioeconomic team of the Agronomic Institute.

In fact, a number of reasons suggest that all three land distribution breakdowns are, at best, gross estimations, and that, in fact, the data over-estimates the number of small farms (0-5 hectares) and underestimates the number of mid-size farms (15-45 hectares).

First, as noted above, inheritance patterns result in the distribution of small parcels to numerous heirs as legal owners. However, studies to date indicate that the minimal area generally farmed by any one active dryland farmer is over seven hectares. In fact, a very substantial number of supposed farmers are actually working outside agriculture and sharecropping or renting their land to others or, defacto, assigning its use to another family member.

Second, tax records (and agricultural service/credit bank records which are based upon them) tend to cluster farm size at under 1500 Dh of fiscal value (1-10 hectares) or above 3000 Dh (over 20 hectares) with a general void in between. (See Figures 1-3, Distribution of CLCA and CRCA Loans in Berrechid, Settat and El Bourj). What is crucial is the realization that these figures are highly subject to individual manipulation because they are based on self-declaration of total worth and farmer discretion in legally registering defacto usage rights. The lower range is favored by those who either do not wish to cooperate with, or do not completely trust, their relations and have kept complete individual title, or those who wish to avoid tax liability, which begins at an assessed value of 1521 Dh. Conversely the higher range is favored by those who wish access to higher credit levels, or who inflate their actual hectarage in order to obtain rights to larger quantities of government distributed inputs, such as HYV seed.

Third, efforts to establish a relation between hectares and official fiscal value, and thereby deduce a formula for extrapolating one from another, produces, at best, gross correlations, because of the variations between regions and farm types. One hectare of irrigated land is not only implicitly worth far more than one hectare of rainfed land, but the ratio obviously varies dramatically depending on climatic zone and immediately prevailing

Annex 2, Table 1: World Bank Farm Size Breakdown

<u>Farm Size (ha)</u>	<u>No. of Farms</u>	<u>% of Total Farms</u>	<u>Arable Land (ha)</u>	<u>% of Arable Land</u>	<u>No. of Ha/Farm</u>
Without Cultivable Land	450,300	23.4	-	-	-
0-5	1,089,500	56.5	1,776,200	24.5	1.6
5-10	219,900	11.4	1,508,000	20.8	6.9
10-20	114,100	5.9	1,529,700	21.1	13.3
20-50	44,000	2.3	1,218,000	16.8	27.7
50-100	7,700	0.4	514,800	7.1	66.4
More than 100	2,600	0.1	703,300	9.7	278.0
Total/Average	1,928,100	100.0	7,250.0	100.0	4.9

Source: World Bank, Staff Appraisal Report, Kingdom Of Morocco, Fifth Agricultural Credit Project, Nov. 22, 1983, p. 7.

Annex 2, Table 2: Estimate of Land Distribution by Size of Farm in a Traditional Dryland Arable Region

<u>Arable Ha.</u>	<u>No. of Farms</u>	<u>% of Total Farms</u>	<u>Arable Land (ha)</u>	<u>% of Arable land</u>	<u>No. of Ha/Farm</u>
0-3	230,100	40.0	571,200	15.0	2.5
3-6	201,600	35.4	971,000	25.5	4.8
6-12	74,000	13.0	723,500	19.0	4.8
12-25	57,000	10.0	1,085,200	28.5	19.0
26-50	5,700	1.0	266,500	7.0	46.8
over 50	1,100	0.2	190,300	5.0	173.0
Total/Avg	569,500	100.0	3,807,700	100.0	6.7

Source: MidAmerican International Agriculture Consortium Dryland Farming Team, A Report: Applied Agronomic Research Program for Dryland Farming in 200-400 mm Rainfall Zone of Morocco Directed to the Small Farmer, January 1977, p. 135.

Annex 2, Table 3: Size of Farms in Haute Chaouia and Beni Meskine Regions of Settlat Province

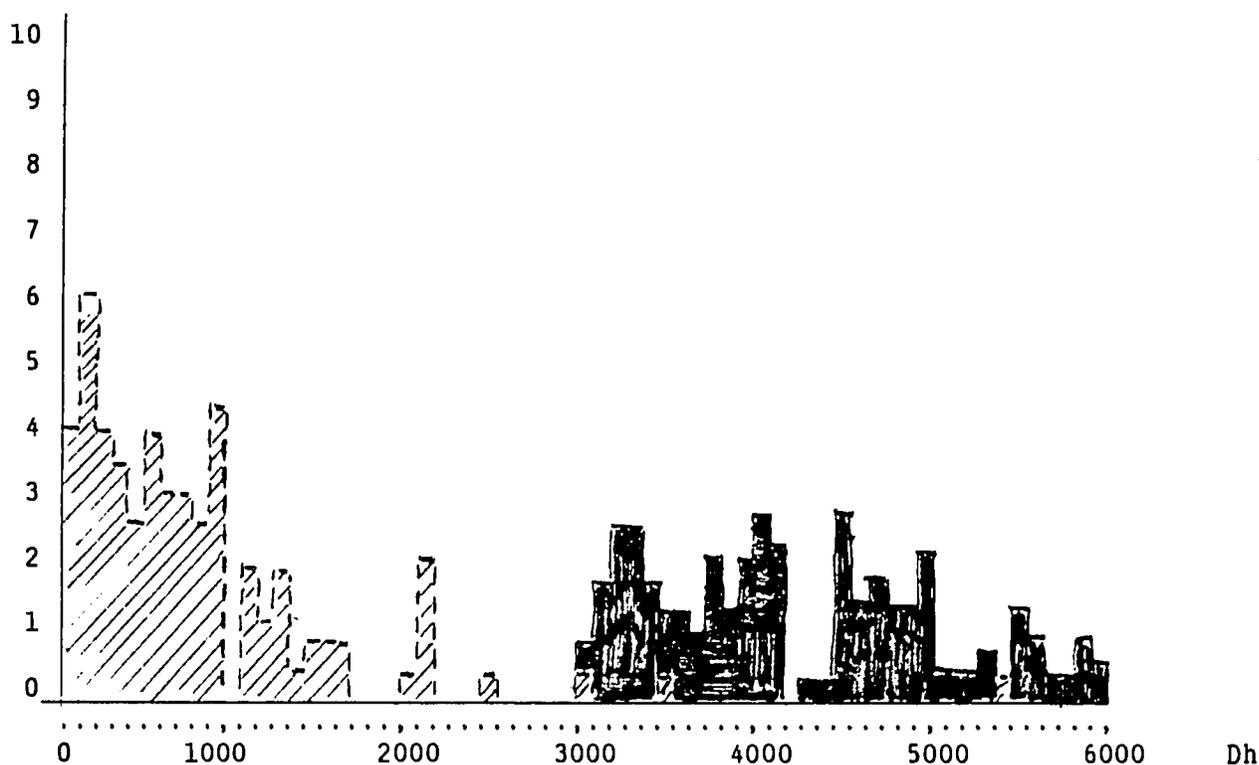
<u>Farm Size</u>	<u>No. of Farms</u>	<u>% of Total Farms</u>	<u>Arable Land (ha)</u>	<u>% of Arable land</u>	<u>No. of Ha/Farm</u>
Without Cultivable Land	328	15.4	-	-	-
0-5	1,064	50.3	2,844	21.5	3.65
5-10	423	19.8	3,132	23.7	7.40
10-15	149	7.0	1,873	14.2	12.58
15-20	69	3.2	1,223	9.3	17.72
20-30	57	2.7	1,448	11.0	25.40
30-50	29	1.4	1,185	9.0	40.86
50-100	10	0.5	549	4.2	54.90
over 100	7	0.3	951	7.2	135.86
Total/Avg	2,137	100.0	13,205	100.0	6.17

Source: Benatya, Driss, Paul Pascon and Larbi Zagdouni, Projet Chaouia, L'Agriculture en Situation Aléatoire Chaouia 1977-1982, Rabat, April 30, 1984.

Annex 2: Figure 1 Distribution of CRCA and CLCA Loans in El Bourg ¹

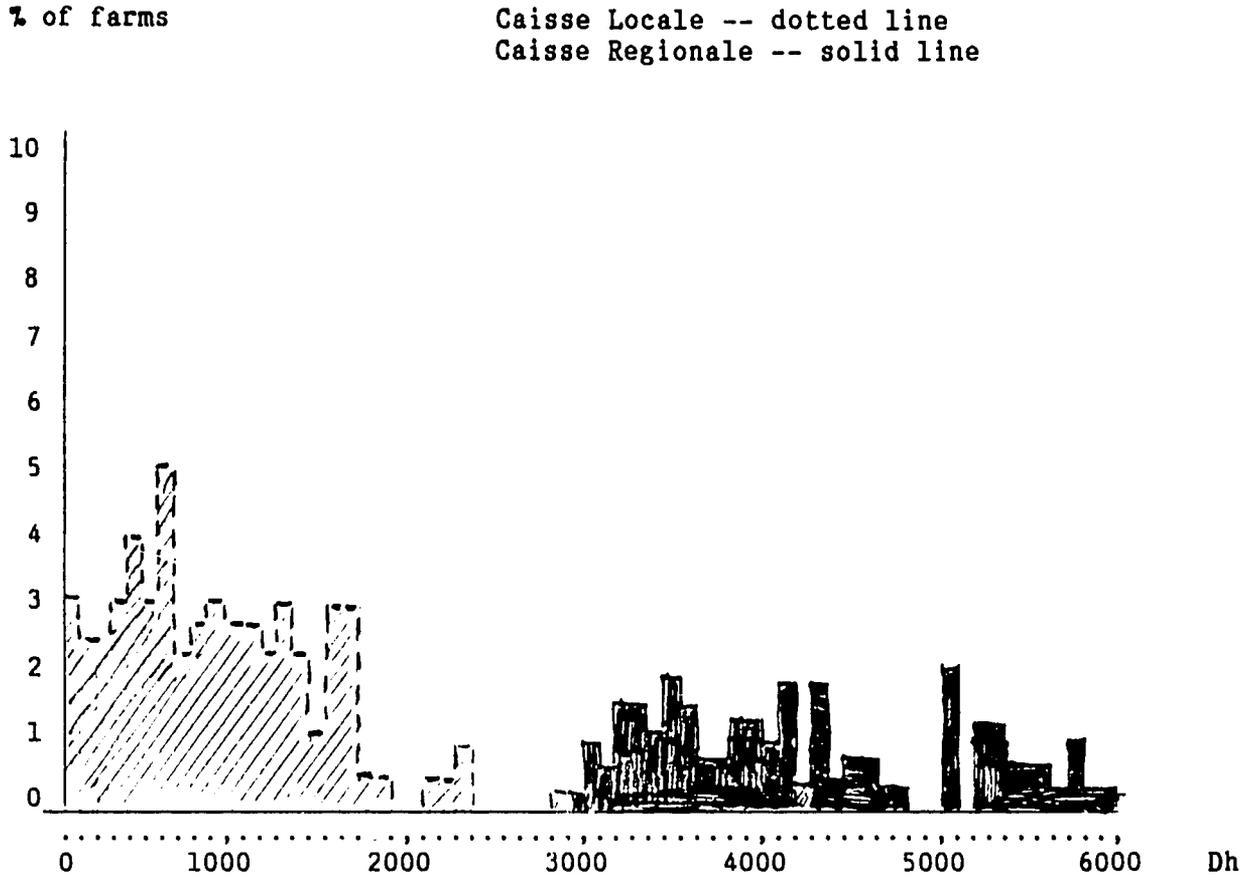
% of farms ²

Caisse Locale -- dotted line
Caisse Regionale -- solid line



^{1/} Frequency distribution of the declared value of 200 farms receiving credit in El Bourg (samples drawn only from a population with a fiscal revenue value of less than 6000 Dh). CLCA clients over 3000 Dh are new clients denied CRCA membership under the 1983 entrance requirement of 6000 Dh. Note that El Bourg is in the lowest rainfall area of the study. Farmers probably have, under normal circumstances, a higher percentage of animals in reality than in either Settat or Berrechid. However, because of the severity of the drought, the GOM determined that, in this area, animals would not be counted for taxes.

Annex 2: Figure 2 Distribution of CRCA and CLCA Loans in Settata ¹

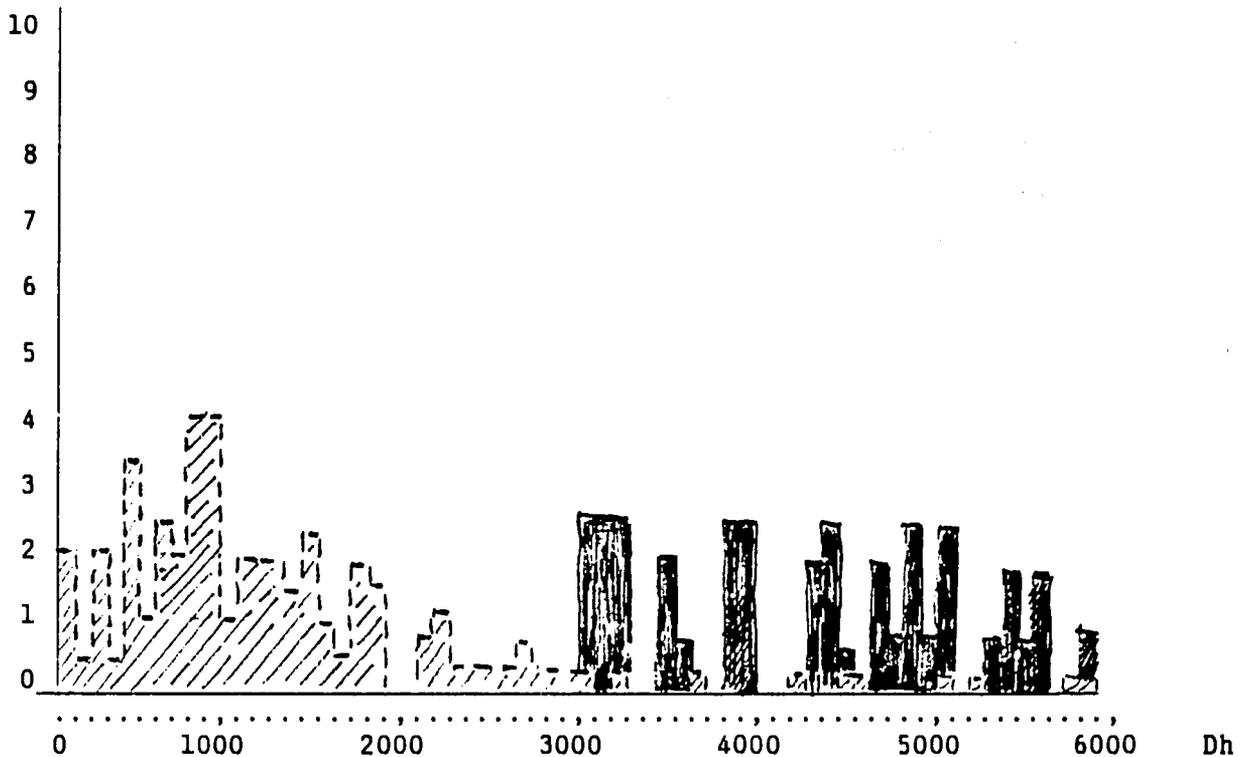


^{1/} Frequency distribution of the declared value of 200 farms receiving credit in Settata (samples drawn only from a population with a fiscal revenue value of less than 6000 Dh). CLCA clients over 3000 Dh are new clients denied CRCA membership under the 1983 entrance requirement of 6000 Dh. Settata is midway between El Bourg and Berrechid geographically and climatically. It has some irrigated agriculture, but much less than Berrechid. It also has a significant number of livestock which are counted for tax purposes (self-declaration of owners as to the number).

Annex 2: Figure 3 Distribution of CRCA and CLCA Loans in Berrichid ¹

% of farms

Caisse Locale -- dotted line
Caisse Regionale -- solid line



^{1/} Frequency distribution of the declared value of 100 farms receiving credit from the Caisse Locale and 41 farms receiving credit from the Caisse Regionale (CRCA samples were weighted to equal the percentage of the 100 CLCA member sample.). CLCA clients over 3000 Dh are new clients denied CRCA membership under the 1983 entrance requirement of 6000 Dh. Berrichid is the highest rainfall area of the three localities studied. It had the highest percentage of irrigated land (hard to hide from official awareness) and the lowest number of animals (at least in the immediate area).

climatic patterns. While the official schedule for assessing land value makes some adjustments for regions, it does not adjust for location (e.g. near or far from a road, which can increase value 5-10 times), depth of the water table, or soil fertility. The attached random samples from the CRCA and CLCA's of Berrichid (a higher rainfall area), Settat (a predominantly dryland area) and El Bourg (an almost totally dryland, low rainfall zone) provide an example of the wide range of relative values.

Because of the above factors it is difficult to assign a realistic value to the percentage of farms, out of total Moroccan farms, that actually fall within the proposed range of this project's focus (3000-6000 Dh). The figure is certainly higher than the usual statistics would indicate, and would increase even more were one to delete from the list of small farms those that are essentially large gardens and do not represent a substantial investment of family time or money. With some confidence one can assign the targeted population of farms of this project to the first quartile (that is, the top 25 percent of Moroccan farms, in terms of farm size), with a probable clustering of around 10-12 percent, and may be even substantially higher.

2.3 Farm Types

Because of the difficulty explained above in ascribing any absolute distribution to farms by area or value, one should focus more on farm types, based on meaningful differences in production systems, strategies, needs, and potentials. Besides avoiding becoming trapped in questionable statistics, such an approach is far more efficacious from a developmental perspective, as it focuses on areas for possible intervention and assistance and permits identification of the relationship between proposed immediate actions and long term agricultural policy. In fact, one hoped for secondary effect of this project's credit and special studies activities, would be to encourage greater CNCA use of operationally meaningful and flexible standards for the provision and evaluation of credit, rather than the fairly rigid formulae presently used.

At least one attempt at classification by production type has already been attempted. It covers the Haute Chaouia region, where the a significant portion of the loans under this project would be made. It divides farms into nine production systems. (See Annex 2, Table 4: Farm Types). It should be noted that, in this sample, farms within the range to be aided by this project equal more than 30 percent of that total sample.

The detail of this breakdown actually exceeds the immediate needs for planning the present proposed intervention. Therefore, for this analysis, these production systems will be grouped into three, more comprehensive, basic divisions: traditional, mixed traditional, and modern production systems.

2.4 Access to Capital

One criteria not specifically focused on in delineating farm types is access to capital, per se. Unsupervised credit, when provided in cash, is an infusion of capital into the farm operation. The real use of that credit largely depends on the farmer's access to additional resources. Ability to rent land, pay for hired labor, hire custom mechanized assistance, or operate and maintain an irrigation system after the initial investment, demands additional funds from either on- or off-farm sources. From a banking perspective, the importance of additional capital is primarily as collateral

ANNEX 2, TABLE 4: FARM TYPES - KEY FARM CHARACTERISTICS

Farm Category	N.	Average Area Owned (ha)	Average Area Farmed (ha)	% Area Rented/Sharecropped	Area/Adult Family Worker (ha)	Average Draft Animals/Farm	Mech. Equip./Farm present/absent owned/rented	Av. Large Animals Units	% Animals Shared	% Crops Grown			% Family workers Earning Wages
										Wheat & Barley	Maize	Legumes	
I	9	1.65	3.03	46.0%	1.24	1	present/rented	1.6	41%	56.6%	28.3%	5%	53.0%
II	6	2.57	7.00	63.3	1.69	1.75	present/rented	4.9	60	47.5	34.0	U.K.	48.6
III	9	7.12	7.60	6.3	1.76	2.0	present/rented	5.3	16	50.5	23.4	14.5	26.2
IV	5	3.95	12.35	68.0	3.20	4.0	present/rented	8.4	38	43.6	29.4	8.0	8.4
V	7	13.16	15.51	15.0	3.61	2.0	present/rented	7.1	11	46.7	21.5	8.0	.06
VI	9	21.1	25.51	24.7	3.93	3.0	present/rented	7.2	5	44.3	24.3	14.0	U.K.
VII	10	29.42	37.47	15.4	9.65	U.K.	present/owned	14.5	U.K.	46.3	10.8	18.0	U.K.
VIII	6	153.00	N.A.	U.K.	N.A.	N.A.	present/owned	U.K.	U.K.	49.2	3.0	U.K.	N.A.
IX	10	15.79	U.K.	N.A.	N.A.	N.A.	present/owned	U.K.	7	60.8	3.0	18.0	U.K.

Key
 I : micro-ownership, micro-farm
 II : small-scale ownership, small farm
 III : micro-ownership, medium farm
 IV : medium ownership, medium farm
 V : medium ownership, medium farm

VI : composite - 5 old, 4 new medium farms
 VII : well-off, modernizing farms
 VIII : modern capitalist farms
 IX : landlords, absentee farmers
 U.K.: Unknown
 N.A.: Not Applicable

Source: Synthesis from text and tables in Zagdouni, La Mechanization Agricole, Cas de la Haute Chaouia, 1981

to secure the loan and limit the lending institution's risk. When loans are made based partially on the assessed productivity of the proposed investment, the existence of adequate operational capital is also important to the lender, as well as to those primarily concerned with increasing agricultural productivity and farm income from a development perspective. However, where the banker may begin to see an unacceptable lending risk, the development perspective may perceive a precise need for the infusion of additional capital in order to assist those capable of greater production, but presently without adequate backup resources. As will be seen, it is partially this difference in attitude to making risky, but socially beneficial, investments, that distinguishes the financial from the development perspective, and that has led to conflicting operational strategies and institutional arrangements for agricultural credit programs in Morocco.

2.5 Trends

In describing any system, one tends to freeze in time dynamic change. Such change is occurring in Moroccan agriculture with respect to the use of mechanization, fertilizer, high yielding seed varieties, the increased dependance on irrigation, and the budding agro-industry sector. At the same time, other changes seem to be following an already established cyclical pattern whereby, over the life of the farm operator, an effort is made to increase the extent of operations, only to see them, upon the operator's demise, fragmenting once again into marginal or non-viable economic operations. At a given point in time, any particular operation can be found somewhere on the spectrum from subsistence, to struggling, to profitable. However, no one position is secure over time. An important concern of development credit must be how and where to intervene on this spectrum to try to economically stabilize and increase that part of the spectrum where profitability can occur. This must be done while maintaining, if not increasing, the resources and income of financially disadvantaged producers, for the socio-economic benefit of the society as a whole.

B. Farm Strategies and Types

Any attempt at characterizing farm types immediately runs up against the difficulty of generalizing among the different existing climatic zones (coastal rainfall, semi-arid, arid), production systems (irrigation, rainfed, and mixed), and product orientations (cereals, livestock, vegetables, mixed farming, etc.). Any characterization is therefore only illustrative of the spectrum of possibilities and the actual target group would vary significantly among areas. Nevertheless, three broad categories of farm types can be described. These are smaller, traditional farms, modern farms, and mixed-traditional farms (those in transition).

1. Traditional Farms and Farm Strategy

Traditional farm operations can be characterized as follows:

1.1 Size and Ownership Spectrum

Traditional farms vary in size from less than one, to more than fifteen, hectares in owned land. In general, a minimum of five to seven hectares of total land owned, rented, or sharecropped is farmed. On the lower end of the

spectrum, the nature and limits of available resources largely determine the farm strategy. At the upper limits of the spectrum, it seems that it is the farm strategy that largely precludes further expansion. The small, five hectare or less, traditional farm is the locus of the rural poor. However, significant numbers of small holdings are held by people who have migrated to urban areas, or who have successful urban migrants in the family, and therefore possess appreciable, if not extravagant, external income.

1.2 Family Consumption ("Subsistence") Orientation

Substantial confusion exists over the use of the word "subsistence" in reference to the Moroccan farm production strategy. Virtually all Moroccan farmers are integrated into the market economy, both in regards to their on-farm activities and off-farm labor and purchases. Even the poor farmer who grows durum wheat solely for family consumption will often sell his production in the market and buy already processed flour with the proceeds, in order to avoid the trouble of milling. What distinguishes his operative strategy is that production decisions are not made in order to maximize profits, but rather to minimize risk and assure basic family consumption needs.

1.3 Crop Choice and Farming Strategy

The small traditional farmer's family consumption strategy is directly reflected in crop choice and pattern. Crops are chosen according to the consumption needs of the family and livestock, with an emphasis on drought resistance over quantity of production. The result is a concentration on barley and hard (durum) wheat, with little or no attention to soft bread wheat. Farming technology follows a similar track, with techniques believed to produce best under drought, such as broadcasting seed and delayed plowing, being common practices. Animal production is an inherent and inseparable part of the farming operation.

1.4 Complexity of Family Economic Structure

In contrast to the simplistic notions involved by the concept of subsistence agriculture, the economic situation of the traditional Moroccan farmer is extremely complex, since agricultural activities are treated as a sub-division of a portfolio of family economic endeavors that usually includes rural paid labor, small marketing activities, urban paid labor, and often remittances from family members in other countries. Reliance is on family labor and capital, which must be carefully allotted among conflicting needs. For the traditional farm, agricultural activity is seen as contributing to consumption needs through the utilization of otherwise unobligated land and labor (e.g. women and children), with a minimal investment of scarce cash funds.

1.5 Inherent Constraints in Capital and Capacity

The small traditional farmer is often, by definition, capital poor, since he repeatedly foregoes profit opportunities to assure basic needs. He thus has little or no funds to invest himself in farm modernization, is usually operating on an area too small to use technologies dependent on economies of scale, and suffers concomitant high transaction costs in relation to benefits in all transactions that require investment of time and money off

the farm (such as travelling in search of seed, fertilizer, markets or credit). In addition, the traditional farmer ordinarily possesses poorer quality land, in terms of fertility, water availability, or access to transport. Further, as a direct consequence of his socio-economic status, the traditional farmer has little influence to bring to bear in obtaining a fair share of limited resources, such as subsidized inputs.

1.6 Availability and Employment of Credit

Given small traditional farmers' mixed economic strategies, it is often more ritualistic than real to ascribe a specific use to borrowed capital. Many such farmers annually borrow money for seeds and plant their fields. However, whether the money goes to buy the seeds and they use their own resources to pay for food, or vice versa, is somewhat academic. Both represent obligatory expenses for the survival of the production unit to which cash credit makes a significant, but relatively small, contribution. This very modest use of cash credit is dictated, in part, by the limits placed on credit availability by the CLCA's. For other credit needs, the small traditional farmer must turn to informal credit. Here, too, access to cash loans is very limited in both amount and duration. The alternative is the widely used systems of sharecropping or livestock production "in association", wherein one party contributes land and the other provides seed, animal stock, and/or other supplementary inputs. The precise division of benefits is then a matter of negotiation.

2. The Modern Sector

The distinguishable qualities of the modern farm sector in Morocco are discussed below.

2.1 Size and Ownership

The term "modern" is generally applied to that segment of Morocco farms that apply, in a comprehensive fashion, current western-approved and recommended technologies, such as intensive use of chemical fertilizer, high yielding seeds, mechanization, and related cultural practices. Moreover, it is because of their substantial links to the modern sectors of the Moroccan economy (banks, commercial outlets, technical services, etc.) that modern operators are able to acquire the necessary inputs, information, and support in the quantities needed to continue operating in this fashion. Large size, as will be seen, is not an absolute prerequisite to adoption of this production strategy. But, since continuously available capital is needed to both acquire and operate the technology, and since both wealth and status are primary, if not exclusive, avenues to the acquisition of limited goods and services, it is only natural that there is a strong correlation between farm size, value, and modernity. Most truly modern farm operations are over 100 hectares. This appears to be as much, if not more, a management threshold, than a question of available land and capital. At least for the areas surveyed, one finds farms over 100 hectares which actually rent 80 percent of their land, but very few farms rented or owned in the 60-90 hectare range.

The question of ownership is a complicating factor in attempting to determine the relationship between size and modernity. However, the distribution of farms is generally based on ownership records. But what is

listed as one large operation may, in fact, be owned by a number of individuals (often in the same family), and what is listed as several small operations may actually be run by a single individual. It is interesting to note that, in the farm areas surveyed for this paper, it was the 100 hectares-plus strata where noticeable vesting of control and ownership in women was found (see special note on Women in Agriculture.)

2.2 Market Orientation and Production Specialization

As to be expected, the modern farming sector is almost entirely profit oriented. (The exception being some government operations). Such operations generally eschew the diversification strategy of smaller farms, and tend to specialize in one or two crops, with little mixing of cultivation within the same season and little associated livestock production activities.

Cereal schemes are basically oriented to the production of bread and durum wheats, both with HYV technology. There is virtually no interest in less productive barley or maize. For historical reasons, such operations are found where there are better soils and in the less arid climatic zone. They therefore, have experienced significantly less loss due to recurrent drought than poorer and smaller traditional operators.

2.3 Access To, and Application of Credit

In the modern sector, credit is not used just as an addition to available capital to meet identified needs. Rather, to a large extent, the availability of credit induces need by creating new opportunities for investment which were not previously considered. Entire operations are started based upon newly available credit. Thus, where the traditional farmer experiences a need and then sees if credit is available to fill it, the modern sector entrepreneur seeks credit opportunities for investment and then seeks a way of taking advantage of them. Unfortunately, one undesirable aspect of this is the purported practice of some urban entrepreneurs to procure agricultural land precisely for the sake of obtaining access to cheaper agricultural credit, which is then actually plowed back into urban/industrial investments.

3. Mixed-Traditional Systems: The Viable Farmer in Transition

3.1 The Phenomenon of Transition and Stabilization

Inherent in the concept of development is the concept of change; the desire to move a situation from what is perceived as a less desirable state to a more desirable one. Change, however, occurs in several fashions -- through the introduction of something new; through the actual transformation of something old; or through the reapportionment and application of existing factors within the same system. Agricultural credit can play a role in all three processes. It can finance the creation of new production systems (e.g. agro-business). It can finance the transformation of old production systems through the adaptation of new technologies (e.g. replacing multi-crop substance agriculture with modern technology-based, specialized crop production). Finally, credit can provide funds for the acquisition and operation of existing factors of production by those who have some resources and want more, but who presently lack the means to either procure or retain them.

The proposed project clearly falls within this last category. It seeks to aid present agricultural producers through either assisting them to obtain improved technologies (pumps, high yielding variety seeds, fertilizer, etc.), or (in the majority of cases) to continue to employ existing technologies or practices (purchase of local seed varieties, hiring labor during peak periods, and such) that require additional capital under present crisis circumstances. The proposed project does not seek to assist either those who, despite difficult circumstances, have access to sufficient reserves to continue operation on their own. Nor does it seek to assist those who presently face an extensive gamut of constraints on production which, under present circumstances, effectively block credit alone from making a substantial contribution to the survival or development of their production system (and which may, in fact, only propel them deeper into insolvency).

The mixed-traditional category of farmers is actually occupied by two groups. The first group includes those who already possess the necessary factors of production in marginally adequate amounts. These can be referred to as smaller viable farmers. The smaller viable farmers have, under normal conditions, the resources necessary to be profitable. However, they generally have only limited amounts of reserves.

The second group includes those who are on the threshold of possessing the necessary factors of production. This category may be termed marginally viable farmers. Farmers in the marginally viable group are consumption-oriented. They may have assembled most, but not all, of the elements necessary to move from consumption to profit-oriented agriculture. For example, they may have enough land, but not enough infrastructure such as pumps and tractors to be truly profitable. Or they may lack only a few hectares to turn the corner of profitability and permit concentrated farm management.

What both of these groups have in common is that, under the present circumstances of prolonged drought, they are increasingly unable to finance continued operations. The result is that the smaller viable farmer is threatened with a return to marginal viability, and the marginal farmer is faced with a return to a family consumption-oriented strategy. Under such circumstances, what is necessary in the short term is credit assistance to continue present operations, while what is necessary in the longer-term is credit assistance to allow access to resources for those on the threshold of becoming viable profit-oriented producers, and increased capacity for sustainability for those already operating viably.

3.2 Size, Location, Characterization and Production Strategy of the Small and Marginally Viable Farmers.

In general, the small, viable, drought-affected farmer has between 16 and 40 hectares of dryland (bour).¹ Since such dryland farming cannot be relied upon for constant production, security is almost universally sought by

^{1/} Not being discussed is the totally irrigated viable farmer who, precisely because of his irrigation, is not among those most severely effected by the drought.

reliance on either some irrigated agriculture, some livestock production, or a combination of the two. The relative importance of these associated activities varies with climatic conditions. During drought situations, as at present, irrigated agriculture and livestock production are looked to not only just to supplement, but to compensate for, lack of dryland revenue. Not surprisingly, therefore, such farmers are now using or looking for credit to actually increase investment in these areas (e.g. to purchase more animals or irrigation pumps) to tide them over until sufficient rains revive dryland production. Outside activities (e.g. commerce), off-farm employment, or other investments (e.g. urban or other farm property rental) are also important secondary sources of income, especially at the lower end of the spectrum.

The exact strategic mix is determined largely by the individual situation of each farmer. For example, some of these farms are recently purchased with earnings from other sectors. Their owners tend to retain a position in these other sectors. Conversely, farm operations based on profit from farming, per se, tend to represent efficient, successful traditional farmers. They are concentrating more and more effort on farming and less on outside activities as their farm capital increases. An intermediate group also exists, made up of those who switch strategies. After successful accumulation of farm land, they may sell land in order to undertake new non-farm investments.

Regardless of where on the above spectrum these transitional farmers fit, they more and more favor profit maximization over consumption needs. However, while favoring market crops (bread wheat, durum wheat, vegetables, fruits), they still diversify farm crops largely as a hedge against price fluctuations. Mechanization and new technologies are introduced to the extent that they are seen as increasing production and profitability, but not as management strategies per se. Thus, for example, these farmers employ a large number of hired laboreres in contrast to larger farms (100+ hectares) which mechanize to the full extent possible and reduce reliance on hired help.

These divergent mangement strategies, and their respective constraints, appear to be a primary reason why farm size jumps from around 50 to over 100 hectares, with few farms in between. It is also why assistance to these smaller, viable farmers makes a larger contribution to the overall economic benefit of the surrounding rural populations than assistance to larger operations.

The official fiscal value of such operations (on which credit and taxes are based, but which do not represent reality) range from approximately 2500 Dh to 10,000 Dh. The project focus (3,000 Dh - 6,000 Dh) is, therefore, clearly on the more marginal smaller farms in the category, and on the ones most in danger of dissolutionment at this time. It is also hoped that, by focusing both assistance and research on this strata, the project will encourage the CNCA to examine more closely these operations as a special class, and to introduce new policies specifically designed to meet their needs.

3.3 Utilization and Reliance on Credit

What characterizes most of the "smaller viable" and "marginally viable" farmers is that, unlike poorer consumption-oriented operators, they have most of the necessary resources to begin effective production for profit. As a result they, unlike poorer operators, are able to specifically focus credit use on those specific elements that make a quantum difference in production success (e.g. pumps, tractors, HYV seeds). Conversely, unlike richer operators, such farmers have become more dependent on credit as a continuous resource, and as part of their annual production strategy, and would seriously suffer from denial of further access to such funds.

Part II: The Socio-Institutional Context of Agricultural Credit in Morocco

A. Historical Perspective and Patterns

1. The Persistence of a Traditional Management Style.

A distinctive feature of Moroccan society is the extent to which it successfully integrates social, economic and political systems that, from an outsider's (especially a Westerner's) perspective seem intrinsically incompatible or contradictory. For example, a powerful and centralized monarchy exists side by side with party politics and strong regional alliances; the significant reliance on traditional Islamic precepts for legitimization of political and personal interests is combined with the adoption of antithetical Western practices, such as the consumption of alcoholic beverages, Western dress, and interest rates. Traditional production technologies co-exist with modern industrialization. Finally regional, ethnic and group alliances retain their importance in the face of expanding urbanization and foreign emigration.

In fact, the orientation and ability to effect the reconciliation and neutralization of counterbalancing tendencies is probably one of the oldest and most cardinal principals of Moroccan society and was largely necessitated by the segmentary structure of traditional socio-political organization. For centuries overall system stability has been maintained by the ability of Moroccan leaders to engineer repeated and opportunistic shifts in policy to counterpoise countervailing tendencies. Such a modus operandi can be highly effective in sustaining basic social stability. However at the same time, such a policy is not particularly conducive to overall system innovation and encourages maintenance of already established social divisions or the creation of new divisions rather than the creation of one common union.

This strategy was adopted by the French during the colonial period and, largely continues to this today, despite some positive attempts to the contrary. Most importantly, it is directly reflected in the administrative distribution of agricultural credit and must be understood to be accommodated or modified as necessary when working in this realm.

2. The Colonial Period

When the French established colonial rule in Morocco, they instituted a redivision and restructuring of agricultural resources that persists in several ways. Nomadic groups and rights were given fixed geographic locations. Rich farmland, especially in the coastal zones, was given over to French farmers who established large and highly productive operations. The less fertile or more arid fringe and interior areas were officially assigned to members of various groups, as private property for cultivation (melk) or as collective property primarily for livestock grazing. French strategy was to create a dynamic modern agriculture sector while providing the indigenous population with an adequate, but limited, subsistence base. Accordingly, productive support, such as technical inputs and credits, were directed to the larger colonial farms. Support to the traditional indigenous sector was designed for political and social, rather than productive, reasons. In line with this was the establishment, in 1928, of a system of "Caisse de Prevoyance" (SOCAP) that provided limited emergency loans for assorted purposes by traditional, indigenous farmers. Such loans could be used for production purposes, but were largely directed to meeting unexpected needs for cash for food, medical treatment or other unforeseen expenses.

3. Post Independence Transformations

After independence, Morocco instituted a policy of Moroccanization of French agricultural properties. The better French farms, with credit assistance from the government, were procured by generally well-to-do Moroccans. These are the farms that today dominate the modern agricultural sector. Other, usually less desirable lands, were taken over by the government, either to be operated directly by the government, developed into farming cooperatives, or to be distributed as individual small private parcels.

Shortly after independence, a decision was made to create a national credit bank (the CNCA) with offices in each region (CRCAs) and a smaller operation for productive loans for small-and medium-sized operations (CLCA). The SOCAP was retained for loans for subsistence needs. Finally, in the early 1970's, SOCAP was phased out and the CLCA became the only lending institution for small farmers. (The CLCA cap on fiscal value initially was 1500 Dh, was later raised to 3,000 Dh and, in 1983, raised again to 6,000 Dh). CLCA was thus designed to provide very limited, but easily obtainable, loans. The CRCA became responsible for larger loans based on production potential, credit history and the client's ability to provide substantial self-financing (for example, 30 percent equipment costs must be contributed by the borrower).

B. The Immediate Situation

1. The Re-establishment of the Two Tier System

At present, only two credit services are effectively available to small-and medium-scale farmers, the CLCA and the CRCA. The former, as noted, provides very limited loans to poorer operators. The CRCA provides larger loans based on production criteria. CLCA lending is limited to 200 percent of registered fiscal value for short-term loans and 160 percent per annum of fiscal value for medium term loans. Thus, the maximum CLCA loan is theoretically now 12,000 Dh/per year but, for many, probably the majority of

clients, the lending range is from 600-3000 Dh/year. This is enough to purchase seed or a few sheep, but insufficient to purchase major equipment or support the total investment costs of an entire operation (e.g. purchase and fattening of animals, or planting, weeding and harvesting of a crop). In contrast, the CRCA, with a much greater credit line, generally provides credits of 10,000 to 50,000 Dh for its modest private clients. This allows them to buy substantially more animals, to cover costs of both purchase and feeding, or to obtain relatively major equipment such as pumps and tractors (provided borrowers can contribute the 30 percent self-financing required).

In reality, the present system represents a return to the dual approach of pre-independence days. The smaller farmer, because of his limited collateral, is automatically relegated to a system of financial assistance that helps him to survive, but not to progress, while productive credit is provided to larger operations. In fact, some leeway is permitted in that a CLCA can transfer a client's dossier to the CRCA, if the client seeks a larger amount of credit. However, because the CRCA system has strict rules concerning auto-financing, as well as required collateral, the move from CLCA to CRCA is more of a leap than a step. Because there is no program to ease that leap, such as a special credit for 90-100 percent financing of equipment or assistance with initial operating costs, the division between the two systems may actually act as a barrier for those on the borderline. Moreover, the CNCA policy of periodically raising the amount of required fiscal revenue for CRCA clients, apparently for administrative reasons, tends to progressively exacerbate the problem. (This situation is somewhat modified by the practice of allowing former CRCA borrowers to remain CRCA clients, even if they would be excluded under new rules. Thus the new rule raising required fiscal revenue to 6,000 Dh will only have a delayed affect and may be of short duration given the need to develop new lending criteria.)

2. Lender Attitudes and Alternative Sources of Credit

A concern expressed often by proponents of formal agricultural credit, and Moroccan credit officials themselves, is the need to provide an alternative for small farmers to reliance on private lenders who demand high interest rates. In fact, among the farmers contacted, the use of credit from informal sources appears to be declining. This is attributed to a combination of factors: the availability of formal credit, drought losses that have reduced privately available funds, and more attractive alternative uses for private investment capital. Most people interviewed during the project design claimed that the only money available privately was for very short-term loans and that this was usually provided because of family or social relationships. In fact, informal credit is apparently falling more and more into disfavor, precisely because of the social obligations and dependency that it places upon the borrower. (For example, richer farmers may loan money to poorer ones, not for the interest, but to obligate the borrower to provide the richer farmer with labor when necessary).

The major system of informal credit remains the practice of production by association, whereby an individual share crops another's land, or herds another's animals, for a percentage of the production. The precise interactions of this complex system are not of immediate importance. What is important is to realize that these arrangements are a form of credit. They represent a system whereby the lender shares the risk with the borrower. The

borrower is not indebted if production fails. This demonstrates that a system of shared risk and non-repayment, in the case of production failure, can be profitable for, and attractive to, lenders as well as borrowers.

3. Effect on, and Attitudes to, Farm Credit

As noted, the farmers interviewed expressed the opinion that the importance of informal credit was rapidly decreasing. Conversely, there was a positive attitude towards increasing government credit, with only an occasional mention of interest rates beginning to seem high. The only real complaints heard by the design team concerned the limits on credit for smaller farmers and the need to pay back loans soon after the harvest. This latter requirement, it is claimed, forces farmers to sell when prices are low and benefits speculation by commercial buyers.

From the descriptions of farmers regarding their use of credit, it seems evident that many now rely upon it as a given. None expressed feelings that credit, per se, resulted in unnecessary indebtedness, and all felt the amounts loaned could be paid off under normal circumstances. This opinion was somewhat colored by the apparently accepted perception that, in truly bad times, unreasonable payback would not be expected. Especially among smaller farmers, this perception seems based on reality, as they generally obtain their loans by co-signing for each other. The result is that social pressure very effectively promotes repayment by individuals, but when hard times hit everyone, such as during droughts, the system collapses and collection becomes impossible. (Under such circumstances, CRCA staff, themselves, feel that the problem becomes socio-political rather than financial. Even if they wanted to collect on the loans, the Ministry of Interior, to maintain civil peace, would not cooperate).

The bottom line seems clearly to be that farmers see the CNCA as one of the few positive and serious existing rural government institutions (in contrast to the agricultural extension service, for example). They also seem to take seriously their own responsibilities as borrowers with a long term interest in seeing the CNCA remain a viable institution.

4. Present GOM Attitudes Towards Agricultural Credit

One of the important aspects of the agricultural credit system in Morocco is the extent to which it has been, and continues to be, a focal point of animated discussion and analysis. There are few ideas for possible changes in operations or policies that have not already been discussed. Concomitantly the CNCA, while not without its problems, consists of well trained, well informed, and serious professionals. Given this situation, it is reasonable to conclude that, while the institution itself may suffer some deficiencies, the more basic problems hindering the efficacious application of agricultural credit to increase productivity and to vitalize the farm sector, lie outside the organizational structure of the CNCA, itself.

As has been noted, this is certainly the case as regards the multiplicity of other constraints on agricultural production: climate, inappropriate technology, poor extension work, lack of applicable research, and so forth. Beyond these constraints, however, looms one factor that doesn't as much constrain the production system, as constrain the CNCA from

more actively utilizing credit for production. This is the dual approach to credit, that is, credit as a social support for the poor and as a productive support for the modern sector.

On the one hand, the GOM sees the urgent need to modernize its agricultural system and maximize production, in order to feed its growing population and to reduce its dependence on imported foods. On the other hand, the government feels compelled to provide at least minimal direct assistance to its especially poor rural population for humanitarian reasons, to maintain civil accord and political allegiance, and to discourage, as far as possible, further outmigration to urban areas, especially Casablanca.

Neither of the above goals is, in and of itself, inappropriate nor inherently contradictory. Productive people should be given productive assistance and people truly in need of assistance to meet subsistence needs should be aided as well. What is contradictory and self-defeating is denying productive assistance to potentially productive individuals because they fall below a cut-off point set apparently for administrative convenience, rather than long-term developmental objectives.

Probably the single most valuable change that could quickly occur in credit lending practices in the short-term would be for the CNCA to carefully examine the possibility of increasing productive loans to small farmers across the board (such as the encouraging but limited efforts taking place at Fes under the World Bank's Fifth Agricultural Credit Loan). As already noted, it does not appear that adequate appropriate technology or associated agricultural service capacity exists to really expand such assistance to the lowest rung of traditional small farmers. In fact, overly precipitate efforts could just as likely harm, as help, such producers. However, there does seem to be sufficient reason to examine the possibility of offering special assistance to those on the threshold, thereby establishing a definite objective and methodology that may be expanded downwards as technological opportunities arise. One of the aims of this project should be to encourage such an approach, both through targetting its assistance as near to this group as presently administratively possible, and financing serious study of more comprehensive future efforts.

5. Parallel Policies in Related Areas: Agricultural Research, Extension and Land Tenure

The contradictions presented by trying to develop a modern system without impairing the old affects three other areas of activity of direct concern to the determination and effective use of agricultural credit: agricultural research, extension, and land tenure.

The focus of agricultural research and extension is virtually exclusively on technological matters of direct relevance to the needs of the modern, especially irrigated, agricultural sector. Consequently, a package of improved agricultural technology has not been developed for small traditional rainfed farmers that could be recommended and financed with confidence. One of the few existing efforts to remedy this is the present USAID Dryland Agriculture Research Project in the Settat area. While the proposed credit project cannot rectify this situation at this time, it might help contribute to an eventual solution. The fact that the majority of loans to be refinanced

are in the Settat area presents such an opportunity. Careful consideration should be given to focusing some of the resources of the special studies on the practical question of how present credit and research activities in the Settat might be coordinated in a pilot project aimed at supervising credit for poor farmers, as soon as an appropriate technological package is developed.

The question of land tenure is, unfortunately, far more complex, given its political, socio-economic and religious aspects. Various solutions, such as a law of primogeniture, have been proposed, but none have yet seemed realistically implementable. One area, however, that does not seem to have been carefully considered, is how agricultural credit, if properly focused, could allow small farmers to acquire the additional land needed to be viable. Credit for land purchase and consolidation has been used in various European countries (especially Scandinavia), in some cases precisely for farming operations similar in size and scale to those in question.

A major contribution to the indigenous debate on Moroccan credit policy might be to promote such an effort by financing a special study team to actually visit such countries and review their relevant history through several case studies. Such an activity would also help reverse a tendency on the part of some outside advisors to try and point Morocco towards activities in other third world countries (e.g. Africa) that, in fact, are less relevant to Morocco.

Part III: General Tenets, Moroccan Practices, and Project Recommendations

Agriculture credit programs are perhaps one of the best documented areas of development assistance. While universal agreement on the uses and effects of credit may still be lacking, consideration of, and reference to, experiences to date is certainly called for, if only to reveal underlying assumptions to both present and proposed practices.

A. General Experiences in Agricultural Credit

1. Interest Rates and Subsidizes

Considerable debate remains on interest rates. For example, AID desires that interest rates reflect market realities. In contrast, the EEC is presently requiring that its money be lent to the poorest farmers at 2 percent per annum. Part of the problem stems from competing goals that need clearer definition. A reasonable relationship between regular market and credit bank interest rates is necessary to ensure the sustained financial viability of the credit institution and to reduce the diversion of agricultural credit to other uses. On the other hand, subsidized interest rates are often simply intended as gifts or to encourage increased participation in innovative, high risk, or otherwise low profit activities. In all cases, a judicious weighting of the consequences is necessary and the long term effect on the credit institution, itself, must always be considered.

2. Multiple Uses of Agriculture Credit

Agricultural credit can be used for at least three purposes: 1) providing needed capital to farmers, 2) as an instrument of innovation (e.g.

subsidizing new equipment and seed), and 3) as an institutional mechanism for education (e.g. providing technical advice along with loans). Major problems arise when these purposes are not clearly articulated, and especially when credit institutions are asked to perform innovation and education tasks that raise their operating costs. Too often, these added costs are either not reflected in adjustments in interest rates, which harms the institution, or they are reflected in the general rates - which harms non-benefitting borrowers. If at all possible, special resources should be provided to credit institutions when they are expected to provide other-than-normal financial services.

3. Supervised versus Non-Supervised Credit

The supervision of credit, either to verify use of borrowed money or to assist in its application, is precisely one of those activities that raises loan costs. Its justification varies with circumstances. Limited verification to ensure the proper use of larger loans is often in a bank's own financial interest. At the same time, excessive meddling in how farmers, who usually know their needs better than bank officials, use their money can prove counter-productive. One exception to this, however, are very poor producers for whom the problem is often not that they don't know what they need, but that they cannot obtain access to the needed resources. In such cases direct participation by credit institutions can assist in assuring that supposedly available goods and services, such as seeds, fertilizer, or government extension assistance, are actually made available on a timely basis.

4. Different Needs and Dangers of Credit to the Very Poor

As noted above, the situation of poorer and less privileged producers may require different types of credit assistance. There is no question that credit to poor people, per se, especially for officially determined purposes, can prove detrimental when they lack the necessary associated resources and capacities. (This lack is, in part, the very reason they are classified as poor). The best of intentions does not override such realities and it is incumbent upon any serious lenders to assure themselves that such borrowers either can effectively use the money for productive purposes, or are given the necessary assistance as part of the loan package.

5. Credit Officials as Bankers and Technicians

An agricultural credit bank must remain financially viable. At the same time, it exists to assist agriculture producers and policy makers. This dual role often creates confusion within the institution itself. There is no remedy for this, other than careful attention to the need to assure that both purposes are continually kept in mind and considered at all times. The greatest danger is not that they cannot be harmonized but, rather, that decision makers will deal with each facet as a totally independent question.

B. Application of Assumptions to the Present Project

1. Concentration on Viable Farms

The proposed project is directly targeted to drought-stricken farmers, particularly those who USAID believes can make productive use of the credit. It is not aimed at farmers who might be harmed by an increased credit burden.

2. Search for Future Ways to Assist the Poorest Farmers

At present, loans of the poorest farms are being supported by funds from the EEC. USAID believes that the best long-term interest of these farms lies in credit that more directly increase their fundamental productive capacities. However, it is not clear that such opportunities for assistance exist, at present. USAID will, therefore, finance special studies under this project to assess the viability of more production-oriented credit interventions for the poorest farmers once proven technology which is appropriate to their situation is available.

3. Concern for the Viability of the CNCA as a Financial Institution

The present project takes, as a given, the need to assure that the CNCA maintains a solid financial base. Interest rates have been set to maximize total recovery of funds. Given the present economic situation, it seems evident that the CNCA will have to share some losses with the producers. However, the proposed recycling seeks to keep this to the minimal amount possible, while helping to revitalize the entire system.

4. Clarification of Credit Policy on Agricultural Production

Through the grant component of this project, specific data will be collected and specific expertise brought to bear on questions of fundamental importance to increasing agricultural production in Morocco and the ways that agricultural credit can support such programs and policies.

C. Recommendations For Special Studies

CNCA and the targetted beneficiaries of this project are presently undergoing a crisis which justifies urgent assistance. However, crisis assistance will not, by itself, help improve the agricultural sector's basic ability for long-term survival and production. Far greater problems already outlined must be faced. The real challenge and opportunity lies in determining the multiplicity of ways that the CNCA might contribute to solving these major long-term constraints. In line with this, the following areas are suggested for further investigation, with a brief explanation of the particular importance of each.

1. Possible Uses of Credit for Land Consolidation and Reform

In other countries, especially northern Europe, credit programs have been used to help consolidate fragmented and micro-farms. Morocco remains paralyzed in its inability to effect such needed land consolidation. A careful study of experiences from other countries and their applicability to the Moroccan situation could provide new ideas for dealing with this problem.

2. Use of Credit for Collective Lands

A significant amount of land, especially rangeland, but including land under cultivation, is the collective property of one or more groups or communities. Increasing the productive use of such lands has repeatedly been frustrated due, among other reasons, to the difficulty of establishing

individual rights and obligations within a collective arrangement and of getting people to invest in collective resources. When such occurrences do take place, it is often only the better off and more powerful who can take advantage of the situation and actually expropriate an unfair share of the resources. In fact, there are ways of addressing this problem other than through privatization of the land, which may be neither possible or desirable. Credit, for example, for improvement of rangeland, could be used as a mechanism for obtaining local contributions to resource improvement, clarifying individual rights, and assisting poorer community members to obtain a share of the action.

3. Banking Strategies for Semi-Arid Zones

It is now generally recognized and understood that traditional farmer strategies for semi-arid regions are oriented towards risk avoidance (e.g. preferring the assurance of meeting minimal needs to profit); take cognizance of the expectation of cyclical years of drought (e.g. store several years grain for both consumption and seed); and are extremely flexible in terms of switching the production focus as events unfold (e.g. deciding to turn a cereal crop into fodder by allowing animals onto planted fields, if rains do not seem promising).

In contrast, credit banking practices require a farmer to plan ahead of time how he will use his money (e.g. crop or animal loan); do not provide quick access to new funds if conditions change; demand repayment of crop loans soon after harvest when prices are lowest; require that previous loans are paid before granting new loans, even though agricultural production activities may overlap; and charge fixed interest rates regardless of the productive situation.

None of the above practices are inherently necessary. A special revolving fund and a limited increase in loan limit could be provided for overlapping production periods. Crop loans could be extended. A open line of credit could be given to proven clients. Even flexible interest rates that adjust with climatic conditions are possible. The important point is that the unique demands of arid land agriculture should give rise to specially adapted credit policies. The possibility of doing so deserves intensive study.

4. Regionally Appropriate Policies and Norms

The need for the CNCA to adapt more flexible policies to its clients is, to some extent, related to its own need to allow more discretion to its own sub-divisions. Given tremendous regional variations in income level, land productivity, production type, etc., there is little justification, beyond administrative expediency, for establishing national norms for access to credit and maximum levels for individual borrowers. A study should be conducted to clearly identify important relevant regional variations and how practices could be modified to take them into account.

5. Farmers in Transition

One of the primary goals of this project is to specifically help those farmers to whom credit is not just a service but a decisive factor in whether they become or remain viable profitable farm operators. One of the concerns

of the project must be the extent to which this group has not only been ignored but perhaps actually disfavored by policies that tend to tailor assistance to what is perceived as the different circumstances of two very divergent systems, that of the traditional, and that of the modern, farmer. Most importantly, this perception appears to be self-reinforcing as practices, such as taxation and loan policies, are designed to correspond to these conceptualizations which are then used to classify data in ways that produces statistics that become self-fulfilling prophecies. A specific effort is called for to remedy this situation as soon as possible by clearly identifying the true importance of such farm operations, their unique needs, and the extent to which current credit practices either fail to respond or actually aggravate their problems.

6. Credit for Micro-Farms

When all is said and done, the stark reality remains that little productive assistance is available to the smallest and poorest of micro-farmers in Morocco. Moreover, experience has shown that single-focused interventions of credit or technological inputs which do not assure access by these operators to all the necessary components of the proposed activity or which have not been adequately tested in their specific environment, may result in a further deterioration of the situation of these farmers (e.g. many may actually experience reduced production due to the inappropriate use of recommended fertilizer under drought circumstances).

Helping this level farmer is a major challenge, and one which probably must follow applied technical and social research. (Such as that now occurring under the AID-funded Dryland Agriculture Research Project). Given this fact, perhaps the most effective activity with respect to research would be to assure that credit concerns are incorporated into present and proposed applied agronomic research, so that an appropriate credit package can be assembled as new possibilities rise.

7. Women in Agriculture

As part of the grant proponent of this project, a special action has been proposed to study the role of women in Moroccan agriculture and possibilities assisting them with credit. The immediate need for such assistance is demonstrated by the fact that the present project, out of necessity, deals almost entirely with men. The reason for this is not because of a discriminatory policy against women borrowers by the CNCA. In fact, the one area of somewhat substantial and continual provision of credit to women by CNCA was in the higher category of 100 plus hectare farms. Rather, the fact is that, while women do inherit property, the social and organizational realities of Moroccan rural society determine that it is generally given over to, or managed by, a male relation, or rented or share cropped by another. The few women who appear as CLCA and lower echelon CRCA clients seem to take loans for one or two years only, often after the death of their spouse, but soon make other arrangements. The exception is in the case of the widows of large farm owners who have the funds to hire necessary help, have adequate education and knowledge to manage the operation, have the social influence to obtain their share of needed inputs, and whose children are usually oriented to modern urban professions and therefore rather hold together the farm as a large family operation than split it into their own personal holdings.

However, even though lower echelon rural women do not occupy a significant position as official title holders or heads of families, they are a major and increasing percentage of the rural agricultural labor force and, especially on transitional farms, appear to be assuming more de facto managerial roles as male absence for urban earning activities increases. Under such circumstances, it is absurd to even contemplate the possibility of more focused use of credit for farm activities without better understanding the production system from their perspective. In fact it is not unlikely that the greatest opportunity for quick and simple interventions to raise the productivity of the poorest farms are precisely in those activities that are traditionally womens' responsibilities (e.g. poultry). However, unless an honest effort is made to understand their perspectives, future possibilities will be lost on the continued excuse that sufficient knowledge is lacking. While intervention without adequate information can be wasteful and even dangerous, failure to obtain such information is inexcusable.

8. Statistics for Management and Development

CNCA is now planning, with the help of the World Bank, to establish a new computer system. Such a system is sorely needed but, as has been shown, improper statistics are not only useless but can be misleading and counter-productive. Statistics are obviously needed to improve management decision making by CNCA management in Rabat. However, information is also needed by local CRCA and CLCA managers and for policy and project planners and implementers. The type of statistics needed for these purposes are not synonymous with those needed for central administrative purposes. Unfortunately, there is little indication that the need for such analytical data at the local level, or by others outside the CNCA, is being considered. Computerization could, in fact, make matters worse, if it results in an increased demand upon local personnel to collect information for central management, thereby forcing them to further remove themselves from the on-the-ground reality of their clients.

It is proposed, therefore, that an attempt be made to identify the type of data needed for purposes above and beyond daily administrative concerns, and to ensure that these needs are incorporated into any new information system. The greatest danger is not that the different needs of senior level and local level managers cannot be harmonized, but rather that decision makers will deal with each facet as sets of totally independent questions.

ANNEX 3

THE AGRICULTURE SECTOR IN MOROCCO

A. Land Use

Nearly 60 percent of Morocco's population lives in rural areas and about 52 percent of the total labor force is employed in agriculture. An estimated 45 percent of rural families lives at or below the absolute poverty level (US \$238 per capita in 1978-80). The absolute number of rural poor was 5.4 million in 1980.

Only 17 percent (7.9 million hectares) of Morocco's land (excluding the Sahara) is arable. This is about 10 percent is irrigated. The remainder is dependent upon seasonal rainfall. About 75 percent of the agricultural population is fully dependent upon rainfed agriculture, and farms with irrigated land are often partially dependent upon it. Another 26 percent of Morocco's land (12 million hectares) is marginal arid rangeland, which provides most of the forage for the country's small ruminant livestock population.

The arable rainfed land in Morocco can be classified into four zones based on average annual rainfall.

1. The Below 200 mm Rainfall Zone -- In areas with less than 200 mm of rainfall only very small amounts of grain can be grown without irrigation. Such land has very limited potential for crop production, even under very good management.
2. The 200-300 mm Rainfall Zone -- Areas with 200-300 mm of rainfall may be considered arid. In this zone, barley is cultivated where soils and microclimates permit, and sheep and goats are grazed on scrub range. El Kelaa, western El Jadida, western Safi, and Marrakech Provinces typify the 200-300 mm arid zone.
3. The 300-400 mm Rainfall Zone -- Areas within this zone are classified as "semi-arid". Barley cultivation predominates, except in areas receiving 350-400 mm rainfall, where durum wheat is grown. Beni Mellal, Azilal, Essaouira, eastern El Jadida, eastern Safi, and Settat Provinces are within this range.
4. The Over 400 mm Rainfall Zone -- This zone encompasses the Northern Atlantic Plains region, an area north of a line drawn from Settat to Oujda, bordered on the east and north by the Atlas and Rif Mountains. It includes the most favorable rainfed agricultural land in the country, and produces about half of Morocco's wheat and pulses. Most of the bread (soft) wheat, because it is less drought-tolerant than durum wheat but has high yield potential, is produced as a cash crop in this rainfall zone, mainly by the largest farms. The most important agricultural provinces in this zone are Casablanca, Benslimane, Khemisset, Meknes, Fes, and Kenitra.

Most of the land under irrigation is in modern perimeters where the GOM has, until recently, concentrated both investment and support services. The large scale irrigation systems are managed by semi-autonomous regional agricultural development authorities, the Offices Regionaux de Mise en Valeur Agricole (ORMVA), which prescribe rational land use patterns, provide extension advice, and supply farmers with subsidized water and modern inputs. Irrigated agriculture accounts for a major share of agricultural exports and has permitted a considerable expansion of sugarbeet and sugarcane production. The area in irrigated perimeters under development responsibility of ORMVA totals about 2.5 million ha, of which about 700,000 ha are now, or will be, irrigated. Beyond that, about 200,000 ha are irrigated by traditional methods and modern small-scale irrigation wells. Nevertheless, there are many small farms and many poor people within the irrigated perimeters. A full third of the smallest farms in the country depend to some extent on irrigation.

B. Cropping Patterns and Cultivation Practices

Cereals cover about half of the arable land. Barley, the bread grain of the very poor and a major animal feed, accounts for half the area cultivated in cereals. Durum wheat (ble dur) accounts for 29 percent of the area planted to cereals, while bread wheat (ble tendre) and maize each account for roughly 10 percent. Together with pulses, cereals accounted for 36 percent of agricultural GDP in 1978-80, followed by citrus fruit and vegetables (11 percent each), and industrial crops and forestry products (6 percent). Animal husbandry contributes about one-third of the value added in the sector.

Durum wheat is the preferred cereal for human consumption in rural areas. Bread wheat, on the other hand, is generally produced as a cash crop, and is sold shortly after the harvest. Barley and maize are primarily grown as animal feeds, though they are used for human consumption when durum wheat becomes scarce. According to the results of farm studies carried out in the Settat area, there is little difference between smaller and medium-sized farms in terms of type of crops grown, but there is some variation in the amount of land dedicated to each. Larger farms, for example, produce more bread wheat, less maize, and leave more land in fallow for grazing. Larger farms also produce more grain legumes, which are regarded by smaller farmers as more labor intensive and more risky than winter cereals.

The production practices of the small- and medium-scale farmers for the four major cereals are essentially the same, except that, if the farmer has chemical fertilizer, it goes first on wheat. Few small farmers, however, use either fertilizer or high yielding seeds. In most years, the typical farmer will use his own grain for seed. However, because of the successive years of drought, on-farm supplies have diminished and a greater number of farmers must purchase seed. Traditionally, seed and available fertilizer are broadcast by hand and then covered with an animal drawn plow. Farmers, however, are increasingly using tractors with tandem disks to prepare their land. Cereals are harvested by June. The barley varieties that are used mature two weeks earlier than wheat, permitting the farmer to spread out his labor requirements during the harvest period. Nevertheless, because of peak labor requirements during the harvest, most farmers are obliged to hire labor or, increasingly, to contract for combine services.

There is evidence that certain cultural practices common in rainfed agriculture in Morocco, such as hand broadcasting of seed, and inadequate rotation, serve to decrease maximum yield potential. Broadcasting seeds by hand, for example, may lower germination rates and encourage weed growth. Poor tillage practices may be major reasons for a relatively low yield response to fertilizer and high yielding varieties in Moroccan agriculture. In addition, while the current system of "fallow" provides an annual crop of weeds that is grazed closely and continuously, it does not adequately conserve water or control weeds for the next cereal crop. A larger amount of quality forage for livestock feed could be produced, if land were planted to annual or perennial forage crops, rather than left to weed fallow.

The majority of farm families are dependent upon livestock to supplement their income. Many will have a milk cow to meet family consumption needs, several sheep and goats, and at least one work animal, usually a donkey. Sheep and goats provide important cash income and are a means of storing capital. However, the pressure for livestock feed is great and many rainfed area farmers do not have access to communal grazing land or to state-owned forests. Feed resources are limited to fallow, crop stubble, and village grazing (roadsides, etc.). Due primarily to low levels of feed intake, poor management, and disease, meat and wool production are very low. As a result, income from livestock husbandry (per animal unit) is unnecessarily low.

C. GOM Investment in Agriculture

Over the past two decades, the GOM has given priority to the development of irrigated cash crops for export, such as vegetables and citrus. Consequently, well over half of GOM investment in agriculture (excluding dam construction) has traditionally been devoted to large-scale irrigation. All told, agricultural investment (including dams, some of which also control floods or produce electricity) has been fairly substantial, representing roughly 20 percent of agricultural GDP and 15 to 20 percent of total gross fixed capital formation (and 20 to 30 percent of total public investment). However, this investment has had relatively little impact on overall growth of the agriculture sector, because of the long gestation periods and the slow build-up rates of production on newly irrigated land. Moreover, beginning in the late 1960s, new dam construction started to run ahead of the government's ability to provide complementary irrigation infrastructure, creating a backlog of land waiting to be irrigated from already existing dams. On the eve of the 1981-85 Plan, this backlog was estimated at about 100,000 hectares, out of the 500,000 hectares of land under command of the 13 agricultural dams already completed. To address this problem, greater emphasis was put on small- and medium-scale irrigation in the 1981-85 Five Year Plan, with a full third of the investment in irrigation under that Plan dedicated to small- and medium-scale works.

A second major objective of the 1981-85 Five Year Plan was to begin developing the rainfed sector. Around 32 percent of investment in agriculture under the 1981-85 Plan was earmarked towards that sector. Unfortunately, the GOM has not been able to redirect its resources to rainfed agriculture as planned. This is for several reasons. First, the existing irrigation projects have had a momentum of their own. There is a propensity, once large upstream investments have been made, to complete as much of the downstream network as possible, in order to increase the return on sunk capital. Second,

inadequate project preparation and implementation capabilities are likely to be a greater constraint on GOM activities in the rainfed sector than in the irrigated sector. Technology appropriate to Moroccan dryland agriculture still needs to be developed before the large number of farmers in the dryland sector can be helped. Finally, due to the GOM's severe financial difficulties, large cuts have been made in the development and operating budgets of the Ministry of Agriculture and Agrarian Reform. These have dramatically reduced the Ministry's options for reallocating resources. For example, in the 1982 budget, the global amount allocated for agricultural investment was 30 percent below the level indicated in the 1981-85 Plan. Major cuts were seen in livestock activities (40 percent), integrated rural development projects (30 percent), extension and agrarian reform activities (40 percent), training (60 percent), and research (70 percent). The program for the irrigated perimeters, however, was only reduced by 13 percent in relation to Plan expectations.

D. Agricultural Performance

Morocco's agricultural potential is far from being realized. Following a period of rapid expansion in the 1960s, Moroccan agriculture has developed slowly. The agricultural sector has, in the aggregate, not been a lead sector for growth in the Moroccan economy over the past decade, as is demonstrated in Table 1, below:

Annex 3, Table 1: Average Annual Growth Rates of Sectors of the Moroccan Economy (percent)

	<u>1960-70</u>	<u>1970-82</u>
Agriculture	4.7	0.1
Industry	4.2	5.3
Services	<u>4.4</u>	<u>6.3</u>
Gross Domestic Product	4.4	5.0

The poor growth performance of agriculture is notable in an economy which changed its investment pattern in the mid-1970's to favor industrial and service sector growth. Consequently the share of agriculture in total output dropped from 23 to 18 percent from 1960 to 1982 while industry's share increased from 26 to 31 percent. The share of the services sector remained constant at 51 percent.

Over the same period, agriculture's share of the labor force dropped, from 62 to 52 percent, while industry's share rose from 14 to 21 percent and the service sector absorbed 27 percent of the labor force in 1980 compared to 24 percent in 1960. The movement of labor out of agriculture continues as the economic structure changes over time, but agriculture remains the largest employer of labor.

Over the past two decades the development of large-scale irrigation has been associated with considerable progress in farming techniques and increasing production in a small segment of the agricultural sector devoted to cash crops for export or industrial processing, chiefly sugarbeets, sugarcane, citrus fruit and vegetables.

Sugar production has increased significantly from zero in 1962 to 435,000 tons in 1983. Production of tomatoes and potatoes has risen to about 400,000 and 500,000 tons per year respectively in the last four years compared to levels of output about half as great in the 1960's. Citrus fruit production has stabilized at about 1,000,000 tons annually in the last six or seven years and export levels have also leveled off at about 600,000 tons. Olive production varies considerably from year to year and recent production levels are slightly below the best years of the past fifteen years. Wine and grape production has dropped considerably from the levels reached in the 1960's and wine exports of 500,000 hectoliters are a third of what they were in those earlier years.

Modern techniques have had little impact on traditional dryland farming activities. As a result, rainfed agriculture, which accounts for the bulk of the country's basic food supply and supports most of the agricultural population, remains low in terms of productivity. The output of cereals, pulses, olives, and red meat, which comes predominantly from the rainfed sector, has not grown significantly since the late 1960s. Indeed, the production of pulses has dropped below the levels reached between 1967 and 1975. The average index of food production per capita (based on FAO data) declined by 16 percent from 1969-71 to 1980-82. Consequently, the average household income in rural areas has remained very low.

Currently, rainfed lands in Morocco are producing at no more than 30 to 40 percent of their capacity. An FAO study estimated that, with proper policies and program, employing basically current technological knowledge, cereals output could be increased by 40 percent within 18 years, from 4 to 7 million MT per year.

Agricultural products account for about one-third of Morocco's total merchandise exports. The major exports are citrus fruit and fresh tomatoes. Fresh and processed fruit and vegetables account for nearly two-thirds of agricultural exports. The growth of Moroccan agricultural exports, in real terms, has been nearly stagnant over the past 15 years, primarily because of increasingly restrictive import policies by France and other EEC countries.

Food production has not kept up with the increased demand generated by a combination of rapid urbanization and income and population growth in the 1970s, along with a policy of food subsidies in favor of urban consumers. As a result, food imports have risen considerably (about 19 percent per year in volume between 1970 and 1980). Morocco became a net importer of food in 1974, and is now heavily dependent on imports to meet consumption needs for basic foodstuffs, including wheat, vegetable oils, and milk products. Grain imports have averaged over 2 million tons annually in 1980-83, while grain production averaged 3.8 million tons. This may be contrasted with 650 thousand tons of grain imports and 4.5 million tons of grain produced annually a decade earlier. Since the growth of imports has more than compensated for the

drop in production, consumption of grain products has continued to rise. Currently, domestic agriculture supplies only about 20 percent of soft wheat consumption needs and about 70 percent of total cereal needs. Altogether, agricultural imports currently account for 25 percent of total merchandise imports, approximately as much as petroleum imports.

Agro-industry in Morocco in 1980 consisted of 700 firms employing 38,000 workers with sales of 10.2 billion dirhams. Statistics on the dominant activities of the industry ranked by value added (in millions of dirhams) are presented in Table V-2.

Annex 3, Table 2: Components of the Agroindustry Sector

	Value Added	Employment	Exports
Sugar industry	306	7,055	21
Fats and oils	153	3,714	175
Tobacco	149	2,758	5
Misc. Foodstuffs	144	2,025	17
Preserved			
Fruit & Vegetables	130	3,249	306
Non-alcoholic Beverages	124	2,356	19
Preserved Fish &			
Other Sea Food	116	2,918	332
All Others	<u>465</u>	<u>13,889</u>	<u>62</u>
Grand Total	1,587	37,964	937

The agro-industry sector has been dominated by sugar and the preparation of cereals. Prepared foodstuffs are the only significant exports and they account for 90 percent of agro-industry exports. The beverages and tobacco sector is, for the most part, directed at satisfying local demand.

From 1978 to 1983, agro-industry accounted for about a quarter of all industrial investment and slightly more than a fifth of job creation in industry. Investment in agro-industry averaged 400 million dirhams annually and resulted in the creation of about 5,500 new jobs each year. Agro-industrial exports doubled in dirham terms from 1975 to 1982 to over a billion dirhams annually. There is, however, significant additional potential for growth in this sector.

E. Constraints to Increased Agricultural Production

USAID believes that, in order for agricultural production in Morocco to catch up with consumption levels, constraints to increased agricultural production will need to be addressed. This will involve, over the long run, a re-orientation of sector-specific policies and a restructuring of production and distribution systems.

These constraints affecting overall performance of the sector will not be addressed directly by the Drought Recovery Credit Project. In any case, much more research is required to either (1) convince the GOM it is in their interest to change the policy and/or (2) propose alternative structures to improve the performance of the sector. However, as discussed elsewhere, this project will forestall additional losses of output while other aspects of the USAID agricultural program address these constraints to growth of output.

1. Problems of Access to, and Use of, Inputs

The level of use of production-increasing inputs such as fertilizer, improved seed, and pesticides is very low. Late arrival and insufficient quantities, a grossly inadequate distribution network, and sometimes the wrong inputs and mix have been identified as major constraints. Farmers who are more progressive farmers, members of cooperatives, and those that cooperate with extension agents have a better opportunity of obtaining such supplies. But even in these situations there are many reports of failures of the supplies to arrive on time or to arrive at all.

Farmers who lack access to inputs consequently do not benefit from the input subsidies administered by the government. These subsidies include irrigation water made available at below cost, fertilizer and seed subsidies, special credit, machinery services, livestock and feed subsidies, and livestock facility development. They have benefitted primarily the more well-to-do farmers and those in the higher rainfall and irrigated areas. Reports indicate that input subsidy programs have suffered from the lack of an adequate distribution network. Thus, rationing of commodities and services has resulted. As a result, the subsidies have only modestly increased grain production.

Seeds of high yielding varieties of cereals, pulses, forage crops, potatoes, and sugar beet are sold primarily by the state-owned company SONACOS, through over 200 outlets of the MARA's network of Centres de Travaux (CTs) and Centres de Mise en Valeur (CMVs). In 1980, the use of HYV seeds reached 50,000 MT, almost exclusively for cereal production. However, only 25 percent of the wheat and almost none of the barley is sown with improved seed. The use of HYVs has stagnated in Morocco, though with large annual fluctuations. Moroccan farmers are aware of the advantages of using HYVs. However, increased HYV use is constrained by the limited purchasing power of many small farmers, and the limited availability of improved seed due to inadequate production and distribution.

Fertilizer use has increased by about 11 percent per year since 1956. However, national fertilizer consumption is only about one-fifth of the that required, according to technical norms. Fertilizers are used mostly by farmers in large irrigated perimeters, Agrarian Reform Cooperatives, state agricultural companies, and large farmers. Prices of fertilizers are fixed by the government at subsidized rates (between 40 and 50 percent of the real cost). The public sector dominates the upstream supply chain. State-owned enterprises manufacture over two-thirds of the locally produced fertilizer. FERTIMA, a parastatal, handles all imports and distributes about one-half of all the fertilizer consumed in Morocco. As with seed, FERTIMA distributes its fertilizer through the CT/CMV network. In addition, nine private companies participate on a limited scale in the wholesale of fertilizer, and many small

licensed private entrepreneurs account for much of the retail trade. Nevertheless, the present distribution network is insufficient and the lack of storage capacity at intermediate and retail levels make early purchases by farmers and retailers difficult. As a result, there are problems with fertilizer availability during periods of high demand.

Morocco's use of tractors and combine harvestors is limited. In 1981 there were a total of 23,500 tractors and 2,400 combines in the country. This amounts to one tractor per 330 ha of cultivable land and one combine per 3,000 ha. This is very low, even in comparison with neighboring countries with similar climatic conditions (one tractor per 110 ha and 50 ha of cultivable land respectively in Tunisia and Algeria). Moreover, 44 percent of the total number of tractors in Morocco are used in the modern irrigated perimeters, which account for less than 13 percent of total cultivated area.

It is estimated that about 60 percent of the total mechanized work is carried out by contract, with more than 80 percent of contract work carried out by private farmers. Because of Morocco's relatively short rainfall period (October-April) it is extremely important that land preparation and planting be carried out at the most opportune time. If planting under semi-arid conditions is not carried out immediately after the first rains, a substantial part of the limited growing season is wasted. Since ploughing with the use of animal traction can only commence after some 150 mm of rain has fallen to loosen the soil, sowing in areas using animal traction usually occurs later than in the mechanized areas. This late sowing results in lower yields because less moisture is available for use by the plant and because the growing season is shorter. Tractors, on the other hand, can prepare the land before the rains start, and generally do a much better job of seedbed preparation, which allows better infiltration and moisture storage. Applied research in Morocco indicates that, as a result of timely land preparation carried out by tractors and early sowing, cereal yields can be increased by as much as 0.3 metric tons/ha. Farmers with holdings of between 5 and 20 ha are becoming increasingly interested in tractor rental as a way of improving farm production and decreasing the amount of fallow land, which at present accounts for about 25-30 percent of the arable land in Morocco.

In some dryland areas of Morocco there is considerable underemployment in agriculture. However, due to its highly seasonal demand, the local cost of labor in many areas remains high, encouraging the trend towards mechanization. The demand for custom work often exceeds local supply. Local CTs do offer custom work services. However, these centers suffer from bureaucratic inertia, have problems maintaining their equipment, lack spare parts, and sometimes do not have enough equipment to meet local demand. Available service agents do not wish to service CT equipment, since there are very long delays in payment. CTs are also, generally, more likely to service the larger, rather than the smaller farmers.

Price and Marketing Policy

Government pricing policy, which influences the structure of cereal prices through administered support prices, is favorable to farmers in that the price of cereals is high, relative to such inputs as fertilizer and seed. However, as the government support price stands considerably higher than the import price, it is cheaper for the government to buy wheat abroad than to pay its support price to Moroccan farmers.

The Office National Interprofessionnel des Cereales et Legumineuses (ONICL), a central cereal marketing board, manipulates the supply of grains between deficit and surplus areas to keep prices stable throughout the country at near the support price, which is more correctly a target price. Frequently, the farm price is well above this level. An exception is the price for bread wheat, which is fixed for the relatively small amount purchased in government channels.

ONICL acts as a commodity stabilization board, serving as the sole contractor for government importation of cereals and pulses. ONICL only controls about 10 percent of total cereals production, that which passes through licensed dealers, cooperatives, and industrial millers. The remaining 90 percent of production is utilized on the farm as food, feed, or seed, or traded in the souks and consumed locally. As rural subsistence needs are met first, the amount of national production commercialized varies widely with the size of the crop. Since only a small portion of total production is marketed through official channels, the price support system does not contribute to the stabilization of cereal producer prices. As a result, on the free market, cereal prices show sharp seasonal fluctuations, with prices at harvest dropping to as low as 70 percent of the support price.

GOM pricing policy suffers from two additional problems. In principle, support prices should bear some relation to the average cost of production. Where production technology and costs are relatively uniform, the support price can be set to provide a profit margin sufficiently high to encourage production. In Morocco, however, production technology, input availability, and resource bases are far from uniform. Consequently, the larger, more cost efficient producers benefit most from the support prices. For example, small farmers who market bread wheat receive prices substantially below the government fixed price because they cannot meet quality and delivery standards. The large scale, modern farmers in the northern regions can meet these requirements and, therefore, can benefit from the supports. Consequently, they produce half of the bread wheat in the country.

Further, subsidies can affect the allocation of production resources between crops. In Morocco, for example, there appears to be a trend away from barley and towards increased consumption of heavily subsidized wheat. Barley, however, is more drought tolerant and matures earlier, thereby suffering less damage from early onset of dry and hot summer conditions. Consequently, it is perhaps better suited to Morocco's climate. The extent to which this trend is caused by GOM price policies is unknown.

Inadequate Research and Extension

Agricultural research in Morocco is the responsibility of the semi-autonomous National Institute for Agricultural Research (INRA), which was created in 1980. To date, however, the impact of research on Moroccan agriculture has been limited. The reasons include (a) inadequate attention to the practical problems of farm production systems; (b) inadequate transmission of research results to farmers by the extension system; (c) poor coordination of research programs; and (d) a general shortage of human, physical, and financial resources. In general, it can be said that, at this stage in the

evolution of Morocco's agricultural research system, there does not yet exist a substantial, proven technological package that can be effectively extended to farmers in the rainfed sector.

Agricultural extension in Morocco is organized around 225 agricultural centers (CTs). Except for industrial crops in modern perimeters, extension efforts have not been successful in diffusing improved technology. Many of the efforts of extension agents have been directed at distributing inputs to farmers, collecting statistics, and enforcing regulations. Shortcomings of the agricultural extension system include: (a) a frequent lack of practical experience and communication skills among agents; (b) weak research/extension links and poor technical backup; (c) organizational weaknesses, including imprecise work programs, poor messages, and lack of supervision; and (d) shortage of vehicles, equipment, and operating budgets, with low salaries and poor incentives.

USAID Efforts to Address Constraints to Agricultural Production

The proposed Drought Recovery Credit Project will not directly address these structural and policy constraints affecting overall performance of the agricultural sector in Morocco. The studies carried out under the proposed Project will, however, serve as a basis for discussing the constraints to effective use of agricultural credit. This will lead quite naturally to the central issues of why agricultural production has not kept pace with the increases in consumption.

Other elements of the USAID portfolio directly address a number of the constraints discussed above. The major focus of the agricultural portfolio of the Mission (almost \$72.5 million in Development Assistance Funds) is on increasing dryland agriculture production and productivity. The major DA-funded agriculture projects are:

- The Dryland Agriculture Applied Research Project, which is developing an applied research package that includes improved cereals varieties, appropriate small farm machinery, forage uses, weed control, selected seed production, pest management, soil tillage and farm management. The project is establishing a Dryland Applied Research Center (Aridoculture Center) at Settat and four satellite research stations. As the Drought Recovery Credit Project will involve CRCAs and farmers in the Settat area, it is expected that cooperation between the two projects can be developed. Staff of the Dryland Agriculture Applied Research Project were involved in the design of the proposed Drought Recovery Credit Project, and contacts were established between them and local CNCA staff. In addition, since some of the studies proposed under the Drought Recovery Credit Project will be carried out in the Settat area, the continued involvement of Aridoculture Center personnel can be expected.

The Agronomic Institute Project, which is increasing the number and quality of agricultural managers, technicians, and scientists in Morocco. This project strengthens Morocco's central agricultural university, the Hassan II Agronomic and Veterinary Institute (INAV), and supports graduate level training and research in

disciplines related to rainfed agriculture. Researchers at the Agronomic Institute are currently conducting socio-economic research, with AID assistance, related to that proposed for some of the Special Studies. Cooperation with these individuals will be encouraged as a means of improving the effectiveness of research undertaken through the proposed Project.

- The Planning, Economics and Statistics for Agriculture Project will vastly strengthen the Ministry of Agriculture's capabilities to gather and analyse agricultural statistics, to undertake economic analysis of factors affecting agriculture, and to monitor and evaluate agricultural development projects in the rainfed sector. This project, in particular, shows potential for developing an ongoing dialogue with the GOM concerning agricultural policy issues.
- The Range Management Improvement Project is directed at improving the capacity of the Ministry of Agriculture to plan and implement applied research and extension programs in range management. The project is also developing a Plant Materials Center which will conduct develop and multiply needed forage species for use on collectively-held and private lands.

Under a 1984 Title I Self-Help Measure, the effectiveness of economic protection policies in agriculture is being studied. The project seeks to clearly demonstrate to GOM decision makers the true resource cost of pursuing a sugar import-substitution strategy (instead of a grain import-substitution strategy, for example) and the value of several major crops to the economy. These findings and the institutionalization of this analytical approach in the Ministry of Agriculture and Agrarian Reform will be the basis for an intelligent, informed dialogue over agricultural policy and strategy in general. Other self-help measures are under discussion for the next Title I agreement.

To the extent possible, the Drought Recovery Credit Project will establish contact with, and coordinate their activities with, these and other AID-supported efforts, in order to make the maximum use of the resources and experience available.

ANNEX 4: ILLUSTRATIVE FARM BUDGETS

Case Study No. 1

Location: El Kulaa Farmer's Age: 58
 No. of Children: 5 Size of Household (with head): 7
 No. of Family Members Working on Farm (with head): 2
 Avg. Consumption Expenses: 7800 dh/year

Land Tenure: Collective
 Farm Size: 49.3 has., of which: 5.3 has. are classified as irrigated, and
0 has. are currently irrigated

Fiscal Revenue 2,743 dh (1975); 4,897 dh (1980); 4,257 dh (1982)
 Client of CRCA-El Kulaa Since: 1967
 Past CNCA Loans Entirely Repaid (excluding consolidations): 7 (number)
23,000 (Dh amount)

Non-farm Income 0 dh

Effects of Drought/Other Comments:

In 1983 this farmer had 5.3 has. irrigated by a small canal. During a normal year, he would have been able to irrigate at least 4 has. This year there has been no water for irrigation. In 1983 the farmer had 6 cattle, 35 sheep, and 5 goats. During 1984 the 6 cattle and 35 sheep died. The farmer sold the 5 goats.

Assets According to Fiscal Income Statement

	1980	1982
1. Irrigated land (has.)	3.0	5.3
2. Non-irrigated land (category 3)	46.0	44.0
3. Olive trees (no. of trees)	360	360
4. Cattle (no. of head)	6	4
5. Sheep (no. of head)	86	50
6. Goats (no. of head)	5	3
7. Draft horses	2	-

Loans Currently Outstanding (dirhams)

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount to be Rescheduled 1
1980	Seasonal Loan	4,500	1 (8%)	-	4,500	5,940
1980	Draft animals	2,400	3 (10%)	-	2,400	3,120
1981	Seasonal Loan	3,500	1 (8%)	-	3,500	4,340
1982	Purchase Sheep	7,500	5 (10%)	-	7,500	refused

Estimated installment payments due in 1985 on all loans (including interest), assuming rescheduling over 10 years and a 5,000 dh seasonal loan for 1984/85, is Dh 7,644.

Ratio of estimated 1985 installment payments to projected 1985 net income is 11.4 percent ^{2,3}. Net disposable income after installment payments is Dh 4,972 per month.

1/ Including interest.

2/ Assuming "normal" year

3/ Excluding Dh 5,000 costs financed through seasonal loan, projected net income is Dh 67,310.

Case Study No. 1

Crop Production Costs 1983/84

Hard Wheat (10 ha)
seeds: 1.2 qx/ha x 200 dh/qx x 10 ha 2400
soil prep (tractor): 90 dh/ha x 10 ha 900
hired labor: 6 md x 10 dh/md 60

Soft Wheat (18 ha)
seeds: 1 qx/ha x 180 dh/qx x 18 ha 3240
soil prep (tractor): 90 dh/ha x 18 ha 1620
hired labor: 12 md/ha x 10 dh/md 120

Barley (12 ha)
seeds: 1 qx/ha x 150 dh/qx x 12 ha 1800
soil prep (tractor): 90 dh/ha x 1 ha 90
soil prep (draft animal): 30 dh/ha x 11 ha 330
hired labor (planting):
0.5 md/ha x 10 dh/md x 12 ha 60
hired labor (harvest): 10 md x 15 dh/md 150

Cumin (1 ha)
seeds: 20 kg/ha x 60 dh/kg 1200
soil prep: 270 dh/ha x 1 ha 270
hired labor (weeding): 242 md x 10 dh/md 2420

Total Crop Production Costs 13040

Animal Production Costs (1983/84)

none ¹

Total Animal Production Costs -0-

Total Production Costs 13040

Revenues - Crop Production 1983/84

Hard wheat: 0

soft wheat: 0

barley: 4 qx x 120 dh/qx 480

Cumin 0

Total Crop Revenues 480

Revenues - Animal Production 1983/84

none ²

Total Animal Production Revenues -

TOTAL REVENUES 480

NET INCOME ³ - 12560

Estimated Crop Prod. Costs - Normal Year ¹ (dh)

Hard Wheat (10 ha)
seeds: 1.2 qx/ha x 200 dh/qx x 10 ha 2400
soil prep (tractor): 90 dh/ha x 10 ha 900
hired labor: 6 md x 10 dh/md 60
harvest (combine) 150 dh/ha x 10 ha 1500
straw: 80 bales/ha x 1.5 dh/bale x 10 ha 1200

Soft Wheat (18 ha)
seeds: 1 qx/ha x 180 dh/qx x 18 ha 3240
soil prep (tractor): 90 dh/ha x 18 ha 1620
hired labor: 12 md/ha x 10 dh/md 120
harvest (combine) 150 dh/ha x 18 ha 2700
straw: 80 bales/ha x 1.5 dh/bale x 18 ha 2160

Barley (12 ha)
seeds: 1 qx/ha x 150 dh/qx x 12 ha 1800
soil prep: 90 dh/ha x 1 ha 90
soil prep (draft animal): 30 dh/ha x 11 ha 330
hired labor (planting):
0.5 md/ha x 10 dh/md x 12ha 60
harvest (combine): 150 dh/ha x 12 ha 1800
straw: 100 bales/ha x 1.5 dh/bale x 12 ha 1800

Cumin (1 ha)
seeds: 20 kg/ha x 60 dh/kg 1200
soil prep: 270 dh/ha x 1 ha 270
hired labor (weeding): 242 md x 10 dh/md 2420
hired labor (harvest) 20 md x 20 dh/md 400

Total Crop Production Costs 26070

Estimated Animal Production Costs - Normal Year

none ¹

Total Animal Production Costs -0-

Total Production Costs 26070

Revenues - Crop Production - Normal Year

Hard Wheat: 11 qx/ha x 120 dh/qx x 10 ha 13200

Straw: 80 bales/ha x 4 dh/bale x 10 ha 3200

Soft Wheat: 17 qx/ha x 90 dh/qx x 18 ha 27540

Straw: 80 bales/ha x 3.5 dh/bale x 18 ha 5040

barley: 20 qx/ha x 80 dh/qx x 12 ha 19200

Straw: 100 bales/ha x 6 dh/bale x 12 ha 7200

Cumin: 4 qx/ha x 2000 dh/qx 8000

Total Crop Revenues 88380

TOTAL REVENUES 88380

NET INCOME 62310

^{1/} Estimates do not take into account the irrigation potential on the farm (4 has) in a normal year.

^{2/} Since the farm no longer has livestock, no normal year production was assumed. Additional capital would first be needed to reconstitute the herd.

^{3/} Estimating 4000 dh/cow and 200 dh/sheep, the loss in assets of the farmer represented in the deaths of 6 cattle and 35 sheep during 1984 decreases net income by another 31,000 dh.

Case Study No. 2

Location: El Kelaa (Ouled Yacoub) Farmer's Age: 46
 No. of Children: 11 Size of Household (with head): 12
 No. of Family Members Working on Farm (with head): 1
 Avg. Consumption Expenses: _____

Land Tenure: Collective Land
 Farm Size: 39.3 has., of which: 6.0 has. are classified as irrigated, and
6.0 has. are currently irrigated

Fiscal Revenue 3,397 dh (1978); 3,037 dh (1981); 4,657 dh (1983)
 Client of CRCA-El Kelaa Since: 1979
 Past CNCA Loans Entirely Repaid (excluding consolidations): 7 (number)
29,200 (Dh amount).

Non-farm Income: 3,800 dh from sheep fattening operation carried out in
 Tangiers (95 dh/head profit x 40 sheep). 3,000 dh/year net income from
 renting out tractor, after covering costs.

Effects of Drought/Other Comments

Cereal production has been nil due to the drought. The permanent flock of
 sheep that were kept for income purposes has been disposed of (50 animals sold
 for 80 dh/head). Compensatory income was derived from chicken raising on the
 one hand and the purchase of 40 sheep for fattening and resale on the other.
 The decline in the size of the cattle herd (at the time of the interview the
 farmer had only 2, together with the increase in the number of goats,
 represents a shift in production made by the farmer in the face of more arid
 conditions.

Assets According to Fiscal Income Statement

	1978	1981	1983
1. Irrigated land (ha)	1.3	1.3	1.3
2. Nonirrigated land (ha)	38.0	1.3	38.0
3. Olives (no. trees - irrigated)	400	400	400
4. Cattle (no. of head)	12	5	5
5. Sheep (no. of head)	40	45	40
6. Goats (no. of head)	0	5	11

Loans Currently Outstanding (dirhams)

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount to be Rescheduled ¹
1982	Livestock Purch.	10,000	5 (10%)	4,000	6,000	2,000
1982	Tractor	46,000	8 (10%)	5,750	40,250	5,750
1983	Seasonal Loan	7,000	1 (9%)	-	7,000	7,630
1984	Livestock for Fattening	10,000	1 (11%)	-	10,000	-

Estimated installment payments due in 1985 on all loans (including interest),
 assuming rescheduling over 10 years and a 10,000 dh seasonal loan for 1984/85,
 is Dh 24,661

Ratio of estimated 1985 installment payments to projected 1985 net income is
23.4 percent^{2,3}. Net disposable income after installment payments is
Dh 6,722 per month.

- 1/ Including interest.
- 2/ Assuming "normal" year
- 3/ Excluding Dh 10,000 costs financed through seasonal loan, projected net
 income is Dh 105,320.

Case Study No. 2

<u>Crop Production Costs 1983/84</u>	(dh)	<u>Estimated Crop Prod. Costs - Normal Year</u> ¹	(dh)
<u>Hard Wheat (10 ha)</u>		<u>Hard Wheat (10 ha)</u>	
seeds: 1 qx/ha x 210 dh/qx x 10 ha	2100	seeds: 1 qx/ha x 210 dh/qx x 10 ha	2100
hired labor: 7.5 md x 20 dh/md	150	hired labor: 7.5 md x 20 dh/md x 10 ha	150
soil prep (tractor): 90 dh/ha x 10 ha	900	soil prep (tractor): 90 dh/ha x 10 ha	900
		harvest (combine) 150 ch/ha x 10 ha	1500
		straw: 80 bales/ha x 1.5 dh/bale x 10 ha	1200
<u>Soft Wheat (19 ha)</u>		<u>Soft Wheat (19 ha)</u>	
seeds: 1 qx/ha x 180 dh/qx x 19 ha	3420	seeds: 1 qx/ha x 180 dh/qx x 19 ha	3420
hired labor: 14 md/ha x 20 dh/md	280	hired labor: 14 md/ha x 20 dh/md	280
soil prep (tractor): 90 dh/ha x 19 ha	1710	soil prep (tractor): 90 dh/ha x 19 ha	1710
		harvest (combine) 150 dh/ha x 19 ha	2850
		straw: 80 bales/ha x 1.5 dh/bale x 19 ha	2280
<u>Barley (10 ha)</u>		<u>Barley (10 ha)</u>	
seeds: 1 qx/ha x 150 dh/qx x 10 ha	1500	seeds: 1 qx/ha x 150 dh/qx x 10 ha	1500
hired labor: 7.5 md x 20 dh/md	150	hired labor: 7.5 md x 20 dh/md	150
soil prep (tractor): 150 dh/ha x 10 ha	1500	soil prep: 150 dh/ha x 10 ha	1500
		harvest (combine): 150 dh/ha x 10 ha	1500
		straw: 100 bales/ha x 1.5 dh/bale x 10 ha	1500
<u>Olives (6 ha irrigated - 400 producing and 200 young trees)</u>		<u>Olives (6 ha irrigated - 400 producing and 200 young trees)</u>	
Estimated total cost:	15000	Estimated total cost:	15000
Total Crop Production Costs	26710	Total Crop Production Costs	37540
<u>Animal Production Costs (1983/84)</u>		<u>Estimated Animal Production Costs - Normal Year</u>	
<u>Cattle (2 head)</u>		<u>Cattle (2 head)</u>	
feed: 840 dh/head x 2 head	1680	feed: 840 dh/head x 2 head	1680
<u>Chickens (600-700 birds)</u>		<u>Chickens (600-700 birds)</u>	
feed and maintenance	56100	feed and maintenance	56100
Total Animal Production Costs	57780	Total Animal Production Costs	57780
Total Production Costs	84490	Total Production Costs	95320
<u>Revenues - Crop Production 1983/84</u>		<u>Revenues - Crop Production - Normal Year</u>	
Hard wheat:	0	Hard Wheat: 14 qx/ha x 150 dh/qx x 10 ha	21000
soft wheat:	0	Soft Wheat: 18 qx/ha x 120 dh/qx x 19 ha	42040
barley:	0	barley: 20 qx/ha x 70 dh/qx x 10 ha	14000
olives:	0	Olives: 20 kg/tree x 1.5 dh/kg x 400 trees	12000
Total Crop Revenues	0	Total Crop Revenues	88040
<u>Revenues - Animal Production 1983/84</u>		<u>Revenues - Animal Production - Normal Year</u>	
<u>Cattle (2 head)</u>		<u>Cattle (2 head)</u>	
milk: 250 ltr/cow/year x 1.6 dh/ltr x 2 ⁴	800	milk: 250 ltr/cow/year x 1.6 dh/ltr x 2 ⁴	800
calves: 1/cow/year x 2 x 1500 dh/calf	3000	calves: 1/cow/year x 2 x 1500 dh/calf	3000
<u>Chickens (600-700 birds)</u>		<u>Chickens (600-700 birds)</u>	
Chickens sold at 60 days old (6 cycles/year)	62100	Chickens sold at 60 days old (6 cycles/year)	62100
Total Animal Production Revenues	65900	Total Animal Production Revenues	65900
TOTAL REVENUES		TOTAL REVENUES	153940
NET INCOME ³	- 18590	NET INCOME	58620

1/ Costs for soil preparation are estimated at market rates, even though the farmer owns (and presumably uses) his own tractor.

2/ Assumes straw production used to feed livestock on the farm.

3/ revenues from animal production does not include income from sale of permanent flock. This represents a disposal of assets. Revenues from sheep fattening operation (3800 dh), which was carried out in the north, near Tangiers, is included as non-farm income.

4/ Based on a production of 500 liters/cow/year with and estimated 50 percent consumed on the farm and the remaining 50 percent marketed.

Case Study No. 3

Location: El Kelaa Farmer's Age: 54
 No. of Children: 1 Size of Household (with head): 12
 No. of Family Members Working on Farm (with head): 1
 Avg. Consumption Expenses: 7800 dh/year

Land Tenure: Collective Land
 Farm Size: 26.7 has., of which: 4.0 has. are classified as irrigated, and
2.7 has. are currently irrigated

Fiscal Revenue 4,075 dh (1980); 3,395 dh (1982)
 Client of CRCA-El Kelaa Since: 1972
 Past CNCA Loans Entirely Repaid (excluding consolidations): 29 (number)
178,000 (Dh amount)
 Non-Farm Income 0 dh

Effects of Drought/Other Comments:

Due to the drought, cereal production was down to zero in 1983/84 and the number of cattle has fallen steadily since 1980. The remaining cattle had to be sent to Tangiers for fattening, instead of being fed from forage produced on the farm. The irrigated land is irrigated with a pump.

Assets	1980	1982	1983
1. Irrigated land (has.)	2.7	2.7	2.7
2. Non-irrigated land	24.0	24.0	24.0
3. Olive trees (no. of trees)	183	153	153
4. Cattle (no. of head)	16	12	10
5. Sheep (no. of head)	35	25	35
6. Goats (no. of head)	8	-	-

Loans Currently Outstanding

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount to be Rescheduled ¹
1981	Purchase Livestock for Fattening	7,500	1 (10%)	-	7,500	9,750 (3 yrs)
1982	Purchase Livestock	10,000	5 (10%)	4,000	6,000	0 (not overdue)
1983	Seasonal Loan	4,000	1 (9%)	-	4,000	4,360
1984	Purchase Livestock	9,000	1 (11%)	-	9,000	9,000

Estimated installment payments due in 1985 on all loans (including interest), assuming rescheduling over 10 years (except as specified) and a Dh 4,000 seasonal loan for the 1984/85 campaign, is Dh 9,973.

Ratio of estimated 1985 installment payments to projected 1985 net income is 22.3 percent^{2,3}. Net disposable income after installment payments is Dh 2,492 per month.

- 1/ Including interest.
- 2/ Assuming "normal" year
- 3/ Excluding Dh 4,000 costs financed through seasonal loan, projected net income is Dh 44,677.

Case Study No. 3

<u>Crop Production Costs 1983/84</u>	(dh)	<u>Estimated Crop Prod. Costs - Normal Year</u>	(dh)
<u>Alfalfa</u> (1 ha irrigated) pesticides: 4 ltr x 150 dh/ltr hired labor: 5.5 md x 15 dh/md irrigation: 25 appl x 57 dh/appl	600 83 1425	<u>Alfalfa</u> (1 ha irrigated) pesticides: 4 ltr x 150 dh/ltr hired labor: 5.5 md x 15 dh/md irrigation: 15 appl x 57 dh/appl	600 83 855
<u>Barley</u> (fodder - 0.5 ha irrigated) seed: 2 qx/ha x 150 dh/qx x 0.5 ha soil prep: 90 dh/ha x 0.5 ha irrigation: 3 appl x 57 dh/appl x 0.5 ha	150 45 86	<u>Barley</u> (fodder - 0.5 ha irrigated) seed: 2 qx/ha x 150 dh/qx x 0.5 ha soil prep: 90 dh/ha x 0.5 ha irrigation: 3 appl x 57 dh/appl x 0.5 ha	150 45 86
<u>Clover</u> (1.2 ha irrigated) seeds: 20 kg/ha x 200 dh/kg x 1.2 ha pesticides: 4 ltr/ha x 150 dh/ltr x 1.2 ha hired labor: 4 md/ha x 15 dh/md x 1.2 ha soil prep: 90 dh/ha x 1.2 ha irrigation: 14 appl x 57 dh/appl x 1.2 ha	4800 720 72 108 958	<u>Clover</u> (1.2 has. irrigated) seeds: 20 kg/ha x 200 dh/kg x 1.2 ha pesticides: 4 ltr/ha x 150 dh/ltr x 1.2 ha hired labor: 4 md/ha x 15 dh/md x 1.2 ha soil prep: 90 dh/ha x 1.2 ha irrigation: 10 appl x 57 dh/appl x 1.2 ha	4800 720 72 198 684
<u>Hard Wheat</u> (6 has) seeds: 1 qx/ha x 250 dh/qx x 6 ha soil prep: 90 dh/ha x 6 ha hired labor (harvest):	1500 540 400	<u>Hard Wheat</u> (12 ha) seeds: 1 qx/ha x 250 dh/qx x 12 ha soil prep: 90 dh/ha x 12 ha hired labor (harvest): hired labor: 13.2 md/ha x 30 dh/md x 12 ha	3000 1080 400 4752
<u>Soft Wheat</u> (6 has) seeds: 1 qx/ha x 200 dh/qx x 6 ha soil prep: 90 dh/ha x 6 ha hired labor: 1 md/ha x 20 dh/md x 6 ha	1200 540 120	<u>Soft Wheat</u> (6 ha) seeds: 1 qx/ha x 200 dh/qx x 6 ha soil prep: 90 dh/ha x 6 ha hired labor: 13.2 md/ha x 30 dh/md x 6 ha	1200 540 2376
<u>Barley</u> (5 has) seeds: 2 qx/ha x 150 dh/qx x 5 ha soil prep: 90 dh/ha x 5 ha hired labor: 1 md/ha x 20 dh/md x 5 ha	1500 450 100	<u>Barley</u> (6 ha) seeds: 2 qx/ha x 150 dh/qx x 6 ha soil prep: 90 dh/ha x 6 ha hired labor: 13.2 md/ha x 30 dh/md x 6 ha	1800 540 2376
<u>Olives</u> (153 trees) hired labor (pruning): 15 md x 20 dh/md	300	<u>Olives</u> (153 trees) hired labor (pruning): 15 md x 20 dh/md hired labor (harvest): 130 md x 15 dh/md	300 1950
Total Crop Production Costs	15697	Total Crop Production Costs	28517
<u>Animal Production Costs (1983/84)</u>		<u>Estimated Animal Production Costs - Normal Year</u>	
<u>Cattle</u> (5 head) bran: 24 tons x 1050 dh/ton straw: 10 tons x 300 dh/ton beet pulp: 2 tons x 1100 dh/ton	25200 3000 2200	<u>Cattle</u> (5 head) Herd maintained using forage production generated on the farm. Costs estimated to be 40 percent of drought year costs	12160
<u>Sheep</u> (35 head) Herd maintained in north (near Tanglers). Revenues are just sufficient to cover the costs of transport, feed, and the shepherd.	-	<u>Sheep</u> (35 head) Herd maintained using forage production generated on the farm.	-
Total Animal Production Costs	30400	Total Animal Production Costs	12160
Total Production Costs	46097	Total Production Costs	40677
<u>Revenues - Crop Production 1983/84</u>		<u>Revenues - Crop Production - Normal Year</u>	
<u>Hard Wheat</u> : 2 qx x 250 dh/qx <u>soft wheat</u> : <u>barley</u> : <u>olives</u> :	500 0 0 0	<u>Hard Wheat</u> : 20 qx/ha x 150 dh/qx x 12 ha <u>soft wheat</u> : 20 qx/ha x 130 dh/qx x 6 ha <u>barley</u> : 20 qx/ha x 130 dh/qx x 6 ha <u>olives</u> : 46 qx x 150 dh/qx	36000 15600 15600 6900
Total Crop Revenues	500	Total Crop Revenues	74100
<u>Revenues - Animal Production 1983/84</u>		<u>Revenues - Animal Production - Normal Year</u>	
<u>Cattle</u> (5 head) milk: 1400 ltr/cow x 5 cows x 1.8 dh/ltr milk: 1000 ltr/cow x 5 cows x 1.6 dh/ltr calves: 3 calves/year x 6000 dh	12600 8000 18000	<u>Cattle</u> (5 head) milk: 1400 ltr/cow x 5 cows 1.8 dh/ltr milk: 1000 ltr/cow x 5 cows x 1.6 dh/ltr calves: 3 calves/year x 6000 dh	12600 8000 18000
<u>Sheep</u> (35 head) lambs: 30 lambs/year x 200 dh/lamb wool: 12 dh/head/year x 35 head	6000 420	<u>Sheep</u> (35 head) lambs: 30 lambs/year x 200 dh/lamb wool: 12 dh/head/year x 35 head	6000 420
Total Livestock Revenues	45520	Total Livestock Revenues	45020
TOTAL REVENUES	46020	TOTAL REVENUES	119120
NET INCOME	- 37	NET INCOME	78443

Case Study No. 4

Location: Marrakech (Oudaya) Farmer's Age: 52
 No. of Children: 7 Size of Household (with head): 14
 No. of Family Members Working on Farm (with head): 5
 Avg. Consumption Expenses: 10400 dh/year
 Land Tenure: Terru Guiche (usufruct given by government, transmissible)
 Farm Size: 42.0 has., of which: 3.0 has. are classified as irrigated, and
3.0 has. are currently irrigated

Fiscal Revenue 3,607 dh (1978); 3,447 dh (1983)
 Client of CRCA-Marrakech Since: 1980
 Past CNCA Loans Entirely Repaid (excluding consolidations): 2 (number)
7,000 (Dh amount)

Non-farm Revenue unknown

Effects of Drought/Other Comments:

Had to abandon a farm three years ago because the well dried up and resettled nearby. Has a new well, but water is not deep enough. Consequently, can pump only three hours a day. The well is as deep as it can go. Holds 20 sheep in association. He provides the food, his partner provided the sheep. He receives 1/3 of the income. The majority of the farm is dryland and, on much of it, there has not been any cereal production (not even straw) for the past 7-8 years.

Assets According to Fiscal Income Statement

	1978	1983
1. Irrigated land (has.)	0.5	0.3
2. Non-irrigated land (category 3)	41.5	41.5
3. Olive trees (no. of trees)	20	20
4. Citrus trees	41	41
5. Grapes (has.)	1.0	1.0
5. Cattle (no. of head)	4	2
6. Sheep	60	50
7. Goats	-	10

Loans Currently Outstanding (dirhams)

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount to be Rescheduled ¹
1980	Animal Traction Equipment	4,800	3 (10%)	1,600	3,200	1,760
1980	Stable	4,000	5 (10%)	1,600	2,400	3,120
1980	Land Preparation	3,000	4 (10%)	1,500	1,500	1,800
1980	Livestock for Fattening	7,000	1 (10%)	-	7,000	Already Consolidated
1981	Maintain Orchards	1,500	1 (10%)	-	1,500	" "
1982	Purchase Livestock	13,000	5 (10%)	-	13,000	6,240
1982	Consolidation Loan	11,103	2 (10%)	-	11,103	13,323

Estimated installment payments due in 1985 on all loans (including interest), assuming rescheduling over 10 years (except as specified) and a Dh 10,000 loan for the 1984/85 campaign, is Dh 15,200.

Ratio of estimated 1985 installment payments to projected 1985 net income is 41.2 percent^{2,3}. Net disposable income after installment payments is Dh 1,811 per month.

1/ Including interest.

2/ Assuming "normal" year

3/ Excluding Dh 10,000 costs financed through seasonal loan, projected net income is Dh 36,927.

Case Study No. 4

<u>Crop Production Costs 1983/84</u>	(dh)	<u>Estimated Crop Prod. Costs - Normal Year</u>	(dh)
<u>Alfalfa</u> (1 ha irrigated) manure: 6 tons/ha x 120 dh/ton pesticides: 3 liters/ha x 30 dh/ltr irrigation:	720 90 2850	<u>Alfalfa</u> (1 ha irrigated) manure: 6 tons x 120 dh/ton pesticides: 3 liters/ha x 30 dh/ltr irrigation:	720 90 2850
<u>Gourd</u> (1 ha irrigated) manure: 6 tons/ha. x 120 dh/ton soil prep: 180 dh/ha x 1 ha irrigation:	720 180 720	<u>Gourd</u> (1 ha irrigated) manure: 6 tons/ha. x 120 dh/ton soil prep: 180 dh/ha x 1 ha irrigation:	720 180 720
<u>Grapes</u> (1 ha irrigated) manure: 6.25 tons/ha x 120 dh/ton fertilizer: 2 qx/ha x 120 dh/qx pesticide: 4 liters/ha x 30 dh/ltr irrigation: hired labor: 260 md x 12.5 dh/md hired labor: 60 md x 25 dh/md reeds: palm fiber: 1 soil prep (tractor): 180 dh/ha x 1 ha	750 240 120 5700 3250 1500 1750 500 180	<u>Grapes</u> (1 ha irrigated) manure: 6.25 tons/ha x 120 dh/ton fertilizer: 2 qx/ha x 120 dh/qx pesticide: 4 liters/ha x 30 dh/ltr irrigation: hired labor: 260 md x 12.5 dh/md hired labor: 60 md x 25 dh/md reeds: palm fiber: soil prep (tractor): 180 dh/ha x 1 ha	750 240 120 5700 3250 1500 1750 500 180
<u>Soft Wheat</u> (6.5 has) seeds: 1 qx/ha x 180 dh/qx x 6.5 ha soil prep: 65 dh/ha x 6.5 ha	1170 422	<u>Soft Wheat</u> (6.5 ha) seeds: 1 qx/ha x 180 dh/qx x 6.5 ha soil prep: 65 dh/ha x 6.5 ha harvest (combine) 150 dh/ha x 6.5 ha straw: 80 bales/ha x 1.5 dh/bale x 6.5	1170 422 975 780
<u>Barley</u> (8 has) seeds: 1 qx/ha x 150 dh/qx x 8 ha soil prep: 65 dh/ha x 8 ha	1200 520	<u>Barley</u> (8 ha) seeds: 1 qx/ha x 150 dh/qx x 8 ha soil prep: 65 dh/ha x 8 ha harvest (combine): 150 dh/ha x 8 ha straw: 100 bales/ha x 1.4 dh/bale x 8 ha	1200 520 1200 1120
<u>Cumin</u> (1 ha) soil prep: 270 dh/ha x 1 ha	270	<u>Cumin</u> (1 ha) soil prep: 270 dh/ha x 1 ha	270
Total Crop Production Costs	22925	Total Crop Production Costs	27000
<u>Animal Production Costs (1983/84) ¹</u>		<u>Estimated Animal Production Costs - Normal Year</u>	
<u>Sheep</u> (20 head held in association) straw	750	<u>Sheep</u> (20 head held in association)	-
Total Animal Production Costs	750	Total Animal Production Costs	-
Total Production Costs	23602	Total Production Costs	26927
<u>Revenues - Crop Production 1983/84 ²</u>		<u>Revenues - Crop Production - Normal Year</u>	
Grapes: 6.2 tons x 1500 dh/ton x 1 ha Barley	9250 0	Grapes: 6.2 tons x 1500 dh/ton Barley: 15 qx/ha x 60 dh/ha x 8 ha Straw: 100 bales/ha x 6 dh/bale x 8	9250 7200 4800
Soft wheat:	0	Soft Wheat: 15 qx/ha x 150 dh/qx x 6.5 ha Straw: 80 bales/ha x 4 dh/bale x 6.5 ha	14625 2080
Gourds Cumin	2500 0	Gourds Cumin: 4 qx x 2000 dh/qx	8000 8000
Total Crop Revenues	11750	Total Crop Revenues	53955
<u>Revenues - Animal Production 1983/84</u>		<u>Revenues - Animal Production - Normal Year</u>	
lamb: none during 1983/84	-	lamb: 15 lambs x 120 dh/head	1800
Total Animal Production Revenues	-	Total Animal Production Revenues	1800
TOTAL REVENUES	32500	TOTAL REVENUES	55755
NET INCOME	- 11852	NET INCOME	28828

1/ Has one cow, production is consumed on the farm.

2/ Alfalfa production is consumed on the farm by the livestock.

Case Study No. 5

Location: Marrakech (Oudaya) Farmer's Age: 44
 No. of Children: 10 Size of Household (with head): 12
 No. of Family Members Working on Farm (with head): 2
 Avg. Consumption Expenses: _____
 Land Tenure: Private Land
 Farm Size: 29.0 has., of which: 21.0 has. are classified as irrigated, and
2.0 has. are currently irrigated
 Fiscal Revenue 3,862 dh (1978); 3,782 dh (1983)
 Client of CRCA-Marrakech Since: 1974
 Past CNCA Loans Entirely Repaid (excluding consolidations): 18 (number)
34,000 (Dh amount)

Non-farm Income: unknown

Effects of Drought/Other Comments:

Formerly received water via small canals from the ORMVA. However, for the past 10 years this has not been the case. The farm depends upon 2 wells, each 50 meters deep. This provides enough water to irrigate for 2 hours/day. As a result, the grapes are watered at the expense of the rest of the crops. Intensive vegetable production was abandoned three years ago due to lack of water. In addition, two hectares of olives and one-half hectare of pomegranates have recently been abandoned for want of water. This year 2 ha of apricots also had to be abandoned. The farmer and local technicians estimated that it would take 8-10 normal years to redevelop the formerly irrigated land (e.g. new trees would have to be planted).

Assets According to Fiscal Income Statement

	<u>1978</u>	<u>1983</u>
1. Irrigated land (has.)	21.2	21.2
2. Non-irrigated land (category 3)	8.2	8.2
3. Olive trees (no. of trees)	140	140
4. Citrus trees	200	200
5. Grapes (has.)	1.0	1.0
5. Cattle (no. of head)	4	3

Loans Currently Outstanding (dirhams)

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount to be Rescheduled ¹
1977	Irrigation System Maintenance	5,000	5 (8.5%)	3,000	2,000	2,340
1978	Motor pump	20,000	5 (8.5%)	16,000	4,000	4,340
1980	Animal Traction Equipment	4,800	3 (10%)	1,600	1,600 ²	1,760
1982	Consolidation Loan	20,082	3 (10%)	-	20,082	25,000

Estimated installment payments due in 1985 on all loans (including interest), assuming rescheduling over 10 years (except as specified) and a Dh 5,000 seasonal loan for the 1984/85 campaign, is Dh 10,850.

Ratio of estimated 1985 installment payments to projected 1985 net income is 18.7 percent^{3,4}. Net disposable income after installment payments is Dh 3,937 per month.

- 1/ Including interest.
- 2/ Dh 1600 was already consolidated.
- 3/ Assuming "normal" year
- 4/ Excluding Dh 5,000 costs financed through seasonal loan, projected net income is Dh 58,100.

Case Study No. 5

<u>Crop Production Costs 1983/84</u>	(dh)	<u>Estimated Crop Prod. Costs - Normal Year</u>	(dh)
<u>Grapes (2 ha)</u>		<u>Grapes (2 ha)</u>	
manure: 5 tons/ha x 750/ton x 2 ha	7500	manure: 5 tons/ha x 750/ton x 2 ha	7500
fertilizer: 1.25 qx/ha x 120 dh/qx x 2 ha	300	fertilizer: 1.25 qx/ha x 120 dh/qx x 2 ha	300
pesticide: 350 dh/ha x 2 ha	700	pesticide: 350 dh/ha x 2 ha	700
irrigation: 4875 ltrs x 3.2 dh/ltr	15600	irrigation: 4875 ltrs x 3.2 dh/ltr	15600
hired labor: 260 md x 20 dh/md	5200	hired labor: 260 md x 20 dh/md	5200
seeds: 3750 dh/ha x 2 ha	7500	seeds: 3750 dh/ha x 2 ha	7500
palm fiber: 1250 dh/ha x 2 ha	2500	palm fiber: 1250 dh/ha x 2 ha	2500
soil prep (tractor): 180 dh/ha x 2 ha	360	soil prep (tractor): 180 dh/ha x 2 ha	360
<u>Apricots (2 ha)</u>		<u>Apricots (2 ha)</u>	
soil prep: 180 dh/ha x 2 ha	360	Apricots abandoned. Will take up	
fertilizer: 5 qx/ha x 120 dh/qx x 2 ha	1200	to eight years to recover.	
pesticides: 250 dh/ha x 2 ha	500		
hired labor: 50 md/ha x 20 dh/md x 2 ha	2000		
irrigation: 975 ltrs x 3.2 dh/ltr	3120		
<u>Citrus (0.5 ha)</u>		<u>Citrus (0.5 ha)</u>	
fertilizer: 4 qx x 120 dh/qx x 0.5 ha	240	fertilizer: 4 qx x 120 dh/qx x 0.5 ha	240
soil prep: 180 dh/ha x 0.5 ha	90	soil prep: 180 dh/ha x 0.5 ha	90
hired labor: 40 md x 20 dh/ha x 0.5 ha	400	hired labor: 60 md x 20 dh/ha x 0.5 ha	600
irrigation: 975 ltrs x 3.2 dh/ltr	3120	irrigation:	5000
<u>Barley (4 ha)</u>		<u>Barley (7 ha)</u>	
seeds: 1 qx/ha x 150 dh/qx x 4 ha	600	seeds: 1 qx/ha x 150 dh/qx x 7 ha	1050
fertilizer: 0.5 qx/ha x 100 dh/qx x 4 ha	200	fertilizer: 0.5 qx/ha x 100 dh/qx x 7	350
soil prep: 90 dh/ha x 4 ha	360	soil prep: 90 dh/ha x 7 ha	630
hired labor: 2 md/ha x 20 dh/md x 4 ha	160	hired labor: 2 md/ha x 20 dh/md x 7 ha	160
		harvest (combine): 200 dh/ha x 7 ha	1400
<u>Soft Wheat (2 ha)</u>		<u>Soft Wheat (7 ha)</u>	
seeds: 1 qx/ha x 180 dh/qx x 2 ha	360	seeds: 1 qx/ha x 180 dh/qx x 7 ha	1260
fertilizer: 0.5 qx/ha x 100 dh/qx x 2 ha	100	fertilizer: 0.5 qx/ha x 100 dh/qx x 7 ha	350
soil prep: 90 dh/ha x 2 ha	180	soil prep: 90 dh/ha x 7 ha	630
hired labor: 2 md/ha x 20 dh/md x 2 ha	80	hired labor: 2 md/ha x 20 dh/md x 7 ha	280
		harvest (combine) 200 dh/ha x 7 ha	1400
Total Crop Production Costs	52730	Total Crop Production Costs	53100
<u>Animal Production Costs (1983/84)</u>		<u>Estimated Animal Production Costs - Normal Year</u>	
none ¹		none ¹	
Total Animal Production Costs	-0-	Total Animal Production Costs	-0-
Total Production Costs	52730	Total Production Costs	53100
<u>Revenues - Crop Production 1983/84</u>		<u>Revenues - Crop Production - Normal Year</u>	
Grapes: 10 ton x 1755 dh/ton x 1 ha	17550	Grapes: 12.5 tons/ha x 1500 dh/ton x 2 ha	32500
Grapes: 10 ton x 1500 dh/ton x 1 ha	15000		
citrus:	0	citrus: 6 tons/ha x 1500 dh/ton x 0.5 ha	4500
barley	0	barley: 20 qx/ha x 70 dh/qx x 7 ha	9800
soft wheat:	0	barley straw: 100 bales/ha x 6 dh/bale x 7	4200
apricots	0	soft wheat: 30 qx/ha x 120 dh/qx x 7 ha	25200
		wheat straw: 80 bales/ha x 3.5 dh/bale x 7	1960
Total Crop Revenues	32500	Total Crop Revenues	90582
<u>Revenues - Animal Production 1983/84</u>		<u>Revenues - Animal Production - Normal Year</u>	
none ¹		none ¹	
Total Animal Production Revenues	-	Total Animal Production Revenues	-
TOTAL REVENUES	32500	TOTAL REVENUES	37482
NET INCOME	- 20230	NET INCOME	64542

^{1/} Since the farm no longer has livestock, no normal year production was assumed. Additional capital would first be needed to reconstitute the herd.

Case Study No. 6

Location: Settat (Sidi El Aidi) Farmer's Age: 36
 No. of Children: 2 Size of Household (with head): 8
 No. of Family Members Working on Farm (with head): 1
 Avg. Consumption Expenses: 15,600 dh/year

Land Tenure: Privately owned. Farmer operates the farm for his father, but he receives all of the income. Credit file and farm are in the father's name.

Farm Size: 28.0 has., of which: 0 has. are classified as irrigated, and 0 has. are currently irrigated

Fiscal Revenue 3,781 dh (1975); 3,325 dh (1983)
 Client of CRCA-Settat Since: 1973
 Past CNCA Loans Entirely Repaid (excluding consolidations): 9 (number)
42,500 (Dh amount)

Effects of Drought/Other Comments

Farmer was forced to sell 3.5 hectares after the 1980/81 drought. Prior to 1980, this farm had 17 dairy cows. Due to the drought, the dairy cows were sold, at very low prices. The farmer commented that his experience was common in the Settata area, which, before the 1980/81 drought, was a significant dairy producing region.

Assets According to Fiscal Income Statement

	1978	1983
1. Nonirrigated land (ha)	31.6	28.1

Note: Fiscal income calculations in Settata Province do not include livestock.

Loans Currently Outstanding (dirhams)

Year	Purpose	Amount	Terms (years)	Amount Paid	Amount Outstanding	Amount Rescheduled ¹
1981	Well	3,000	3 (10%)	2,000	1,000	1,100
1982	Draft Animals	2,800	2 (10%)	1,000	1,000	1,100
1982	Extended terms on previous loans	3,000	3 (9%)	2,000	1,000	1,100
1983	Seasonal Loan	10,000	1 (9%)	-	10,000	10,900
1984	Seasonal Loan	2,000	1 (9%)	-	1,000	not overdue

Estimated installment payments due in 1985 on all loans (including interest), assuming rescheduling over 10 years (except as specified) and a Dh 10,000 seasonal loan for the 1984/85 campaign, is Dh 13,272.

Ratio of estimated 1985 installment payments to projected 1985 net income is 15.3 percent^{2,3}. Net disposable income after installment payments is Dh 6,100 per month.

1/ Including interest.

2/ Assuming "normal" year

3/ Excluding Dh 10,000 costs financed through seasonal loan, projected net income is Dh 86,468.

Case Study No. 6

<u>Crop Production 1983/84</u>		(dh)	<u>Estimated Crop Production - Normal Year</u>		(dh)
<u>Hard Wheat (10 ha)</u>			<u>Hard Wheat (10 ha)</u>		
seeds: 1.6 qx/ha x 250 dh/qx x 10 ha	4000		seeds: 1.6 qx/ha x 250 dh/qx x 10 ha	4000	
fertilizer: 1 qx/ha x 90 dh/qx x 10 ha	900		fertilizer: 1 qx/ha x 90 dh/qx x 10 ha	900	
hired labor: 1.2 md/ha x 20 dh/md x 10 ha	240		hired labor: 1.2 md/ha x 20 dh/md x 10 ha	240	
soil prep: 140 dh/ha x 10 ha	1400		soil prep: 140 dh/ha x 10 ha	1400	
			harvest (combine) 180 dh/ha x 10 ha	1800	
			straw: 200 bales/ha x 1.5 dh/bale x 10	3000	
<u>Barley (7 ha)</u>			<u>Barley (7 ha)</u>		
seeds: 1.5 qx/ha x 150 dh/qx x 7 ha	1575		seeds: 1.5 qx/ha x 150 dh/qx x 7 ha	1575	
hired labor: 2.4 md/ha x 20 dh/md x 7 ha	336		hired labor: 2.4 md/ha x 20 dh/md x 7 ha	336	
			harvest (combine): 180 dh/ha x 7 ha	1260	
			straw: 200 bales/ha x 1.5 dh/bale x 7 ha	2100	
<u>Peas (4 ha)</u>			<u>Peas (4 ha)</u>		
fertilizer: 0.5 qx x 35 dh/qx x 4 ha	70		fertilizer: 0.5 qx x 35 dh/qx x 4 ha	70	
fertilizer: 0.5 qx x 90 dh/qx x 4 ha	180		fertilizer: 0.5 qx x 90 dh/qx x 4 ha	180	
pesticides: 25 kg/ha x 30 dh/kg x 4 ha	3000		pesticides: 25 kg/ha x 30 dh/kg x 4 ha	3000	
hired labor: 30 md x 20 dh/md x 4	2400		hired labor: 60 md x 20 dh/md x 4	4800	
<u>Corn (3 ha)</u>			<u>Corn (3 ha)</u>		
seeds: 25 kg x 1.7 dh/kg x 3	128		seeds: 25 kg x 1.7 dh/kg x 3	128	
soil prep (animal): 70 dh/ha x 3 ha	210		soil prep (animal): 70 dh/ha x 3 ha	210	
hired labor: 11 md/ha x 20 dh/md x 3	660		hired labor: 30 md/ha x 20 dh/md x 3	1800	
<u>Coriander (0.5 ha)</u>			<u>Coriander (0.5 ha)</u>		
seed: 25 kg/ha x 3.5 dh/kg x 0.5	44		seed: 25 kg/ha x 3.5 dh/kg x 0.5	44	
fertilizer: 1 qx/ha x 35 dh/qx x 0.5	18		fertilizer: 1 qx/ha x 35 dh/qx x 0.5	18	
hired labor: 2 md/ha x 20 dh/md x 0.5	20		hired labor: 22 md/ha x 20 dh/md x 0.5	220	
soil prep: 70 dh/ha x 0.5 ha	35		soil prep: 70 dh/ha x 0.5 ha	35	
Total Crop Production Costs	15000		Total Crop Production Costs	22192	
<u>Animal Production Costs (1983/84)</u>			<u>Estimated Animal Production Costs - Normal Year</u>		
<u>Sheep (18 head)</u>			<u>Sheep (18 head)</u>		
hay: 100 bales x 15 dh/bale	1500				
barley: 1 ton x 1350 dh/ton	1350				
shepherd: 500 dh/month x 12 months	6000		shepherd: 500 dh/month x 12 months	6000	
Total Animal Production Costs	8850		Total Animal Production Costs	6000	
Total Production Costs	24066		Total Production Costs	28192	
<u>Revenues - Crop Production 1983/84</u>			<u>Revenues - Crop Production - Normal Year</u>		
Hard wheat:	0		Hard Wheat: 28 qx/ha x 180 dh/qx x 10 ha	50400	
Barley	0		Straw: 200 bales/ha x 4 dh/bale x 10 ha	8000	
Peas: 1 qx/ha x 700 dh/qx x 4 ha	2800		Barley: 30 qx/ha x 70 dh/qx x 7 ha	14700	
Corn	0		Straw: 200 bales/ha x 4 dh/bale x 7	5600	
Coriander	0		Peas: 12 qx/ha x 350 dh/qx x 4 ha	16800	
			Corn: 6 qx/ha x 120 dh/qx x 3 ha	2160	
			Coriander: 8 qx/ha x 250 dh/qx x 0.5 ha	1000	
Total Crop Revenues	2800		Total Crop Revenues	98660	
<u>Revenues - Animal Production 1983/84</u>			<u>Revenues - Animal Production - Normal Year</u>		
<u>Sheep (30 head)</u>			<u>Sheep (30 head)</u>		
lambs: none during 1983/84	-		lambs: 12 sold (1 year old) x 500 dh/head	6000	
Total Animal Production Revenues	-		Total Animal Production Revenues	6000	
TOTAL REVENUES	2800		TOTAL REVENUES	104660	
NET INCOME	- 21266		NET INCOME	76468	

ANNEX 5: DRAFT SCOPE OF WORK FOR TECHNICAL ASSISTANCE

USAID/Morocco wishes to contract with an institution to provide the technical assistance, training, and commodities procurement called for in this project. As the CNCA desires to obtain good quality technical assistance that is appropriate for their needs, and given their extensive experience in directly managing procurement and services contracts, the technical assistance under this project will be acquired under a Host Country contract. It is essential that the contracting institution be able to provide, either directly or through subcontracts, the entire package of services required. The institution must be able to field highly qualified personnel and to support its staff in the field in a reliable and timely manner. To this end, it is expected that, for both long- and short-term technical assistance, the Contractor will perform much of the work with its own staff or with individuals with whom it has worked extensively.

This purpose of the technical assistance is to promote the long-term capacity of the CNCA, as a credit institution, to effectively provide needed credit services to Moroccan farmers. This is to be achieved by funding a number of activities, including: (1) the provision of a long-term technical advisor to CNCA; (2) specialized studies designed to assess the impact of current CNCA lending practices or explore possible new approaches to lending; (3) a range of training activities focusing on subjects critical to CNCA's long-term development, namely credit evaluation, loan monitoring, accounting, electronic data processing and control; and (4) the procurement of a number of micro-computers to improve the efficiency of several critically-important departments at the head office.

Senior Long-term Agricultural Credit/Agribusiness Specialist

The Agricultural Credit/Agribusiness specialist will be provided for a period of three years. This individual will assist the CNCA in assessing the effectiveness and appropriateness of current lending policies, utilizing the findings and recommendations of the specialized studies carried out under the Project, and defining strategies for the future. In addition, this Advisor will ensure adequate contact and a flow of information between CNCA and AID, thereby creating a knowledge base for possible future project activities and policy initiatives on the part of AID, particularly in the areas of agro-industry and assistance to the private sector.

As is presented in the position description, below, the Senior Long term Agricultural Credit/Agribusiness Specialist must be highly qualified. This individual will be the key to the success of the institution-strengthening component of this project. He or she will be working on a daily basis with senior level CNCA offices and staff. Further, he will be responsible for establishing a dialogue with the CNCA, GOM, and donors on important and complex policy issues. Consequently, this individual must speak fluent French language at both a conversational and technical level (at least FSI 3, preferably higher). This individual must also have experience working in agricultural credit/banking in French-speaking developing countries. A thorough knowledge of French credit procedures and terms is necessary to effectively carry out the assignment. Particular expertise in finance would be very useful. Experience in agribusiness and data management will be beneficial. In view of CNCA's status as an already well-established and

highly efficient institution and of the high quality and level of professional expertise of its head-office staff, it will be critical to select a highly qualified and experienced candidate. The Technical Advisor will be funded for a period of three years.

Specialized Studies

In addition to the policy issues examined by the Technical Advisor, it will be necessary to assess the impact of current CNCA lending activities, and to undertake a detailed analysis of the socio-economic conditions affecting CNCA credit. Before even considering an assessment of current CNCA policies, AID must have a clear understanding of why CNCA is financing certain types of activities (particularly at the CLCA level), how effective these interventions are from the farmer's point of view, and what new policies would be both desirable and feasible in the future. These studies will create a knowledge base for AID as well as produce specific recommendations to be subsequently implemented by the CNCA. It is anticipated that, in all, eleven special studies will be carried out, each one involving roughly six person-weeks of effort. One study, however, that of the credit needs of women in Moroccan agriculture will involve twelve person weeks.

A number of critical issues or concerns were identified during the course of the project design which could be addressed by these studies. These include:

- Assessing macro and micro-economic benefits of credit;
- Identifying the relationship between rural credit and agricultural production, and eventually between credit purpose and actual credit usage;
- Examining the appropriateness of overall lending policies (type of credit, loan terms, and so forth) with respect to the specific characteristics and needs of particular regions or types of clients;
- Reviewing the linkage between credit and the "viability" of the borrower, particularly when dealing with marginal farmers at the CLCA level;
- Studying the effectiveness of unsupervised credit to the small farmer vs. the anticipated benefits, but higher cost, of supervised credit;
- Exploring the development of special credit programs directed towards land reform, and to the improvement of collective lands;
- Developing a long-term credit strategy to deal with drought conditions, if indeed such conditions were to continue over the coming years; and,
- Creating an efficient Management Information System in conjunction with CNCA's ongoing computerization effort.
- Examining the credit needs of women in Moroccan agriculture.

Training

The Contractor will also be responsible for supervising the short term training of approximately 30 CNCA mid-level staff. In addition, equipment will be procured to supply a training center at the CNCA and a technical library. Since computer training will be one of the major focuses of the training center in the coming years, the Contractor will procure five micro-computers for the training center. The Project will also fund observational training overseas and technical training, lasting an average of three months, in the areas of automatic data processing, project evaluation, control, monitoring, banking and accounting. Such training will most likely be provided either in the U.S. or in France. The project will also support the training of a corps of full-time, fully-trained educators. CNCA wishes, in a first stage, to train five such educators, in the areas of credit evaluation, loan monitoring, accounting, automatic data processing and audit/control, respectively. Such training, which would also take place either in the U.S. or in Europe, would conceivably be of three months duration as an average.

Procurement of Micro-computers

Initial computerization of CNCA's entire network will be financed under a World Bank credit included in its Fifth Agricultural Credit Project. This will encompass the design of the EDP system, as well as an allocation of \$1 million for the initial purchase of micro-computers for 20 CRCAs. However, CNCA has requested AID to provide up to 7 micro-computers for technical departments at head office in order to allow them to complete their respective tasks more efficiently and be fully synchronized with computerized field offices. These micros are needed for the following departments or units: Special Studies, Monitoring and Evaluation, Credit, Treasury and Banking Activities, Personnel, Equipment and Supplies, and Accounting.

Position Description: Senior Long-term Agricultural Credit/Agribusiness Specialist

Major responsibilities:

The Senior Agricultural Credit/Agribusiness specialist's major tasks will include:

Serving as team leader and coordinator for each of the special studies carried out under the project.

Monitor and manage all of the training and other institution-strengthening efforts carried out under the project.

Providing advisory services to senior CNCA staff on credit related issues and suggesting areas where further research is necessary to improve the operation and management of agricultural credit.

Working with CNCA, GOM and AID officials identify credit and related efforts to promote the development of private sector agribusiness in Morocco.

Promoting an ongoing dialogue between the CNCA, GOM, AID, and other donors on policy-related issues critical for improving the effectiveness of agricultural credit and developing Moroccan the agribusiness sector.

Desired Qualifications:

The individual fielded by the Contractor to perform these tasks must speak fluent French at both conversational and technical levels (French S-3+, R-3+ preferred, S-3, R-3 required) and must have substantive experience and training in agricultural credit. Experience working with agricultural credit projects in French speaking developing countries is highly desirable. It is preferred that the candidate have actual hands-on experience in implementing a credit project. This individual should have experience in banking, financial management, and accounting. The candidate must understand both the macro- and micro-economic aspects of rural credit and be generally familiar with the problems facing small farmers and agribusiness in developing countries such as Morocco. Substantive experience in agribusiness would be very helpful. In view of the professional expertise of Moroccan counterparts, particularly at CNCA, only candidates offering the highest professional credentials will be considered.

ANNEX 6: PID APPROVAL MESSAGE

ACTION AIDE AMB ECON CHRON

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DE RUEHC #1817/01 2421249
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UNCLAS SECTION 01 OF 03 STATE 261817

OFFICIAL FILE

608-0/84

AIDAC

F.O. 12356: N/A

TAGS:

SUBJECT: NEAC REPORT: SMALL FARM CREDIT PID 608-0134

THE NEAC EAST ADVISORY COMMITTEE MET ON AUGUST 16, 1984 WITH BRAD LANGMAID AS CHAIRPERSON AND REVIEWED THE SUBJECT PID.

THE NEAC WAS PLEASED TO HAVE MALCOLM PURVIS, AGRICULTURE DEVELOPMENT OFFICER/RABAT, PRESENT TO CLARIFY POINTS IN THE PID AND VERY ABLY ELUCIDATE AND DEFEND THE PROJECT. THE NEAC DETERMINED THAT THE MISSION IS AUTHORIZED TO PROCEED WITH THE DESIGN OF THE SMALL FARM CREDIT PROJECT PAPER DURING WHICH THE ISSUES IDENTIFIED IN THE PID AS WELL AS THE FOLLOWING ISSUES AND CONCERNS SHALL BE RESOLVED AND/OR INCORPORATED.

A. ISSUE: AVAILABILITY OF AGRICULTURAL PRODUCTION INPUTS.

DISCUSSION: THE PID STRESSES THE IMPORTANCE OF PROVIDING CREDIT FACILITIES TO DROUGHT AFFECTED SMALL FARMERS TO ALLOW INCREASED PRODUCTION. THE PROVIDING OF AGRICULTURE CREDIT BY ITSELF WILL NOT ENSURE INCREASED

PRODUCTION. STUDIES OF AGRICULTURAL CREDIT PROJECTS IN LDCS CONCLUDE THAT IMPROVED FARM PRACTICES, CREDIT AND THE USE OF PURCHASED INPUTS COLLECTIVELY STIMULATE AGRICULTURAL GROWTH AND INCREASED PRODUCTION.

GIVEN THE SEVERE BUDGET CONSTRAINTS IMPOSED ON THE GOM BY CURRENT ECONOMIC AND FINANCIAL AUSTERITY MEASURES, HOW DOES THE PROJECT INTEND TO ENSURE RECIPIENT FARMERS) APPROPRIATE INFORMATION AND AVAILABILITY OF INPUTS SUCH AS IMPORTED NITROGEN FERTILIZER AND HIGH-YIELD VARIETY SEEDS? LINKAGE OF THIS PROJECT WITH OTHER ONGOING AID-FUNDED AGRICULTURAL PROJECTS AND GOM AGENCIES WILL ENABLE CNCA TO HAVE GREATER IMPACT ON FARMERS) PRODUCTIVITY.

RECOMMENDATION: THE PP SHOULD DEMONSTRATE HOW THE CREDIT TO FARMERS WILL BE USED TO PURCHASE CURRENT INCREASING INPUTS. THE PP SHOULD ALSO ADDRESS LONG-TERM INSTITUTIONAL DEVELOPMENT OF CNCA AND THE ESTABLISHMENT

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OF LINKAGES WITH PROJECT AND COM ENTITIES (E.G. EXTENSION SERVICE AND SOURCES OF PHYSICAL INPUTS) TO MAXIMIZE USE OF THE NEW DRYLAND AGRICULTURE TECHNOLOGICAL PACKAGES OF PRACTICES AS THEY BECOME AVAILABLE.

P. ISSUE: FINANCIAL ANALYSIS OF CNCA, PARTICULARLY REGARDING SMALL FARMER LOAN PORTFOLIO AND ADEQUACY OF DCNOR FUNDS TO COVER CURRENT NON-PERFORMING DEBTS

BACAGROUND: THE PID STATES THAT THE CNCA NON-PERFORMING DEBT IS ESTIMATED AT DOLS 45 MILLION, OF WHICH THE EEC WILL COVER DOLS 20 MILLION AND AID DOLS 15 MILLION. THERE IS A SHORT FALL OF DOLS 12 MILLION. WHAT IS THE ACTUAL MAGNITUDE OF THE FARMERS' LOAN ARREARAGES AND WHAT IS THEIR POTENTIAL DEMAND FOR RESCHEDULING AND NEW PRODUCTION LOANS? IF THE BALANCE OF FUNDS ARE NOT SUPPLIED, WHAT IMPACT WILL THEIR ABSENCE HAVE ON CNCA IN FULFILLING ITS OVERALL COMMITMENT TO FARMERS IN THE DROUGHT AFFECTED AREAS? WILL CNCA FORECLOSE ON SOME FARMERS IN VIEW OF THEIR INABILITY TO CARRY BAD DEBTS WHICH IMPAIRS CNCA FINANCIAL SOUNDNESS? WILL RESCHEDULING OF THE LOANS REDUCE THE NON-PERFORMING DEBTS AND IF SO BY HOW MUCH? A FINANCIAL APPRAISAL OF CNCA IS NEEDED TO DETERMINE THE DEGREE TO WHICH IT CAN ABSORB POTENTIAL LOSSES.

OTHER RELEVANT QUESTIONS INCLUDE:

- WILL THE DOLS 15 MILLION BE USED TO RESCHEDULE NON-PERFORMING LOANS AND ALSO TO PROVIDE NEW LOANS, OR JUST THE FORMER?
- WHAT ARE THE TERMS OF OTHER DONOR LOANS (IBRD, AFW, FADES, EEC, ETC.) TO CNCA?
- IS THE DOLS 45 MILLION A TOTAL OF CAPITAL DEBT AND, IF SO, WHAT IS THE CASH FLOW NEED OF CNCA FOR ONE YEAR?
- WHAT ARE THE EXISTING TERMS OF CNCA LOANS TO SMALL FARMERS?

RECOMMENDATION: THESE QUESTIONS MUST BE ADDRESSED DURING THE PP DESIGN.

C. ISSUE: RELATIONSHIP BETWEEN THE SPECIAL CREDIT FUND PROGRAM FOR SMALL FARMERS AND THE WORLD BANK'S FIFTH AGRICULTURAL CREDIT PROJECT.

BACAGROUND: THE AFS APPROVED IN PRINCIPLE A SPECIAL CREDIT FUND PROGRAM FOR SMALL FARMERS, INSULATED FROM REGULAR CNCA LENDING. BUT A VERY CLOSE RELATIONSHIP SHOULD BE MAINTAINED BETWEEN A SHORT-TERM AID QUOTE

INCURSION UNQUOTE INTO THE SECTOR AND THE WORLD BANK'S LONG EXPERIENCE IN DEALING WITH AGRICULTURAL CREDIT IN MOROCCO. IN THIS REGARD, THE PP SHOULD CLEARLY SPECIFY WHAT ARE AID'S POLICY DIALOGUE GOALS FOR AGRICULTURAL CREDIT REFORM AND WHETHER THEY ARE SIGNIFICANTLY DIFFERENT FROM THOSE OF THE WORLD BANK. FURTHERMORE, THE PP SHOULD DETERMINE WHETHER ESTABLISHMENT OF A SEPARATE FUND TO RESCHEDULE SMALL FARMER LOANS, OUTSIDE OF CNCA'S ALREADY ESTABLISHED PROCEDURES WILL UNDERMINE POLICY REFORMS ALREADY ATTAINED BY THE SERIES OF BANK PROJECTS. THE PP SHOULD ALSO CLARIFY WHAT PROGRESS CNCA HAS MADE IN THE AREA OF CREDIT REFORM, PARTICULARLY IN TERMS OF INTEREST RATES.

RECOMMENDATION: THE PP SHOULD ASSESS THE IMPACT OF PROVIDING AGRICULTURAL CREDIT ASSISTANCE THROUGH A SPECIALLY CREATED SMALL FARMER SUPPORT FUND ON THE INSTITUTIONAL DEVELOPMENT OF CNCA AND ON POLICY REFORMS BEING SUPPORTED BY THE WORLD BANK.

D. ISSUE: INTEREST RATES CHARGED ON LOANS TO SMALL FARMERS AND ON FUNDS TO CNCA.

BACKGROUND: AS NOTED DURING THE APS REVIEW, THE AGENCY POLICY STRONGLY EMPHASIZES THE PROVISION OF CREDIT AT COMMERCIAL RATES OF INTEREST, AND IT WAS POINTED OUT THAT OTHER LOAN TERMS (E.G., GRACE, REPAYMENT PERIOD, ETC.) COULD BE ADJUSTED TO MEET SPECIAL NEEDS.

DISCUSSION ALSO DEALT WITH WHETHER THE MODALITY OF THE AID LOAN FUNDS TO MOROCCO WOULD INFLUENCE THE INTEREST RATES, I.E. WHETHER THE LOAN SHOULD BE A ONE STEP LOAN TO CNCA OR A TWO STEP LOAN VIA THE BANK OF MOROCCO.

RECOMMENDATION: NEGOTIATIONS WITH THE GOM SHOULD ENSURE THAT THE DIFFERENCE BETWEEN INTEREST RATES CHARGED ON REGULAR CNCA LENDING TO SMALL FARMER CLIENTS AND THE RATES TO BE CHARGED ON THE SPECIAL DROUGHT FUND LENDING IS MINIMIZED AND IF NECESSARY TO USE GRACE PERIOD TYPE MECHANISMS TO PROVIDE THE TEMPORARY RELIEF REQUIRED. THE NEAC ALSO RECOMMENDED THE TWO-STEP LOAN AGREEMENT WITH THE AID DOLLAR LOAN TO COM. THE TERMS OF THE DOLLAR LOAN ARE BASED ON GOM'S ECONOMIC SITUATION AND BUREAU IS RECOMMENDING AGENCY STANDARD 42 YL TERMS. (NOTE HOWEVER AGENCY DECISION ON THIS ISSUE NOT YET MADE. SEE PARA NO. FIVE BELOW). TERMS FOR SECOND STEP SHOULD BE GOVERNED BY MARKET CONDITIONS. AS NOTED AGENCY POLICY DOES NOT PERMIT SUBSIDIZED INTEREST RATES EXCEPT IN SPECIAL SITUATIONS. PP WILL HAVE TO MAKE CASE FOR THE DEGREE AND DURATION OF ANY EXCEPTION. BUREAU STRONGLY PREFERS USE OF GRACE PERIOD RATHER THAN INTEREST RATE TO AFFECT SUBSIDY AS IT HAS MORE DIRECT CORRELATION BETWEEN TERMS OF CREDIT AND FARMER SITUATION AND VOIDS LONG-TERM INTEREST DIFFERENTIAL.

E. ISSUE: INSTITUTIONAL DEVELOPMENT

BACKGROUND: THE PID INDICATES OVER 2 MILLION GRANT FUNDS

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WILL BE USED FOR INSTITUTIONAL DEVELOPMENT AND POLICY DIALOGUE. HOWEVER, IT IS UNCLEAR WHAT THE MAGNITUDE OF THE INSTITUTIONAL DEVELOPMENT PROBLEM MAY BE FOR HOW THE PROJECT WILL ADDRESS OTHER RELEVANT ACTIVITIES IN INSTITUTIONAL DEVELOPMENT (BESIDES T.A., TRAINING, WORKSHOPS, AND MECHANISMS FOR POLICY DIALOGUE), FOR EXAMPLE, NEW SUPERVISED CREDIT, LAND CONSOLIDATION, INHERITANCE REFORM AND MEANS TO STIMULATE PRODUCTION. NEAC BELIEVES PROJECT SHOULD BE SUBSTANTIALLY MORE THAN A ONE TIME CREDIT DROP, HENCE INSTITUTIONAL DEVELOPMENT ASPECTS HAVE PARTICULAR IMPORTANCE. PROJECT HAS POTENTIAL LINKAGES TO (1) EXTENSION PROCESS THROUGH SUPERVISED AGRICULTURAL CREDIT, (2) INPUT/OUTPUT PRICES THROUGH FINANCING OF AGR. IMPORTS AND (3) PRIVATE SECTOR THROUGH EXPANSION INTO AGRO-INDUSTRY LENDING. PID WAS NOT WELL DEVELOPED IN THESE AREAS AND SENSE OF DISCUSSION WAS THAT SUBSTANTIALLY MORE WORK WOULD BE NEEDED. AT A MINIMUM PP NEEDS TO SPELL OUT BROADER MISSION GOALS IN THESE AREAS, DEGREE TO WHICH THIS PROJECT WILL CONTRIBUTE TO THE GOALS AND HOW IT IS TO BE ACCOMPLISHED.

RECOMMENDATION: THE DESIGN TEAM SHOULD DETERMINE THE OPTIMUM MEANS TO FURTHER DEVELOP THE EFFECTIVENESS OF

CNCA AS AN INSTITUTION, DETAIL THE USE OF GRANT FUNDS, IN RELATIONSHIP TO OVERALL SECTOR OBJECTIVES.

F. ISSUE: SOCIAL ANALYSIS

BACKGROUND: THE PID IS WEAK IN ITS PLANS FOR SOCIAL ANALYSIS. ARE FARMERS RECEPTIVE TO DEBT RESCHEDULING AND/OR NEW PRODUCTION LOANS? WHO ARE THE TARGET BENEFICIARIES AND WHAT LEVEL OF BENEFITS ARE ANTICIPATED? WHAT IMPACT WILL THE ELIGIBILITY CRITERIA PROPOSED ON PAGE 5, PARA 3 HAVE ON SMALL FARMERS?

RECOMMENDATION: THE PP DESIGN TEAM SHOULD UNDERTAKE A SOCIAL ANALYSIS WHICH REFLECTS THE SMALL FARMERS) SITUATION, AND PROBABLE RESPONSES TO THE PROPOSED DEBT

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RESCHEDULED. THE ANALYSIS SHOULD ESPECIALLY SEEK TO OBTAIN ACTUAL RESPONSES FROM REPRESENTATIVE FARMERS AS TO THE DESIRABILITY OF LINKING REFINANCING WITH NEW PRODUCTION LOANS.

G. ISSUE: EVALUATION

BACKGROUND: THE PID HAS A SECTION ON EVALUATION BUT IT TENDS TO FOCUS MORE ON PROJECT MONITORING THAN ON EVALUATION. SINCE THIS PROJECT WILL BE JUSTIFIED PRIMARILY ON ECONOMIC GROUNDS, WHAT PLANS ARE THERE TO ENSURE SUFFICIENT BASELINE DATA WILL BE AVAILABLE TO ASSESS THE ECONOMIC IMPACT OF THE PROJECT?

RECOMMENDATION: THE PP DESIGN TEAM DEVELOP A COMPREHENSIVE EVALUATION PLAN INCLUDING PLANS FOR COLLECTING BASELINE AND ECONOMIC PROGRESS DATA, WITH FUNDS earmarked FOR THIS PURPOSE. IN VIEW OF THE NEWLY ISSUED NEAR EAST BUREAU EVALUATION GUIDELINES SHOULD ALSO DISCUSS GOM INTEREST IN THE CAPACITY AND PARTICIPATE IN PROJECT EVALUATION AS IS DETERMINED THIS CAPACITY NEEDS STRENGTHENING, EVALUATION PLAN SHOULD DISCUSS MISSION PLANS TO DEVELOP THIS CAPACITY EITHER THROUGH THE PROJECT OR THROUGH LINKAGES TO OTHER ACTIVITIES.

3. THE NEAC DISCUSSED USAID REQUEST THAT DUE TO THE TIGHT TIMETABLE USAID BE REDELEGATED THE AUTHORITY TO REVIEW AND APPROVE THE PROJECT PAPER. ISSUES RAISED PARA 1.D AND E RAISE SUBSTANTIVE POLICY AND STRATEGY CONCERNS. WE ARE PREPARED TO REACH AGREEMENT ON THESE ISSUES BY CABLE WHICH WOULD PERMIT DELEGATION OF APPROVAL AUTHORITY TO MISSION, HOWEVER OUR EXPERIENCE WITH THIS KIND OF PROCESS IS THAT SOMETIMES CARRYING ON A CABLE DIALOGUE CAN BE MORE TIME-

CONSUMING AND A GREATER BURDEN ON THE MISSION THAN WOULD BE THE PROCESS IF THE MISSION WENT AHEAD WITH PREPARING THE PP AND ITS POSITION ON THESE ISSUES AND PRESENTED THEM (POSSIBLY BY A MISSION REPRESENTATIVE) TO THE NEAC AS A FULL PACKAGE. WE AWAIT YOUR RECOMMENDATIONS AS TO WHICH WAY YOU WOULD LIKE TO PROCEED.

4. OTHER CONCERNS WHICH NEED ATTENTION INCLUDE:

A. FINANCIAL AND OTHER PLANS NECESSARY TO CARRY OUT THE PROJECT AND A REASONABLE FIRM COST ESTIMATE MUST BE COMPLETED IN ACCORDANCE WITH SECTION 611(A) OF THE FOREIGN ASSISTANCE ACT PRIOR TO OBLIGATION FUNDS FOR THE PROJECT.

B. THE NEAC UNDERSTANDS FROM MALCOLM PURVIS THAT PROJECT FUNDS WILL NOT BE USED, AS IMPLIED ON PID PAGE 19 PARA TWO, FOR DIRECT HIRE USAID CREDIT AND AGRIBUSINESS STAFF.

C. THERE IS A POTENTIAL AUGMENTATION PROBLEM CONCERNING THE LOAN TO THE GOM AND HENCE TO CNCA I.E. LOAN DISBURSEMENTS SHOULD NOT BE AHEAD OF NEEDS. IF CNCA HAS

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MAKE DISBURSEMENT FROM THE SMALL FARM DEVELOPMENT FUND PRIOR TO OBLIGATION CNCA SHOULD BE PREPARED TO DOCUMENT THESE DISBURSEMENTS. NEAC SUGGESTED THAT USAID MAY WISH TO CONSIDER USE OF PL 480 TITLE I FUNDS TO PROVIDE BRIDGING SINCE APPORTIONMENT MAY DELAY OBLIGATION IN FY 85.

5. IN REGARD TO THE ESF LOAN REQUIREMENTS AND REPAYMENT SCHEDULE, THE BUREAU IS PROPOSING TO USE THE MOST CONCESSIONAL TERMS AVAILABLE. PPC IS DISCUSSING THE BUREAU'S REQUEST WITH OMB AND STATE. SEPTEL WILL ADVISE THE MISSION OF RESULTS OF THE DISCUSSIONS. SHULTZ

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ANNEX 7: STATUTORY CHECKLIST

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

No

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?

2. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government?

No

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3. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No
4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Libya, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver? No
5. ISDCA of 1981 Secs. 724, 727 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727 and 730 of the ISDCA of 1981. N.A
6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No
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7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? No
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? (a) No
- (b) If so, has any deduction required by the Fishermen's Protective Act been made? (b) No
9. FAA Sec. 620(c); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill appropriates funds? (a) No
- (b) No
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into Yes, taken into account by the Administrator at time of approval of Agency OYB.

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Consideration memo:
 "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

- 11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No

- 12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) Morocco is up to date on payment of its UN obligations

- 13. FAA Sec. 620A; FY 1982 Appropriation Act Sec. 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or No

abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime?

14. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No

15. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) No

16. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Session of the General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed Morocco was represented and Morocco did disassociate itself from the communique.

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to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

17. ISDCA of 1981 Sec. 721. See special requirements for assistance to Haiti. N.A.

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria.

a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? No

2. Economic Support Fund Country Criteria

a. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest? No

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b. ISDCA of 1981, Sec. 725(b). If ESF is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.?

N.A.

c. ISDCA of 1981, Sec. 726(b). If ESF assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile has made significant progress in human rights; (2) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier?

N.A.

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5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESP.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

(a) Congressional Notification

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project;

(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

(b) Yes

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,00, will there be

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- (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? (a) Yes
(b) Yes
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? None required
4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.) N.A.
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? N.A.
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6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
- Yes: Project is, in effect, part of a multilateral effort to assist GOM to help farmers recover from 4 years of drought.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
- (a) N.A.
(b) Yes
(c) Yes
(d) Yes
(e) Yes
(f) N.A.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- N.A.

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9. FAA Sec. 612(b), 636(h);
FY 1982 Appropriation
Act Sec. 507. Describe
steps taken to assure
that, to the maximum
extent possible, the
country is contributing
local currencies to meet
the cost of contractual
and other services, and
foreign currencies owned
by the U.S. are utilized
in lieu of dollars.
- GOM will contribute
lending capital to
project beneficiaries
and make in-kind
contribution toward
institution-building
activities.
10. FAA Sec. 612(d). Does
the U.S. own excess
foreign currency of the
country and, if so, what
arrangements have been
made for its release?
- U.S. does not own
excess foreign
currency of Morocco.
11. FAA Sec. 601(e). Will
the project utilize
competitive selection
procedures for the
awarding of contracts,
except where applicable
procurement rules allow
otherwise?
- Yes
12. FY 1982 Appropriation Act
Sec. 521. If assistance
is for the production of
any commodity for export,
is the commodity likely
to be in surplus on world
markets at the time the
resulting productive
capacity becomes
operative, and is such
assistance likely to
cause substantial injury
to U.S. producers of the
same, similar or
competing commodity?
- N.A.
13. FAA 118(c) and (d).
Does the project comply
with the environmental
procedures set forth in
AID Regulation 16? Does
- Yes

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the project or program take into consideration the problem of the destruction of tropical forests?

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N.A.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and

N.A. - ESF Project

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otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

N.A. - ESF Project

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

N.A. - ESF Project

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

N.A. - ESF Project

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e. FAA Sec. 110(b).

N.A. - ESF Project

Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character.

f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

N.A. - ESF Project

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage

N.A. - ESF Project

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institutional development;
and supports civil
education and training in
skills required for
effective participation in
governmental processes
essential to self-government.

2. Development Assistance Project
Criteria (Loans Only)

- a. FAA Sec. 122(b). N.A.
Information and conclusion
on capacity of the country
to repay the loan, at a
reasonable rate of interest.

- b. FAA Sec. 620(d). If N.A.
assistance is for any
productive enterprise which
will compete with U.S.
enterprises, is there an
agreement by the recipient
country to prevent export
to the U.S. of more than
20% of the enterprise's
annual production during
the life of the loan?

- c. ISDCA of 1981, Sec. 724 N.A.
(c) and (d). If for
Nicaragua, does the loan
agreement require that the
funds be used to the
maximum extent possible for
the private sector? Does
the project provide for
monitoring under FAA Sec.
624(e)?

3. Economic Support Fund
Project Criteria

- a. FAA Sec. 531(a). Will Yes
this assistance promote
economic or political

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stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? No
- c. FAA Sec. 534. Will ESP funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? No
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N.A.

Annex 8, Part II. English Translation of B/G Request for Assistance

To: Mr. Harry Petrequin, Acting Director, Agency for International Development

From: Mr. Abdellatif Jouahri, Minister of Finance

Subject: Small Farm Credit Project

Reference: Your letter dated October 31, 1984

During the meetings held recently between representatives of your office, the Ministry of Finance, and the Caisse Nationale de Crédit Agricole (CNCA), your representatives indicated that, upon receiving an official request, USAID would be disposed to provide the Kingdom of Morocco with a Loan of \$13.5 million and to the CNCA a Grant of \$1.5 million. These funds would be intended, respectively, to cover the rescheduling of the debt payable to Caisses Regionales de Credit Agricole (CRCA) by those farmers stricken by the drought and to implement a development program for the CNCA. The Loan will be granted for a period of 25 years with a 5 year grace period and an interest rate of 3 percent during the grace period and 4 percent thereafter.

We wish to thank you for your willingness to assist Morocco in mitigating the effects of the drought and in contributing to a program to develop the CNCA. I have the honor to submit, by this letter, a request in the name of the Kingdom of Morocco for a loan of \$13.5 million and a Grant of \$1.5 million to the CNCA, which will be used for the activities discussed by our respective offices.

I request, however, that you use your influence to soften the conditions of your loan, due to the limited resources of the farmers the project will serve. I sincerely hope that the AID Loan could be granted to the Moroccan Government for a period of 40 years, with 10 years of grace, and interest rates of 2 percent during the grace period and 3 percent thereafter.

Sincerely,

Abdellatif Jouahri
Minister of Finance

15/11/84

ANNEX 9: B/G RQUEST FOR ASSISTANCE

DIRECTION DU TRASCOR

INFO COPY

3/3665

LE MINISTRE DES FINANCES

à

MONSIEUR HARRY J. PETREQUIN
DIRECTEUR a. i.

ACTION: AGR. DUE: 11/23.
INFO: DIR, D/DIR, PROG, CHRON, RF.

AGENCY FOR INTERNATIONAL DEVELOPMENT
137, Avenue Allal Ben Abdellah

B.P. 120

-R A B A T-

OBJET: Projet - Opération en faveur des petits agriculteurs.

REFER: Votre lettre du 31 octobre 1984.

Au cours des réunions qui ont été tenues dernièrement entre les représentants de votre organisme, du Ministère des Finances et de la Caisse Nationale de Crédit Agricole (CNCA) vos représentants ont signalé que l'USAID serait disposée si une requête officielle lui est présentée à accorder au Royaume du Maroc un prêt de 13,5 Millions de dollars et à la CNCA un don de 1,5 Million de dollars destinés respectivement à couvrir les rééchelonnements des exigibles des petits agriculteurs relevant des Caisses Régionales de Crédit Agricole (CRCA) sinistrés par la sécheresse et à réaliser un programme de développement de la CNCA. Le prêt envisagé serait accordé pour une durée de 25 ans dont 5 ans de différé d'amortissement aux taux d'intérêt de 3 % pendant la période de grâce et de 4 % durant les années suivantes.

En vous remerciant vivement de votre disposition à aider le Maroc pour atténuer les effets de la sécheresse et contribuer à un programme de développement de la Caisse Nationale de Crédit Agricole, j'ai l'honneur d'introduire par la présente une requête au nom du Royaume du Maroc pour obtenir le prêt de 13,5 Millions de dollars et à la CNCA un don de 1,5 Million de dollars qui seront affectés aux opérations discutées par nos services respectifs.

Je vous demande toutefois d'user de votre influence pour assouplir davantage les conditions de votre prêt en raison de la situation modeste des agriculteurs concernés par le projet. Je souhaite vivement que le prêt de l'AID soit accordé à l'Etat marocain sur une période de 40 ans dont 10 ans de différé d'amortissement, aux taux d'intérêt de 2 % pendant la période de différé d'amortissement et de 3 % durant les années suivantes.

Veillez agréer, Monsieur le Directeur, l'expression de ma parfaite considération.

Ministère des Finances
Direction du Trésor
Signé: Abdelatif JOUHRI