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INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION
OF THE
PRESIDENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED CREDIT
TO
THE REPUBLIC OF MALI
FOR A
RICE PROJECT

December 9, 1971

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A PROPOSED CREDIT
TO THE REPUBLIC OF MALI
FOR A RICE PROJECT

1. I submit the following report and recommendation on a proposed credit to the Republic of Mali for the equivalent of US\$6.9 million on standard IDA terms to help finance a project for Rice Development.

PART I - INTRODUCTION

2. The Association has previously made two credits to Mali, both for transport. A summary statement regarding these credits to Mali is given in Annex 1.

3. The \$9.1 million credit of 1966 (95-MLI) was for railway rehabilitation. The original project is now completed. However, the Association has agreed that savings of \$530,000 under the credit be used for an extension of the project by track renewal on an additional 26 km. The closing date, originally June 30, 1970, was first postponed to December 31, 1971 and, in view of the extension of the project, has now been postponed to December 31, 1972. Performance under the Credit has not been fully satisfactory. In particular, the Railway's financial situation has remained precarious. Most of the forwarding business on the Railway is handled by two private agencies who often are not paid regularly by their clients (predominantly public enterprises) with resulting defaults on the agencies' payments to the Railway. Furthermore, the Government has not reimbursed the Railway for past deficits and has not provided funds to ensure repayment on debts to the Senegal Railway as originally agreed. However, action is now being taken to settle debts and improve the financial situation. The \$7.7 million credit of 1970 (197-MLI) for a Highway Maintenance project is being implemented in cooperation, for the first time, with the International Labor Organization (ILO). Execution of this project is proceeding satisfactorily, except for a two-month delay in the highway preinvestment studies. A number of measures have now been taken to strengthen the consultant team so as to overcome the present difficulties.

4. The proposed credit, which would be the first Bank Group assistance for agriculture in Mali, is also the first of two operations due to be presented to the Executive Directors during this fiscal year. The second project would be a small telecommunications project. Project preparation is underway in various fields. In particular, projects for livestock, railways and highway rehabilitation may be ready for consideration in FY1973.

PART II - THE ECONOMY

5. A report on "The Current Economic Situation and Prospects of Mali" (AW-30a) was distributed to the Executive Directors on December 6, 1971 (R71-265). A Country Data Sheet is attached in Annex 2.

6. Mali is a large land-locked country, extending from the center of the Sahara in the north into the savannah-type open forest regions along its southern border. Nearly 40 percent of its total area is desert; another 40 percent is usable for extensive livestock production leaving only 20 percent suitable for rainfed agriculture and for irrigated agriculture along the Niger River. With a per capita GDP of only about \$55, Mali is one of the poorest countries in Africa. It has no known mineral resources that are economically exploitable, while development of manufacturing industries is limited by the small local market, absence of raw materials and the unfavorable geographic location. Thus agriculture and livestock, accounting for 90 percent of total employment and 50 percent of GDP, is Mali's main source of economic growth and foreign exchange earnings.

7. Following independence in 1960, Mali embarked on an ambitious program to modernize and develop its economy along socialist lines. A considerable number of state enterprises, mostly in manufacturing, trade, and transport were established, while at the same time the activities of private merchants were severely limited and comprehensive price controls introduced. Despite heavy investments, production showed little response as price incentives were inadequate. Excessive central bank financing covering large public sector deficits combined with poor rural production to create large balance of payments deficits. In face of these problems the Government devalued the Mali franc by 50 percent in March 1968. At the same time Mali rejoined the French monetary zone, under which France guarantees the convertibility of the Mali franc and covers most of the current budget deficits as well as providing considerable capital assistance.

8. After the November 1968 military take-over, several measures were taken to redress the economic situation: key farm prices were increased and private trade was liberalized. Moreover, a new investment code was adopted to attract foreign capital and a comprehensive review of state enterprises was initiated to improve their financial situation and reduce their technical and managerial difficulties. These measures were fully endorsed by the 1969 Bank mission which also identified the need for further liberalization of prices and marketing, reduction of the balance of payments deficit, balancing of the current budget, rescheduling of external debt, and more thorough measures to improve the efficiency of state enterprises.

9. Over the last three years, the Government has made considerable progress towards reducing the balance of payments deficit from 6-7 percent of GDP in 1968 and 1969 to little over 1 percent in 1970. This was achieved partially through an increase in exports stimulated by more attractive producer prices for groundnuts and cotton and by increased availability of imported goods as

a result of trade liberalization. Even more important, however, was the substantial improvement in private capital flows as a result of rising confidence in the stability of the Malian economy and the more liberal orientation of government policies, which prompted a sizeable repatriation of capital. For the first time in many years, the balance of payments for 1970 registered a substantial net inflow of private capital and transfers exceeding 4 percent of GDP. This trend can be expected to continue, albeit at a somewhat lower level.

10. Conversely, the public finance situation has improved only little over the last three years. Continuous rapid expansion of the civil service has resulted in a sharp increase in the government wage bill, far above the growth of budget revenues and of the economy. As a result, the current budget still shows a sizeable deficit. Although revenues have increased somewhat faster than current expenditures in 1970, it is unlikely that the current budget can be balanced within the next few years, thus leaving the Government dependent, in diminishing amounts, on French budget subsidies.

11. The difficult financial situation of most state enterprises adds to the serious drain on public resources. Partly as a result of unsatisfactory management but primarily because of Government's pricing policies, these enterprises are operating at a substantial deficit, which has to be covered by treasury advances and short term borrowing from the Central Bank. The Government's recent decision to allow these companies to increase retail prices of several basic consumption goods is an improvement, but might not be sufficient to achieve satisfactory financial returns.

12. The virtual absence of public savings, together with limited absorptive capacity, are the key constraints in implementing the 1970-72 Rehabilitation Program. Contrary to past investment patterns, the Rehabilitation Program gives high priority to the rural sector in order to reduce the food deficit and increase exports. In addition to cotton and groundnuts, major emphasis is put on rice cultivation along the Niger River.

13. Among the three crops (cotton, groundnuts and rice) which receive highest priority in the Rehabilitation Program (accounting together for over 80 percent of planned rural investments), the rice program is the most important. As in many other West African countries, rice consumption has sharply expanded during the last decade, while local production has hardly increased. The country has therefore gradually changed from an important exporter to a net importer of rice (10 percent of total consumption) in spite of its good potential for irrigated rice production. These imports have become an increasing burden on the balance of payments amounting to up to \$3 million per year. In an attempt to reverse this unsatisfactory trend, the Government is making a special effort to develop rice production, and to this end, has successfully solicited assistance from its major aid donors. The rice program focuses on two operations: the IDA project around Mopti (in which the French aid agency, FAC, is participating) and another project in the Segou area to be financed by the European Communities (FED).

14. The Rehabilitation Program concentrates on quick-yielding and directly productive investments in the rural sector, combined with efforts to improve the efficiency and financial position of the state enterprises. In the longer term, however, a more sizeable and broader investment program, including expansion of education and other infrastructure, will be necessary to achieve continuous satisfactory economic growth. Higher public savings are crucial to the implementation of such a plan. This hinges on a substantial reduction in the growth of the government wage bill--which must fall well below the increase in current revenues. Furthermore, the Government will have to abandon its policy of having public enterprises sell import products at subsidized prices to the urban population. This change in prices might well create some difficult problems with civil servants and trade unions. It can only be achieved gradually and might have to be accompanied by an increase in basic salaries.

15. Little progress has been made in rescheduling Mali's high foreign debt, two-thirds of which is held by the U.S.S.R. and the People's Republic of China. Service payments amount to some 20 percent of government revenues and 13 percent of export earnings but are projected to reach 50 percent of both budgetary revenues and exports by 1976 unless substantial rescheduling is obtained. However, while there have been no formal agreements on this subject, Mali is already receiving and is likely to continue to receive a de facto moratorium for the bulk of its foreign debt, since the U.S.S.R. and China seem willing not to insist on timely servicing of their credits in case of serious financial difficulties. In consequence, the real debt burden might well turn out to be much lower than the above projections suggest, which would considerably ease the balance of payments and budget problems.

16. While implementation of the Rehabilitation Program should stimulate economic growth and improve both public finances and the balance of trade, Mali's financial position will remain basically weak for some years. Economic growth over the next decade will continue to be modest, with GDP growing at best by 4-5 percent p.a. or some 3 percent per capita. Meanwhile, the capacity for raising public savings will remain limited even assuming a concerted and successful effort by the Government to limit the growth in its wage bill and abolish consumer subsidies by public enterprises. Thus, public investments will in the future have to be financed largely by external assistance. Furthermore, considering the present weak situation of the budget, as well as of the balance of payments, this assistance should to the maximum extent possible be on concessionary terms and cover a high proportion of total project costs, including local expenditures.

PART III - THE PROJECT

17. The Project would improve conditions for rice irrigation in the Mopti area of the Niger River flood plains. Through rehabilitation and construction of polders, paddy acreage in the project area would increase from about 22,000 ha. to about 31,000 ha., while yields would increase from

0.88 ton/ha. to an estimated 1.86 tons/ha. The increment in production, as a result of the project, would be equivalent to a 30 percent increase in the country's present rice production. About 7,300 farm families would each cultivate an average plot of 4 ha. and would continue to grow subsistence crops outside the project area. The Project would be implemented over a 6-year period under the overall responsibility of the Ministry of Production, assisted by consultants. French bilateral aid (FAC) would finance all foreign personnel cost. The Government will have FED assistance for a parallel project in the Segou area with which the proposed project would be coordinated.

18. The Project would comprise:

- (a) construction of three polders, including land preparation, with a rice cultivated area of 13,300 ha.;
- (b) rehabilitation of five polders, including land preparation, with a rice cultivated area of 13,200 ha.;
- (c) land preparation on 2,000 ha. of an existing polder;
- (d) construction of buildings for the project;
- (e) establishment of a project authority, Operation Riz Mopti (ORM), including provision of farm machinery and technical assistance to ORM. The project authority will operate and maintain the polders, allocate land in the new polders, produce and distribute selected seeds, and provide credit and extension services in all areas mentioned above, plus in existing polders with a rice cultivated area of 2,700 ha.;
- (f) establishment and operation of an agricultural research station; and
- (g) preparation of a feasibility study for a second rice project in the Mopti area.

Consultants would be engaged to assist the Rural Engineering Department of the Ministry of Production in the supervision of construction, to advise ORM in its activities, including training of Malian staff during the development period, and to help prepare the feasibility study. They will be replaced by their Malian deputies as soon as feasible. A Credit and Project Summary is given in Annex 3.

19. Works for the new polders include construction of embankments, intake regulators, canals, farm roads and cattle crossings. The same applies for the agricultural research station and the seed multiplication farm. Rehabilitation of existing polders would involve strengthening embankments and raising their heights to acceptable standards. Furthermore, a laterite-surfaced road would

be constructed on top of the embankments of the most frequently used sections, and intake regulators would be improved. Existing canals that have become silted would be cleared and new canals built to improve drainage and filling conditions.

20. Land Preparation (about 10,000 ha.) in polders mentioned above and in the Sarantomo-Sine polder would require deep plowing to destroy existing grass and light bush vegetation. Construction of buildings would include offices, storage buildings and housing for ORM, the seed multiplication farm, the research station and the feasibility studies. In addition, a combined office and storage building would be erected in each of the three new polders and in two existing polders not already supplied with one.

21. Agricultural Research. The present research station and the seed multiplication farm at Ibetemi would be transferred to near the town of Mopti where they would have better access to ORM headquarters and where experiments could be carried out, not only on floating rice, but also on irrigated rice. In addition, their program would be expanded to include research on fertilizer and ox-drawn farm implements, as well as on performance of seed trials on farms scattered throughout the project area.

22. The feasibility study for a second rice project would include a number of technical surveys, detailed engineering of an all-weather road between Ke-Macina and Tenenkou, a health survey of the project area, and an analysis of markets, prices and economic benefits. The Rural Economics Institute under the Ministry of Production would continue to coordinate those studies carried out by specialized firms and would be responsible for the final report.

23. The cost of the Project, including taxes of \$1.0 million, is estimated at about \$9.4 million equivalent, of which \$5.6 million would be in foreign exchange. The proposed IDA credit of \$6.9 million equivalent would finance 73 percent of total cost. It would cover an estimated \$4.5 million foreign exchange cost of civil works contracts, agricultural research, equipment and studies for a second rice project. It would also cover \$2.4 million equivalent of local expenditures on civil works contracts, management and extension services, and the feasibility studies of the second project. FAC would finance an estimated \$0.7 million foreign exchange cost for foreign personnel. The Government's contribution of \$1.8 million equivalent would finance all taxes on construction materials, equipment and services to be paid under the project (\$1.0 million), local procurement of farm implements (\$0.5 million of which \$0.4 million indirect foreign exchange cost), and basic salaries of government employees working under the project (\$0.2 million).

24. Recovery of project costs would be achieved through imposition of a levy in kind on project farmers, which would be set at 60 kg. of paddy per ha. in the first year and increase gradually to 180 kg. of paddy per ha. from the tenth year onward. Revenue from the levy would be sufficient to recover annual operation and maintenance costs and all direct investments, without interest costs, over a period of about 35 years.

25. Overall responsibility for the proposed project would rest with the Ministry of Production whose Rural Engineering Department would be in charge of polder construction and rehabilitation. The extension service of the Ministry of Production would be organized in two units: ORM, which would cover the proposed project, and ORS (Operation Riz Segou), which would cover the FED-financed project. To insure adequate coordination and to provide integrated policy guidance for ORM and ORS, a National Rice Commission would be set up within the Ministry of Production, chaired by the Minister or his representative and comprising the Rural Engineering Department, ORM and ORS.

26. ORM would be established by decree as a semi-autonomous project authority, directly responsible to the Minister of Production. It would be administered by a board of six members, including a representative of the Ministry of Production, the Director of Agriculture, the Director of Rural Engineering and three experts appointed by the Minister. ORM would be managed by a Project Manager appointed by the Minister.

27. Assurances have been obtained by the Government that a special account for ORM's personnel expenditures will be established and that monthly deposits will be made to this account in amounts required to maintain a balance adequate to cover basic salary requirements for three months.

28. All civil works contracts, as well as procurement of machinery and equipment, would be carried out through international competitive bidding.

29. The major benefits of the project would be additional production of rice to help reduce the increase in rice imports. It would result in foreign exchange savings of about \$2.6 million annually. Improved farm techniques and increasing use of equipment would also benefit millet and sorghum production. There would be a reduction of grazing areas during the dry period, caused by draining part of existing lakes and ponds, but this would be largely compensated by the increased production of rice straw. At full development of the project in 1982, farmer's income is expected to reach about \$300 equivalent annually or about 2 1/2 times the present level. The economic rate of return would be 14 percent with project life assumed at 35 years. The economic costs exclude all taxes as well as subsidies on equipment and fertilizers.

PART IV - LEGAL INSTRUMENTS AND AUTHORITY

30. The draft Development Credit Agreement between the Republic of Mali and the Association, the Recommendation of the Committee provided for in Article V, Section 1 (d) of the Articles of Agreement of the Association, and the text of a resolution approving the proposed credit are being distributed to the Executive Directors separately. Conditions for effectiveness of the Agreement would be the establishment of ORM, the establishment of a special account for ORM personnel expenditures and the employment of engineering consultants.

31. I am satisfied that the proposed credit would comply with the Articles of Agreement of the Association.

PART V - RECOMMENDATION

32. I recommend that the Executive Directors approve the proposed credit.

Robert S. McNamara
President

Attachment

Washington, D.C.

December 9, 1971

ANNEX 1

SUMMARY STATEMENT OF BANK LOANS AND IDA
CREDITS TO MALI AS OF OCTOBER 31, 1971

<u>Credit Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>Amount (US\$ million)</u>	
				<u>IDA</u>	<u>Undisbursed</u>
95-MLI	1966	Republic of Mali	Railways	9.1	2.3
197-MLI	1970	Republic of Mali	Highway Maintenance	<u>7.7</u>	<u>6.2</u>
Total				16.8	
Total now held by IDA				<u>16.8</u>	
Total undisbursed					<u>8.5</u>

COUNTRY DATA

Area : 460,000 square miles (1,200,000 km²)

Population : (mid 1971 estimates)

Total	5.3 million
Density	12 per square mile (4 per km ²)
Rate of growth	2.5 % per year

Political Status : Independent since 1960

Gross Domestic Product (market prices):

	<u>1964/5</u>	<u>1965/6</u>	<u>1966/7</u>	<u>1967/8</u>	<u>1969</u>
GDP at current prices (billion MF)	90.4	94.6	104.0	130.5	135.5
GDP at 1967/8 prices (billion MF)	115.5	120.2	124.0	130.5	127.8
Rate of growth	/ <u>2.8% p.a.</u> ^{1/} /				
GDP per capita at current prices (US\$)	^{2/}	^{2/}	^{2/}	48	48

Structure of GDP (1969)

<u>Sources :</u>	%	Uses	%
Rural Sector	43.0	Private consumption	71.9
Manufacturing, power	9.4	Public consumption	16.5
Construction	4.6	Gross domestic investment	17.8
Commerce, transport	28.0	Balance of payments	
Other services	3.2	deficit on goods and	
Public authorities	<u>11.8</u>	services	<u>-6.2</u>
	100.0		100.0

^{1/} Adjusted to exclude the impact of the 1969 drought on rural production.

^{2/} Not comparable with later years because of heavy devaluation in May 1967.

<u>Financing of Domestic Investments</u>			
(in billion MF)	<u>1967/68</u>	<u>1969</u>	
Gross domestic investments	22.7	24.1	
Gross national savings	9.8	15.1	
Net capital inflow	2.7	-0.5	
Decrease in foreign assets	9.6	8.2	
<u>Central and Regional Government Finances</u>			
(in billion MF)	<u>1967/68</u>	<u>1969</u>	<u>1970</u>
Current revenues	18.8	17.1	20.0
Current expenditures	18.6	20.8	20.1
Current balance	-0.2	-3.7	-0.1
Investment expenditures	2.2	1.4	1.6
Overall deficit	-2.0	-5.1	-1.7
Financed from: foreign sources	1.0	5.0	2.8
local sources	1.0	0.1	-1.1
<u>Money and credit</u>			
Relations to monetary areas : Member of the Franc area			
(in billion MF, end of period)	<u>1968</u>	<u>1969</u>	<u>1970</u>
Total money supply	23.1	25.3	27.7
Credits to private sector	5.6	6.4	9.1
Credits to public sector	46.5	54.3	62.7
<u>Balance of payments</u>			
(in billion MF)	<u>1968</u>	<u>1969</u>	<u>1970</u>
Imports ^{1/}	21.7	29.3	26.2
Exports ^{1/}	14.0	22.0	21.7
Trade balance	-7.7	-7.3	-4.5
Net services	-10.4	-10.8	-11.8
Goods and services balance	<u>-18.1</u>	<u>-18.1</u>	<u>-16.3</u>

^{1/} Recorded and estimated unrecorded.

External Trade ^{1/}

Relationship to customs area : Member of the West Africa Customs Union
Associated Member of the European Communities

	<u>1968</u>	<u>1969</u>	<u>1970</u>
Exports (in % of GDP)	10.7	16.2	15.4 ^{2/}
Imports (in % of GDP)	16.6	21.6	18.6

Concentration of exports : (%)

rough estimates

Livestock on the hoof	53 %
Fish (smoked and dried)	15 %
Coton fiber	13 %

International reserves
(as of December 31)

	<u>1968</u>	<u>1969</u>	<u>1970</u>
Gross foreign assets : US\$ million	10.5	11.0	9.0 ^{2/}
Net foreign assets : US \$ million	2.9	2.5	2.3
month's imports	-46.6	-53.1	-55.1

IMF Position (US \$ million)

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u> ^{3/}
Quota	17.0	17.0	22.0	22.0
Drawings outstanding	12.0	10.4	8.0	6.5
SDR	-	-	-	1.3

World Bank Group Operations
(US \$ million)

Up to September 30, 1971

Bank	<u>Commitments</u>	<u>Disbursements</u>
IDA	16.8	8.3

External Public Debt (US \$ million)

	<u>1970</u>
Total debt as of December 31	
including undisbursed	288.2
excluding undisbursed	236.6
Total debt service : due	4.0
paid	0.0

Debt service relative to foreign

exchange earnings : due	13.4 %
paid	0.1 %

Exchange rate :

Prior to May 1967:	MF 246.8 = US\$ 1.00
May 1967 to August 1969 :	MF 493.7 = US\$ 1.00
After August 1969 :	MF 555.4 = US\$ 1.00

^{1/} Recorded and estimated unrecorded.

^{2/} Estimated.

^{3/} End of September.

MALI

Credit and Project Summary

Rice Development Project

Borrower: The Republic of Mali

Amount and Terms of Credit: US\$6.9 million equivalent repayable through semi-annual installments of 1/2 of 1 percent from June 1, 1982 through December 1, 1991 and of 1-1/2 percent from June 1, 1992 through December 1, 2021; service charge 3/4 of 1 percent per annum.

Project: Construction and rehabilitation of polders covering an area of 31,000 ha., including extension services and agricultural credits; construction of buildings for the project; establishment of a project authority, Opération Riz Mopti; establishment and operation of an agricultural research station; preparation of a feasibility study for a second rice project in the Mopti area.

Estimated Cost:

	<u>Total</u>	<u>Foreign Exchange</u>	<u>Local</u>
		(US\$ thousands)	
Civil Works	3,860	2,140	1,720
Engineering Supervision	220	150	70
Agricultural Research	440	210	230
Farm Machinery	930	790	140
Management Extension Services	1,730	930	800
Second-stage Studies	660	400	260
Contingencies	<u>1,580</u>	<u>1,010</u>	<u>570</u>
Total	9,420	5,630	3,790

Financing of Project:

IDA Credit	6,900
FAC	700
Government	<u>1,820</u>
Total	<u>9,420</u>

Procurement Arrangements: All civil works contracts as well as the procurement of farm machinery and equipment to be financed by IDA would be carried out through international competitive bidding. Fertilizers and ox-drawn farm implements to be sold to participating farmers for cash or credit would be purchased annually on the basis of applications received from ORM.

Construction Period: 1972-76.

Disbursements: The Credit would be disbursed against the CIF cost of equipment and implements and 78 percent of the combined cost of civil works, second-stage studies, salaries and operating costs of ORM, and the agricultural research station. The timing of disbursements (FY) is estimated as follows:

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Total</u>
Amount (\$ million)	1.2	2.5	2.2	0.7	0.15	0.15	<u>6.9</u>

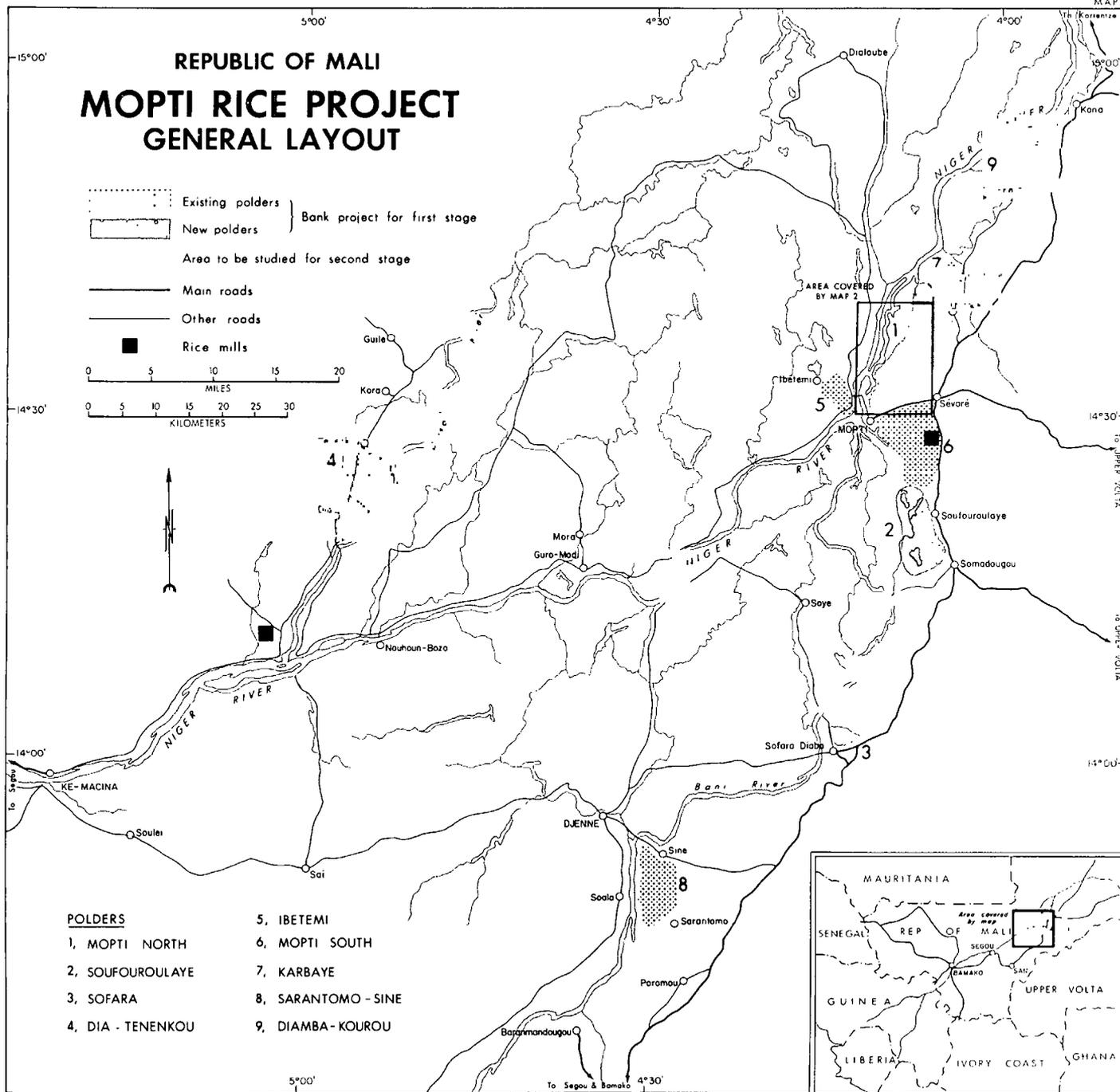
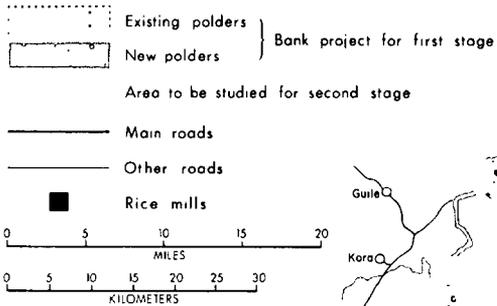
Consultants: The Borrower would be assisted in the handling of polder construction activities by a management consultants firm, which would furnish the services of five experts to ORM.

Appraisal Report: Report entitled "Appraisal of the Mopti Rice Project, Mali (PA-107a)" dated November 9, 1971.

REPUBLIC OF MALI

MOPTI RICE PROJECT

GENERAL LAYOUT



- POLDERS**
- | | |
|-------------------|---------------------|
| 1, MOPTI NORTH | 5, IBETEMI |
| 2, SOUFOUROULAYE | 6, MOPTI SOUTH |
| 3, SOFARA | 7, KARBAYE |
| 4, DIA - TENENKOU | 8, SARANTOMO - SINE |
| | 9, DIAMBA - KOUROU |

