COUNTRY : **Republic of Niger**

APPRAISAL REPORT

June 2011

	Team Leader	M. TARHOUNI, Chief Irrigation Engineer, OSAN.2
Appraisal Team	Team Members	Messrs.M. OULD TOLBA, Chief Agro-economist, OSAN.3 A. E. NNA, Financial Managment Expert, SNFO/ORPF.2 S. OUEDRAOGO, Procurement Assistant, BFFO/ORPF.1

TABLE OF CONTENTS

Page

Project Information Sheet

Customer Data

BORROWER

Republic of Niger

:

irrigation and pastoral development needs of these regions. The lessons learnt from completed operations also influenced the design of PMERSA-MTZ, by highlighting the following principles: implementation of simple technical solutions to basic problems; systematic adoption of a participatory approach and development of partnerships; close involvement and empowerment of all stakeholders; and indispensable assistance to farmers.

3. Bank's Value-added

By focusing on the first pillar of its assistance strategy in Niger, namely rural development through water resource mobilization, and as the entity supervising project implementation on behalf of GAFSP, the Bank will pursue and step up its support to Niger in a domain in which the ADF has demonstrated its competence and expertise for over a decade. Operations financed by the Bank in Niger have led to the development of proven expertise in surface water mobilization and raised commun4(s)l Tm[

REPUBLIC OF NIGER Water Mobilisation Project to Enhance Food Security in Maradi, Tahoua and Zinder Regions (PMERSA-MTZ) RESULTS-BASED LOGICAL FRAMEWORK

	NIGER: Water Mobilisation Project to Enhance Food Security in Maradi, Tahoua and Zinder Regions (PMERSA-MTZ) Project Goal: Sustainably raise agricultural output and productivity through mobilization of surface and groundwater								
RESULTS CHAIN		PERF	ORMANCI	E INDICATORS	MEANS OF	RISKS/MITICATIVE			
		Indicator (including ISCs)	Baseline Situation Target		VERIFICATION	MEASURES			
IMPACT	The food security of communities is enhanced	Coverage ratio of food product needs by national production	52% in 2011	62% in 2016	Reports and statistics of MAE and other ministries concerned Reports and statistics from the RDS and SDRP	<i>Risk:</i> political and social instability <i>Mitigative measures</i> : Institutional framework favorable to good governance, democracy and implementation of SDRP/SDR			
	Output and productivity sustainably increased	Agricultural output	Cereals: 200,000 T Vegetables: 83,000 T	2015() g{5(v){C)-4(e)1 g;.03 Tm0 g{)]TJETQ 2M-6(a)]T	J				
EFFECTS		Yields from major crops	Sorghum: 0.5T/ha Sor gh Onion: 19T/ha Tomato: 9T/ha Green pepper: 16T/ha Watermelon: 9T/ha	num					

retention sites and creating an enabling environment for flood-recession agriculture, irrigation, pastoral activities and flood-plain protection. The Bank embarked on this path over a decade ago and in 2006 financed the Maradi Region Water Mobilization Study that was updated in February and March 2011. The PMET and PADAZ projects, completed in 2007 and 2009, yielded very interesting results in Tahoua and Zinder regions with the creation of about twenty diversified water collection structures that helped to increase food security in the new sites and boost the local economy. PMERSA-MTZ will contribute to consolidating PMET and PADAZ achievements, provide a better response to community demands and extend development and food security operations to Maradi region. As concerns

2.2. Technical Solutions Adopted and Alternatives Explored

AlternativeBrief DescriptionReason for RejectionAdoption of irrigation in large
schemes downstream of damsDevelopment of extensive irrigation
schemes downstream of dams.Solution ill-adapted to the limited managerial
capacity of beneficiaries and requiring more
capital.Transfer of Jibiya waters by
canalTransfer of water from Jibiya Dam
(Nigeria) through a 30 km concrete
canal leading to Maradi Plain 0 0 1 25

Table 2.2Alternative Solutions Explored and Reasons for Rejection

Table 2.4Summary of Cost Estimates by Expenditure Category

Table 2.5: Sources of Financing

Sources

UA million

Mandarounfa in Maradi region from where water from Jibiya Dam in Nigeria will be released for water table replenishment and/or direct use for small-scale irrigation. The three project regions cover close to 56% of the country's total population, representing about 8.9 million persons, of which over 213,000 will benefit directly from PMERSA-MTZ and 460,000 indirectly. The population is mostly rural and mainly practises traditional rain-fed farming and stockbreeding activities that can generate substantial additional income for rural households. The poverty situation in the three regions is alarming. In Maradi, close to 80% of the population lives below the poverty line. Women and youth who make up 63% of the population are the poorest and most vulnerable group with inequitable access to various resources (land, education, training, etc.).

2.6 Participatory Approach for Project Identification, Design and Implementation

2.6.1 The communities in Maradi region were actively involved right from the project identification phase through participatory surveys conducted in various sites and the restitution workshops organised for the preparatory study conducted in 2006 and during the preliminary design study (PDS) of February and March 2011. In the Tahoua and Zinder regions,

ERR (baseline scenario): 15.0% - NPV amount: 3.956	CFAF billion
FRR (baseline scenario): 14.3% - NPV amount: 3.051	CFAF billion

3.2. Environmental and Social Impact

3.2.1 Environment: the project is classified under Environmental Category 2. The potential direct and indirect effects that the infrastructure planned under the project could generate are controllable. Major positive effects are expected, such as: job creation, increased agricultural and livestock production, replenishment of the water table, improvement in food security and the living conditions of vulnerable social classes, etc. Potential negative effects include: (i) during the works phase: destruction of the vegetation, risk of accident during infrastructure construction, risk of contracting STD/AIDS, soil degradation and fragility due to movement of machinery; and (ii) during the operational phase: risk of water-borne diseases, risk of conflict between users of water resources, risk of river bank degradation due to poor operation

	-	1	
No.	Activities	Responsibility	Deadline
1	Appraisal	ADF	April 2011
2	Negotiations	Government/ADF	August 2011

Table 4.2Implementation and Supervision Schedule

and local levels. These commissions together with the registration process help to clarify and secure access to landed property, and thus gradually develop private initiative in the agricultural investment sector. As concerns public finance management, studies conducted in 2008 and 2009 show that although some progress was made over the last few years, the public finance management system is still fraught with many shortcomings. To address these

4.5. Risk Management

4.5.1 A number of risks that affect the attainment of project objectives were identified. They relate to: (i) water shortage; (ii) possible implementation delays as well as infrastructure maintenance and management difficulties; and (iii) land conflicts.

4.5.2 **Water shortage:** Insufficient or irregular rainfall could reduce the amount of water and consequently affect output. The planned water management infrastructure will help to mitigate the impact of climate changes and secure production through surface water collection and use. Water inflow into the small dams was evaluated based on a ten-year frequency, which mitigates the risk of non-replenishment of the facilities. In Maradi region, the

Annex II

On-going Bank Group Operations in Niger

(Active portfolio as at 5 June 2011)

Project Title	Division	Status	Approval date	Closing date	Amount (UA)	Disb. rate (%)	Age (yr.)	Project risk
ROAD PROJECTS Tibiri-Dakoro and Madaoua-Bouza-Tahoua	OITC1	OnGo	19/12/2005	30/06/2012	22,000,000	49.60		Non PP/PPP

Annex IV



Map of the project area

This map has been prepared by the African Development Bank Group for the convenience of the readers of the report to which it is attached. The denominations used and the boundaries shown on this map do not imply on the part of the Group and its affiliates, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.