

CLIMATE INFORMATION DEVELOPMENT AND FORECASTING PROJECT (PDIPC) IN NIGER

COUNTRY: **REPUBLIC OF NIGER**

PROJECT APPRAISAL REPORT

March 2012

		Team Leader	L. GARBA, Environmentalist, OSAN.4
	Project Team		L. GBELI, Agricultural Economist, OSAN.4
	3	Team	E. NNA, Financial Management Specialist,
		Members	SNFO/ORPF.2
			E. M. SOUMARE, Procurement Officer,
			SNFO/ORPF.1
Appraisal Team			A. RAMOUL, Operations Assistant, OSAN.4
			Y.LABBENE Meteorology/Climatology Expert
			D. GOUDOU, Climate Change Expert
			T. A. KOUGBLENOU, Agricultural Economist
	Division Manager		K. JOHM, OSAN.4
	Sector Director		A. BEILEH, Ag. Director, OSAN
	Regional Director		K.J. LITSE, ORWA

	Messrs.	M. Traoré,	Lead Natural Re	source Management Specialist,	OSAN.4
		M. M. TARHO	UNI,	Chief Irrigation Engineer,	OSAN.2
	N. Kacem,			Agricultural Economist,	OSAN.2
		A. DORSOUM	ſΑ,	Climate Change Specialist,	ORQR.3
Peer Reviewers		M. KANE,		Rural Infrastructure Engineer,	OSAN.1
Peer Reviewers		J. El FALEH,		Irrigation Engineer,	OSAN.4
	Mrs.	R. BA NAYE,		Gender Specialist,	OSAN.2
	Mrs.	F.R. QUINTAN	NILHA,	Climate Change Specialist,	ONEC.3

TABLE OF CONTENTS

			<u>Page</u>
•	-	cal Year, Weights and Measures, Acronyms and Abbreviations, Project Informationary, Project Matrix, Implementation Schedule	•
I. S	TRATEGI	C THRUST AND RATIONALE	1
1.1	PROJECT	LINKAGES WITH COUNTRY STRATEGY AND OBJECTIVES AND PPCR CRITERIA	1
1.2		ALE FOR BANK'S INVOLVEMENT	
1.3		Coordination	
II. P	ROJECT I	DESCRIPTION	3
2.1	PROJECT	COMPONENTS	3
2.2		AL SOLUTIONS RETAINED AND OTHER ALTERNATIVES EXPLORED	
2.3		TYPE	
2.4		COST AND FINANCING ARRANGEMENTS	
2.5		Area and Beneficiaries	
2.6		PATORY APPROACH FOR PROJECT, IDENTIFICATION, DESIGN AND IMPLEMENTATION	
2.7		ROUP EXPERIENCE AND LESSONS LEARNED REFLECTED IN PROJECT DESIGN	
2.8		FORMANCE INDICATORS	
III. P	KOJECI I	FEASIBILITY	/
3.1	Econon	IIC AND FINANCIAL PERFORMANCE	7
3.2	ENVIROR	IMENTAL AND SOCIAL IMPACTS	8
IV. II	MPLEME	NTATION	9
4.1	IMPLEM	ENTATION ARRANGEMENTS	9
4.2	Monito	PRING	10
4.3	GOVERN	ANCE	11
4.4	Sustain	ABILITY	11
4.5	RISK MA	NAGEMENT	12
4.6	Knowle	DGE BUILDING	12
V. L	EGAL FRA	AMEWORK	12
5.1	LEGAL IN	ISTRUMENT	12
5.2		ons Associated with Bank's Intervention	
5.3		ANCE WITH BANK POLICIES AND PPCR CRITERIA	
VI. R	ECOMM	ENDATIONS	14
APPEN	DIX I:	Niger Comparative Socio-Economic Indicators	1
APPEN	DIX II:	Ongoing Bank Group Operations in Niger	1
APPEN		Major Projects Financed by the Bank and Other Development Partners	1
APPEN		Map of Niger	1
APPEN	DIX V:	SPCR Programme Organization Chart	1
Volum	e 2 (Tech	nical Annexes)	
Annex	A	SECTOR OVERVIEW AND DONOR SUPPORT	1
Annex		BACK-UP OF KEY ARGUMENTS OF THE REPORT	1
Annex	C	OPERATIONAL ANNEXES	1

Currency Equivalents

(February 2012)

UA 1 = US\$ 1.55108 = CFAF 772.193 = £1.55108

US\$ 1 = CFAF 497.8421 €1 = CFAF 655.9574

Fiscal Year

1 January – 31 December

Weights and Measures

1 metric tonne = 2204 pounds 1 kilogramme (kg) = 2.20 pounds 1 metre (m) = 3.28 feet

1 millimetre (mm) = 0.03937 inches 1 kilometre (Km) = 0.62 miles 1 hectare (ha) = 2.471 acres

Acronyms and Abbreviations

ACMAD : African Centre for Meteorological Application Development ADPRS : Accelerated Development and Poverty Reduction Strategy

AGRHYMET: Agro-Hydro-Meteorological Regional Centre

CIF : Climate Investment Funds

CLIMDEV : Climate for Development in Africa

CNEDD : National Environmental Council for Sustainable Development

DMN : National Statistics Directorate

DMN : National Meteorological Directorate

ERR : Economic Rate of Return

EWS-CU : Early Warning System Coordination Unit

INRAN : National Agricultural Research Institute of Niger

IPCC : Intergovernmental Panel on Climate Change

MAG : Ministry of Agriculture

NAMAs : Nationally Appropriate Mitigation Actions

NAPA : National Adaptation Plan of Action to Climate Change

NPV : Net Present Value

PACRC : Community Action Programme for Climate Resilience PADAZ : Zinder Agricultural Development Support Project

PADL : Local Development Support Project

PCU : Project Coordination Unit

PDIPC : Climate Information Development and Forecasting Project

PMET : Tillabery Water Mobilization Project

PP : Procurement Plan

PPCR : Pilot Programme for Climate Resilience

PVDT : Dosso and Tillabéry Water Mobilization Project

RDS : Rural Development Strategy

SME : Small and Medium-sized Enterprise

SN/PACVC : National Strategy/Action Plan on Climate Change and Variability

SPCR : Strategic Programme for Climate Resilience

TWG : Thematic Working Group

UAM : Abdou Moumouni University of Niamey

Project Information Sheet

Client Information

BORROWER /DONEE: Republic of Niger

EXECUTING AGENCY: Ministry of Transport

Financing Plan

Source	Amount (US\$ Million)	Instrument	
PPCR	9.5	Loan	
PPCR	3.5	Grant	
Government	0.8		
TOTAL COST	13.8		

ADB's Key Financing Information

Loan Currency	USD	
Interest Type	Fixed Basic Rate	
Service Charge	0.10%	
Other Fees*	NA	
Tenor	40 years	
Grace Period	10 years	
NPV (baseline scenario)	CFAF 2.615 billion	
ERR (baseline scenario)	24.8%	

Timeframe – Main Milestones (expected)

Concept Note Approval:
Project Approval:
Signature:
Signature:
July, 2012
Effectiveness:
September 2012
Completion:
Last Disbursement:
March 2017
Closing Date:
September 2018

PROJECT SUMMARY

1. Project Overview

Niger has prepared a Strategic Programme for Climate Resilience (SPCR) with assistance from the Bank, World Bank and International Finance Corporation, which was approved by the PPCR Sub-Committee in November 2012. The PDIPC is one of four in the SPCR, and it seeks to strengthen the population's resilience to climate change by mainstreaming climate information in the planning and implementation of development actions. The PDIPC project will cover all 235 district councils in Niger's eight (8) regions. The project's main expected outputs are: (i) development and dissemination of climate scenarios and products to end users, (ii) capacity building for mainstreaming climate products in development actions, (iii) preparation of a vulnerability map of agro-pastoral activities in Niger's district councils, and (iv) scaling up the early warning system (EWS) to make it multi-hazard. The project cost is UA 9.331 million on SPCR and Government financing. It will be implemented over a five-year period from 2013 to 2017. The project activities will directly benefit all of Niger's 15.9 million inhabitants.

2. Needs Assessment

Over the past forty years, Niger has experienced *seven episodes of drought* whose effects on agro-pastoral production, food security and socio-economic life have been dramatic. Without sustained climate change adaptation measures, the rural communities, which depend on rainfed crops, will continue to be fragilized and will have no alternative but to leave the vulnerable areas. The PDIPC project will make a significant contribution in terms of climate forecasting and information through the following activities: (i) capacity building in climate data processing; (ii) detailed analysis of the local impacts of climate change and variability; (iii) preparation of appropriate adaptation measures for all the district councils; and (iv) adaptation of climate information and its dissemination to the key actors according to their needs.

3. Bank's Added Value

In keeping with Pillar 1 of the Bank's Assistance Strategy for Niger and as the project implementation supervision body, the Bank will pursue and step up its support to Niger in an area where it has demonstrated its know-how for several years. This project is consistent with the objectives of the Bank's climate change adaptation and related risk management strategy. Through the ClimDev Programme, the Bank is financing a project to build the modeling capacities of African climate institutions, implemented by ACMAD, and has supported Niger in preparing its Nationally Appropriate Mitigation Actions (NAMAs) Plan to reduce greenhouse gas emissions, finalized in October 2011.

4. Knowledge Building

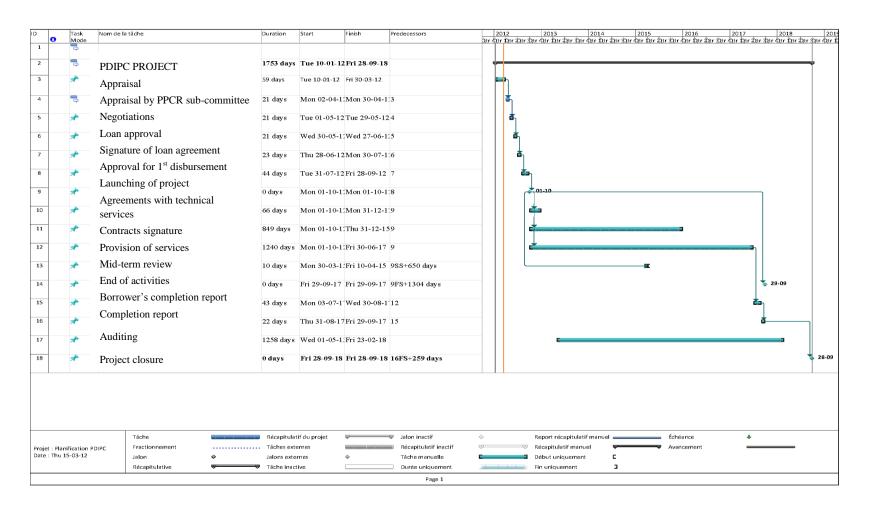
The aim of the PPCR is to manage and demonstrate approaches for mainstreaming climate risk in development action planning. The project beneficiaries will develop knowledge on the use of climate information to improve the management of agro-silvo-pastoral activities. The lessons learned will be disseminated through periodic meetings of the pilot countries, and will be consolidated for replication of the SPCR intervention strategy in the sub-region and elsewhere in the world. The SPCR will help to build knowledge on the close links between development and adaptation to climate change.

RESULTS-BASED LOGICAL FRAMEWORK

Country and Project Name: Climate Information Development and Forecasting Project (PDIPC) Project Goal: Improve population's resilience to climate change through the generation and dissemination of reliable climate information RESULTS CHAIN PERFORMANCE INDICATORS MEANS OF RISKS AND MITIGATION MEASURES VERIFICATION Indicators (including CSI) **Baseline Situation** Target -7.8% in 2017 Food security is Annual variation in cereal 2011 production Annual Harvest Assessment IMPACT strengthened production from the mean against 2006-2010 reports of the Ministry of mean = -10.8%Agriculture Annual asset losses Ensure security against increase in main Asset losses in 2012 EWS Statistics 10% reduction in annual losses climate risks % of district councils using N/A At least 50% of district councils Use of climate Project Monitoringclimate information for their information is **Evaluation Reports** - Lack of synergy among actors for climate CDP change adaptation improved Field Surveys EFFECTS - Lack of receptiveness of the population - Inadequate network maintenance % of producers using climate N/A At least 5% of Niger's producers information in their activities (65,000)**Mitigation Measures** - Promotion of PPRC Programme by A warning is given for Climate risk warnings given by Early warnings on floods, drought, **EWS Reports** appropriate communication - Establishment of an equipment maintenance the main climate risks **EWS** Food insecurity sandstorms and extreme temperatures. strategy 1. Capacity Building 1.1 Number of operational 1.2 15 Synoptic 1.1. Eight (8) Regional Centres Quarterly project activity Risks for the Generation of regional centres stations, 9 secondary 1.2 34 synoptic stations, 39 agro-- Weak DMN capacity reports Climate Data 1.2 Coverage of observation stations, 617 rain meteorological stations, 39 rain loggers and 796 rain gauges. Regional Centres network gauges Bank supervision reports **Mitigation Measures** Information 1.3 Number of new products 1.3 At least 4 new products 1.4 Seasonal and short-term forecasts Scientific publications Dissemination developed 1.2 .Televised - Building DMN's and all actors' capacities. 1.4 Availability of forecasts - Support to DMN by Technical Monitoring information bulletin. updated regularly. OUTPUTS 1.5 Dissemination of seasonal forecasts. 1.5 80 community radios disseminate Committee products in national languages meteorological products agro-hydro-1.6 Number of district councils meteorological 1.6 3000 villages in Niger's 235 and users with access to climate communes and 150 000 producers 1/3 information bulletin information Special Policy of whom are women 1.7 Number of producers Makers' bulletin. 1.7 1500 producers 1/3 of whom are covered by agro-meterological 1.5 Limited radio and women television support broadcasting in French

		T	T		T =	
	2. Support for	2.1. Climate scenarios / risks	.1 Use of global high	2.1. Climate scenarios / risks identified	Quarterly project activity	Risks
	Modeling and	identified on a small scale	resolution models	for the 2020-2049 period in 2014	reports	- Weak DMN capacity
	Vulnerability	2.2. Vulnerability and indicator		2.2. A tool for assessment of		
	Assessment Research	assessment tools developed		vulnerability and relevant indicators	Bank supervision reports	Mitigation Measures
	Climate scenarios	2.3 Vulnerability map of		validated and published in 2016		
	Vulnerability of agro-	Niger's district councils		2.4 Vulnerability map validated and	Scientific publications	- Capacity building for DMN and all actors.
	pastoral activities	prepared	3.1. Food insecurity	published in 2016		- Support for DMN from Technical Monitoring
			warning			Committee
	3. Strengthening the	3.1. Number of climate risks		3.1. Main climate risks (droughts,		
	Early Warning	covered by the EWS		extreme temperatures, flooding,		
	System	3.2. Operationality of the		sandstorms)		
	EWS System	national risk management		3.2 National risk management platform		
S	National platform	platform		and its offshoots are operational in 2015		
UT	Dissemination of	3.3 Operationality of the		3.3 Early warning dissemination		
OUTPUTS	warning	warning information		network covering all the networks in		
[]		dissemination network		2014		
0		3.4 Number of dissemination		3.4 Four annual dissemination		
		campaigns organized in the		campaigns 2014-2017.		
		communes				
				4.1 Project activities implemented over		
	4. Project			the 5 years		
	Management	4.1 Compliance with schedule		4.2 Procurement plan implemented		
	Project Coordination	and budget		without complaints		
	and Monitoring	4.2 Procurement in accordance		4.3 Annual audit reports considered		
	Procurement	with Bank rules		satisfactory		
	Project Audit	4.3 Satisfactory financial		4.5 Project outcomes in keeping with		
	Project Monitoring-	management		SPCR objectives		
	Evaluation	4.5 Synergy with the other				
		SPCR projects				
70			Component 1: US\$ 8.8		Sources of Financing:	
II	1. Strengthening of obs		Component 2 : US\$ 1.2		PPCR Loan: US\$ 9.5 million	
E	2. Support for modeling and vulnerability assessment		Component 3: US\$ 1.5		PPCR Grant : US\$ 3.5 millio	
Z	research		Component 4: US\$ 1.0	68 million	Government = US\$ 0.8 million	on
P(3. Strengthening the early warning system				TOTAL: US\$ 13.8 million	
COMPONENTS	4. Project management					
\mathcal{C}						
,						

PROJECT IMPLEMENTATION SCHEDULE



REPUBLIC OF NIGER: CLIMATE INFORMATION DEVELOPMENT AND FORECASTING PROJECT IN NIGER (PDIPC)

Management submits the following Report and Recommendations on a proposed loan of UA 6.122 from the PPCR to the Republic of Niger and a grant of UA 2.256 million to the Republic of Niger to contribute to the financing of the Climate Information Development and Forecasting Project (PDIPC) in order to strengthen the population's resilience to climate change.

I. STRATEGIC THRUST AND RATIONALE

1.1 Project Linkages with Country Strategy and Objectives and PPCR Criteria

- 1.1.1 The project's general framework is in keeping with the Pilot Programme for Climate Resilience, the aim of which is to assist the Niger Government to formulate a cohesive series of initiatives that will mainstream climate resilience into the country's economic and social development strategies. It is also in line with Niger's Accelerated Development and Poverty Reduction Strategy (ADPRS) for the 2008-2012 period, as well as Niger's National Strategy and Action Plan on Climate Change and Variability (SN/PACVC) adopted in 2003. The development of climate information is also one of the priority measures identified by the National Adaptation Plan of Action (NAPA) on Climate Change and Variability (2006). The project falls under Component 1 of Niger's Strategic Plan for Climate Resilience (SPCR) and includes actions aimed at enabling the National Meteorological Directorate (DMN) to develop appropriate climate impact modeling scenarios at the national and international levels, promote research to dissipate some uncertainties regarding vulnerability assessment model exit points, and facilitate access to better data and information on the impacts of climate change and variability.
- 1.1.2 The PDIPC is one of four SPCR priority projects prepared by Niger with assistance from the MDBs (World Bank, ADB and IFC) and was approved by the PPCR Sub-Committee in November 2010. Designed to cover a 5-year period, the SPCR comprises three pillars (Annex B1); each Pillar has its own activities which complement each other to achieve the programme objectives. Under Pillar 1, the PDIPC will cover the climate information development and forecasting which will be used to enhance the performance of the other projects. PROMOVARE investment project will implement the integrated water resources management activity under Pillar 2. The World Bank-supervised PACRC will cover Pillar 1 activities (climate and environmental resilience, communication and capacity building tools), Pillar 2 activities (sustainable soil management, social protection) and Pillar 3 activities (strategic coordination of the programme and knowledge management). The project under IFC supervision will carry out activities that are complementary to the three other projects (development of a climate information platform, promotion of resilient irrigation methods, insurance and mutualization) in liaison with the private sector.

1.2 Rationale for Bank's Involvement

1.2.1 The PDIPC is fully consistent with the Bank's Medium-Term Strategy (2008-2012) which identifies climate change as a cross-cutting threat that could impede achievement of the Bank's objective. Access to appropriate climate data is consistent with the Bank's Climate

Risk Management and Adaptation Strategy. The project is also in line with the 2010-2012 RBCSP, especially regarding the mainstreaming of climate change adaptation as a necessary cross-cutting support for achievement of the operationalization objectives of the two RBCSP pillars. Finally, the project is in harmony with the 'ClimDev' Programme and Niger's National Adaptation Plan of Action (NAPA) on Climate Change, adopted in 2006.

1.2.2 In recent years, the Bank has financed several projects in Niger with components on the effects of climate change, including the Kandadji Programme, the Tahoua PMET Project, Zinder PADAZ, Dosso/Tillabéry PVDT, Diffa PADL Diffa and PMERSA-MTZ. Through the ClimDev Programme, the Bank is financing a project to build the modeling capacities of African climate institutions, implemented by ACMAD, and has supported Niger in preparing its Nationally Appropriate Mitigation Actions (NAMAs) Plan to reduce greenhouse gas emissions, finalized in October 2011. Under the PPCR Pilot Programme, the Niger Government has selected the Bank as the project supervision body.

1.3 Donor Coordination

The partnership between the donors and the Niger Government is governed by the Paris Declaration principle. Aid is coordinated in line with the Poverty Reduction Strategy Paper (PRSP) which has been retained as reference framework for current and future interventions by the technical and financial partners. Coordination is carried out through the following organs: the National Steering Committee, the National Government/TFP Committee, the National Consultation and Dialogue Committee, the Sector Structures and the Permanent Secretariat. Information on the agricultural and environmental sector, one of the most vulnerable sectors to climate change and the main project beneficiary, is summarized in the following table.

		Importance					
Sector o	Sector or Sub-Sector*						
			in 2011	Exports in 2011	Labour		
Agricultural Sector			54.1%	18.8%	80%		
Stakeholders: State - Donors (ODA) in CFAF million							
Government: Annual public expenditure (2010-2011 average)	Donors	: ODA Disb	ursements 195 4	over the 2010-2011 pe 33	riod		
67 215	Budgeted Aid			Non-Budget Aid			
	Bilateral = 44 882						
	ADF = 16972		Bilateral = 10 127				
	IDA = 33980	ADF = 302					
	EDF = 15536	IDA = 13578					
	WADB = 11 541	EDF = 4534					
	$IDB = 11\ 242$		WADB =	151			
	Others = $43\ 050$	IDB = 3 603					
	Sub-Total = 161 930	O	Sub-Total	33 503			
Level of Aid Coordination							
Existence of thematic working	Existence of thematic working groups TWG			Yes			
Existence of a Global Sector P	No						
ADB's role in Aid Coordination	•	TWG Member					

II. PROJECT DESCRIPTION

4.1 Project Components

Table 0-1: Project Components

	Table 0-1 : Project Components							
	Component Name	Cost Estimate (US\$ million)	Description of the Components					
1	Capacity Building for Generation of Climate Data	8.87	Strengthening of the Observation Network: rehabilitation / establishment of 34 synoptic stations, 39 agro-meteorological stations, 39 rain loggers and 796 rain gauges in 2013; construction of 8 regional meteorological centres, construction of a calculation centre, installation of a communications network with the regions and global centres, preparation of a network maintenance strategy and capacity building for observation personnel. Development and Improvement of Climate Products: inventory of existing products and new needs, capacity building for DMN in seasonal forecasting and the installation of a short-term forecasting model, and the development of products adapted to producers' needs. Establishment of a Climate Information Dissemination Mechanism: study on dissemination methods, end-user sensitization campaigns (administration, CNEDD, district councils, civil society and private sector), fitting out of a studio for televised information bulletins, upgrading of DMN's Website, upgrading of strategic planning guides for agro-pastoral activities, training of 266 extension workers, agro-meteorological campaign targeting 150,000 producers, agro-meteorological support for 15000 producers in PROMOVARE project area, research/action on mainstreaming climate information in agro-pastoral activities.					
2	Support for Modeling and Vulnerability Assessment Research	1.75	Generation of Climate Scenarios for Niger: development, validation and dissemination of climate scenarios for 2020-2049. Assessment of Vulnerability to Climate Change: development and validation of a vulnerability assessment tool, preparation and dissemination of a vulnerability map of agro-pastoral areas, building actors' capacities to use the tools.					
3	Strengthening of the Early Warning System	1.55	Establishment of a Multi-Hazard Early Warning System for Climate (MH-EWS): Diagnostic study of the existing EWS system, development of the MH-EWS, support for operationalization of the national climate risk mitigation platform in the eight regions. Support for dissemination of agro-meteorological and early warning products: Establishment of an information dissemination network covering Niger's 235 district councils, conduct of 4 annual dissemination campaigns.					
4	Project Management	1.68	 Planning of project activities Coordination and monitoring of activities Procurement of goods, works and services Financial management Project monitoring-evaluation Annual audits and final project evaluation 					

4.2 Technical Solutions Retained and Other Alternatives Explored

2.2.1 The approach adopted to provide the population with reliable climate data is based on building DMN's observation and data processing capacities, the development and improvement of meteorological/climatological products by complementary actions, and the establishment by DMN of a system for the dissemination of information to the various users. Furthermore, the proposed observation capacity building is a balanced programme between

partial automation of observation and improved network management, especially with regard to maintenance. The tools for the development and improvement of products concern: (i) the procurement and real time operation of a Limited Area Model on one region focused on Niger's Weather Watch Centre with a view to improving short and medium-term forecasting (24, 48 and 72 hours); and (ii) strengthening of DMN's contribution to the PRESAO forum on seasonal forecasts and enhancement of the products developed. Dissemination of information to the various users will be based on the involvement of local actors as well as NGOs and synergy, with end users of the PROMOVARE and PACRC projects.

2.2.2 In Niger, the existing Early Warning System (EWS) mainly covers food security, and does not really have a decision-making tool adapted to the other climate risks (drought, floods, crop enemies, climate-sensitive diseases, etc.) facing the country. To ensure efficient crisis management, it is essential for Niger to establish a multi-hazard early warning system for climate change.

Table 0-2: Alternative Solutions Considered and Reasons for their Rejection

Alternative	Brief Description	Reason for Rejection
Full automation of the DMN	Installation of synoptic stations,	Solution ill-adapted to DMN's
network	secondary agro-meteorological	financial, management and
	stations and automatic rain gauges	maintenance capacities
Development of a climate model	Development and	Very high development and
for Niger	operationalization of a specific	maintenance costs
	model for Niger	

4.3 Project Type

The PDIPC project will be financed by the Pilot Programme for Climate Resilience of which Niger is one of the selected beneficiary countries. This is an investment project for adaptation to climate change through generation of reliable climate information and promotion of its mainstreaming in development activities. Despite the fact that the PPCR provides Niger with an option to exclusively use grant resources, the country has also chosen to use loan resources in order to finance all the priority activities identified by the SPRC.

4.4 Project Cost and Financing Arrangements

- 2.4.1 The total PIDC cost, including physical and financial contingencies and net of tax and customs duties, is estimated at US\$ 13.8 million, i.e. about CFAF 6.77 billion, with 75% in foreign exchange and 25% in local currency. The summary of the project cost estimate by component and expenditure category is presented in the tables below.
- 2.4.2 The project will be jointly financed by the PPCR and the Government. The PPCR loan is US\$ 9.5 million and the Grant is US\$ 3.5 million, which cover 94.1% of the total project cost excluding taxes. The Government will contribute an amount of CFAF 401, 010,000, i.e. 5.9%.

Table 0-3: Cost Estimate by Component

Components	(Cost (CFAF '00	00)	Cost (USD '000)			%	%Ba
Components	LC	FE	Total	LC	FE	Total	FE	se C.
Capacity Building for Generation of Climate Data	1 114.69	2 620.60	3 735.29	2 280.18	5 360.63	7 640.81	70	64
Support for Modeling and Vulnerability Assessment Research	55.50	704.50	760.00	113.53	1 441.11	1 554.64	93	13
Strengthening of Early Warning System	115.00	550.00	665.00	235.24	1 125.07	1 360.31	83	11
Project Management	176.81	519.42	696.23	361.67	1 062.51	1 424.18	75	12
Base Cost	1 461.99	4 394.52	5 856.51	2 990.62	8 989.32	11 979.94	75	100
Physical Contingencies	109.08	327.66	436.73	223.12	670.25	893.37	75	7
Financial Contingencies	126.03	352.50	478.53	257.81	721.06	978.87	74	8
Total Cost	1 697.10	5 074.68	6 771.78	3 471.55	10 380.63	13 852.18	75	115

Table 0-4: Project Cost by Expenditure Category

Expenditure	(Cost (CFAF '000)			ost (USD '00			
Categories	LC	FE	Total	LC	FE	Total	% FE	%B Cost
	128.57	385.70	514.27	262.99	788.98	1 051.97		
Works							75	9
Goods	476.77	1 430.31	1 907.08	975.27	2 925.80	3 901.07	75	33
Services	742.45	2 235.89	2 978.34	1 518.74	4 573.68	6 092.42	75	51
Operating costs	114.21	342.62	456.83	233.62	700.85	934.47	75	7
Total Base Cost	1 461.99	4 394.52	5 856.51	2 990.62	8 989.32	11 979.94	75	100
Physical Contingencies	109.08	327.66	436.73	223.12	670.25	893.37	75	7
Financial Contingencies	126.03	352.50	478.53	257.81	721.06	978.87	74	8
Total Cost	1 697.10	5 074.68	6 771.78	3 471.55	10 380.63	13 852.18	75	115

Table 0-5: Sources of Financing

Saurag	Cost (USD '000)			Cos	t (CFAF '000	%	
Sources	FE	LC	Total	FE	LC	Total	70
LOAN	7 238.65	2 293.23	9 531.88	3 538.69	1 121.07	4 659.76	68.8
GRANT	2 580.98	919.02	3 500.00	1 261.74	449.27	1 711.01	25.3
GVT.	561.00	259.30	820.30	274.25	126.76	401.01	5.9
TOTAL	10 380.63	3 471.55	13 852.18	5 074.68	1 697.10	6 771.78	100.0

Table 0-6: Use of Resources by Category (x1000 USD)

Categories	PPCR Loan	PPCR Grant	Government
Works	1 218.92	-	-
Goods	1 480.45	3 096.79	-
Services	5 771.70	403.21	755.99
Personnel	584.72	-	-
Operating costs	476.09	-	64.31
Total	9 531.88	3 500.00	820.30

4.5 Project Area and Beneficiaries

The project area covers all eight (8) regions of Niger, and aims to generate and provide Niger's population with reliable climate data so as to improve the planning and implementation of its agro-silvo-pastoral activities. Through its information extension activities, the project will directly affect 150,000 producers spread over Niger's 234 district councils. Agro-meteorological support will be provided to 1500 producers under the project in the PROMOVARE area of intervention. The climate products will be included in the extension/sensitization package of the PROMOVARE and PACRC projects. The project will work with the IFC to create the climate information platform. The direct beneficiaries of the project are as follows: the administration, CNEDD, district councils, farmers, stockbreeders, women, civil society, village associations of the village development committee type, producer groups, and development partners.

4.6 Participatory Approach for Project, Identification, Design and Implementation

The project was identified during preparation of the Strategic Programme for Climate Resilience (SPCR) in Niger. The PDIPC was one of the 4 projects identified. The April 2011 preparation mission met with the main stakeholders, in particular, the representatives of the SPCR Steering Committee, the Ministry in charge of Agriculture and Livestock and the Ministry in charge of Water Resources, research institutions, civil society organizations and the private sector; ongoing projects with sustainable land management-related activities, the umbrella structures of farmer organizations operating in the water management sector, and the technical and financial partners. All the activities for each component have an implementation mechanism based on participation, involvement and empowerment of the beneficiaries, namely the local communities and vulnerable producers, to enable them to assume ownership of the facilities, ensure their maintenance and cover recurrent costs. The equipment (rain loggers and gauges) will be managed and operated by Niger's 235 district councils (3 per council) which will sign an agreement to that effect with the Project.

4.7 Bank Group Experience and Lessons Learned Reflected in Project Design

The Bank's portfolio comprises 17 ongoing operations for a total amount of UA 221.37 million, with a disbursement rate of about 42.1 %. There are three potentially problem projects, i.e. 17.6% of the portfolio (details in Appendix II). The ongoing agricultural sector portfolio comprises 4 projects (PMERSA-MTZ, PVDT, Kandadji and PADL-Diffa) of which only one is potentially problematic. The Bank is also financing a project under the ADB/ClimDev programme aimed at building the modeling and climate forecasting capacities of African institutions. Two projects in the sector were completed in 2010 (PLCE and PADAZ) with a performance evaluation of 3 (refer to Annex B2). The lessons learned from Bank-financed projects are as follows: (i) favour simply designed projects focused on priority actions in poverty reduction and food security; (ii) develop synergies among development programmes; (iii) take into account the integration of agriculture and stockbreeding, making it necessary to systematically tackle the land tenure issue and support for the different land commissions; (iv) mainstream infrastructure development into project implementation, and (v) support capacity building for beneficiaries.

2.8 Key Performance Indicators

The key performance indicators selected for the project are: (i) the rate of use of climate information by producers, (ii) the percentage of district councils using climate information in council development plans, (iii) climate systems covered by the early warning system, (iv) regular availability of seasonal and short-term forecasts, (v) the number of producers affected by the dissemination of climate information, (vi) the availability of climate scenarios for Niger over the 2020-2049 period, (vii) the number of operational regional meteorological centres, (viii) the availability of a vulnerability map covering all Niger's district councils, (ix) the timely dissemination of warning on major climate hazards at central and regional levels, (x) the level of operationality of the national climate risk management platform, (xi) women's access to agro-meteorological extension activities, and (xii) the number of gender-disaggregated jobs created.

II. PROJECT FEASIBILITY

3.1 Economic and Financial Performance

- 3.1.1 The additional income generated by beneficiaries who have easier access to meteorological information will be CFAF 2.616 billion in 2015; this will represent an average additional income per producer of CFAF 40,200 based on an adoption rate of 5%, i.e. 65,000 producers concerned.
- The project economic rate of return, calculated from 2012 to 2030, is estimated at 3.1.2 24.8%. A 15% drop in income over the period brings this rate down to 21.2%, and it stands at 19.2% for a 15% decrease in income and a 10% increase in project costs. The total value added, corresponding to the real net additional income for rural producers which will be generated as a result of access to adequate meteorological information, is estimated at CFAF 1.308 billion in 2014, CFAF 2. 616 billion in 2015, CFAF 2.940 billion in 2020, CFAF 3.308 billion in 2025, and CFAF 3.727 billion in 2030. The ERR and value added were calculated on the basis of: (i) projections to 2030 for national production of the main agricultural crops grown in Niger. The growth rate assumptions retained for the projections per crop have factored in the irregular production trends between 1990 and 2007, as well as the growth rates obtained from the difference between 2004-2006 and 1990-1992 moving averages; (ii) calculation of gross income with 5-year time horizons up to 2030, through the valuation of projected production at current average prices on rural markets; (iii) estimated production and potential gross and net income induced by access to meteorological information based on 7% increase in yields above the trend; (iv) estimate of potential gross income factoring in average production costs; (v) calculation of the project cash-flow based on the real net income due to the project's impact, factoring in 5% rate of adoption by farms in Niger.

	Baseline cash flow	Sensitivity to 15% decrease in income	Sensitivity to 15% decrease in income and 10% increase in costs
ERR	24.8%	21.2%	19.2%

3.2 Environmental and Social Impacts Environment

3.2.1 The PDIPC has been classified under Category 3. It is a capacity building project in the observation and development products, and their use to improve the adaptation of agropastoral products to climate change. However, general site management mitigation measures will be systematically incorporated in the specifications of contractors responsible for fitting and installing the different items of equipment.

Climate Change

3.2.2 The PDIPC is basically a project for adaptation to climate change through its main activities of generation and dissemination of climate data to users for use in planning and implementation of development activities. It will generate agro-meteorological information for development actors, producers and stockbreeders, in particular those in PACRC and PROMOVARE project areas so as to strengthen their resilience to climate change. The project will have no significant impact on climate in terms of greenhouse gas (GG) emissions.

Gender

3.2.3 With respect to the capacity building activities, the project will ensure strong representation of women and youths among the beneficiaries in accordance with the operational principles as defined in the Bank's Updated Gender Plan of Action (UGPOA) for 2009 –2011. The objective is to ensure a ratio of 1/3 women and 1/3 youths in all activities. The development of climate information around the following **extension** themes will have positive social impacts on women and youths: (i) pastureland management, (ii) intensive stockbreeding with enhanced productivity, and introduction of more efficient improved breeds, (iii) intensification of animal and agricultural production, (iv) promotion of ecologically sound farming systems; (v) strengthening of mixed farming (agricultural subproducts, fodder crops, and conflict resolution) which will foster rational use of natural resources, and (vi) the mobilization and allocation of adequate and decentralized financial resources to the agro-pastoral sector.

Social Impact

3.2.4 The climate adaptation and resilience strengthening activities for vulnerable target groups through the development of climate information will have the following major positive impacts: (i) reduction of rural-urban migration and ageing of the agricultural and pastoral population; (ii) reduction of the incidence of poverty; (iii) improvement of food and nutrition security by increasing the net amount of food produced from cereal crops available to households; (iv) building the technological, organizational and management know-how of poor and vulnerable communities; this will make them responsible partners of the administration and support/advisory organizations; (v) increase in women's incomes and strengthening of their economic power; and (vi) induced improvement of the population's living conditions. By ensuring the security of agro-pastoral activities through adaptation to climate change, the project will enhance farmer and stockbreeder jobs. The generation of significant income means that such activities will attract young people and vulnerable groups dependent on them. It will create jobs for young people during its implementation, and will consolidate jobs in the rural development sector in the medium to long-term.

IV. IMPLEMENTATION

4.1 Implementation Arrangements

- 4.1.1 Implementation Arrangements: In order to promote and boost their synergy, the two PPCR projects implemented by the Bank (PDIPC and PROMOVARE) will be implemented under a single Coordinator, whose appointment will be submitted to the Bank for approval. This Coordinator will head the PDIPC and PROMOVARE Project Coordination Unit under the supervision of the Director-General of Planning. The Project Coordinator will ensure that an adequate fiduciary framework and operational mechanism are established. He will be supported by two financial management and procurement experts, and will be responsible for project management, in particular, the procurement of goods and services, financial management, and monitoring and evaluation in collaboration with the monitoring-evaluation expert of the Strategic Coordination Unit.
- 4.1.2 The Ministry of Transport will designate, from among the DMN, a PDIPC Technical Monitoring Unit headed by a Team Leader and assisted by 2 technical experts: an observation network expert and a modeling and product design expert. The PDIPC team leader will be responsible for the technical coordination and monitoring of project activities. The network expert will be responsible for network strengthening activities, while the climate modeling and product design expert will coordinate modeling and product development activities. The activities will be carried out by consulting firms, contractors, NGOs, communities and technical services, which will establish partnership agreements with the PDIPC. On the ground, the PDIPC will also involve 8 regional focal points in the deconcentrated structures of the Ministry of Transport. A technical and scientific committee, grouping together all local competencies (DMN, UAM, AGRHYMET, ACMAD, CNEDD, EWS-CU, DNS, and ASECNA) will be established to support the PDIPC Technical Monitoring Committee in developing climate products.
- 4.1.3 The project steering committee will be the National Orientation and Steering Committee to be established for coordination of the entire Strategic Programme for Climate Resilience (SPCR). In the regions, this function will be discharged by the Regional Orientation and Steering Committee of the SPCR programme. The district councils will be the project managers for observation equipment for they will have to decide on the location for its installation and assume responsibility for its management and periodic maintenance.
- 4.1.4 **Procurement:** All procurements of goods, works and consulting services financed from the PPCR resources will be made in accordance with the Bank's Rules of Procedure for the Procurement of Goods and Works (May 2008 Edition) or, as necessary, the Bank's Rules of Procedure for the Use of Consultants (May 2008 Edition) using standard Bank Bidding Documents (September 2010 Version). The ex-post review procedure will be used for estimated contract amounts of less than UA 20,000. The procurement methods to be used for the development works will be National Competitive Bidding (NCB) and shopping. Goods will be procured through international competitive bidding (ICB) and shopping. Consulting services will be procured through the Quality-and Cost-Based (QCBS) method and the Least Cost Selection (LCS) method. Three Agreements will be signed with CNEDD, UAM, EWS and INRAN to carry out the respective activities which they are exclusively authorized to carry out for private sector projects in Niger. All the procurement details are presented in Annex B7 of Volume 2. The 18-month Procurement Plan, prepared by the Donee, is also presented in Annex B7.

- Financial Management and Disbursement: In the case of Niger, despite the 4.1.5 reforms embarked upon since 2005 to improve the public financial management system, the assessments on the basis of the methodologies of the 2008 PEFA and the 2009 PEMFAR II continue to reveal constraints in each of the three components of the national public financial management systems, namely: the budget execution system, the financial control system and the presentation of accounts. Against this backdrop, the establishment at the Directorate-General of Planning (DGP) of a coordination unit for the PDIPC and PROMOVARE projects turned out to be the most realistic solution, especially as it will be strengthened in terms of project management and also the Bank's rules and procedures. In order to ensure effective financial implementation of PROMOVARE and PDIPC, the Director-General of Planning will undertake a number of actions immediately following approval of funding, including: (i) establishment of the Strategic Coordination Unit and designation of its members; (ii) establishment of the PDIPC and PROMOVARE Coordination Unit at the Directorate-General of Planning, and the appointment of the Coordinator of the said Unit; (iii) recruitment of the financial management and procurement experts and the accountant; (iv) preparation of the administrative, financial and accounting procedures manual; (v) procurement of accounting software (multi-project), software parametering and staff training; (vi) the recruitment of an external auditor; and (vii) the opening of a special account for loan resources in a commercial bank acceptable to the Bank. Detailed data on financial management and disbursements are provided in Annex B6.
- 4.1.6 **Audits:** The annual audits of the financial statements will be carried out by a firm of external auditors on the basis of terms of reference approved by the Bank. The audit reports will be submitted to the Bank no later than six months after the end of the period under review.

4.2 Monitoring

4.2.1 The project monitoring and evaluation mechanism to be established comprises the SPCR Strategic Coordination Unit, the National Orientation and Steering Committee, the Rural Engineering Directorate-General, project coordination, the Regional Orientation and Steering Committee, the Regional Directorates (water, environment, agriculture, etc.), the donors and beneficiaries. The Government and the Bank will ensure close monitoring throughout project implementation. Joint supervision, monitoring and mid-term review missions will be led by the Bank during project implementation. A project monitoring/evaluation manual will be prepared early in the project, and will identify the relevant monitoring indicators as well as the monitoring procedures to be implemented. The project will set up two types of monitoring: internal and external monitoring. Internal monitoring will be carried out by the project coordination, on the basis of specially prepared spreadsheets. Quarterly and annual activity reports will be produced. External monitoring will be carried out in addition to internal monitoring. External monitoring will focus mainly on the project impacts and effects to achieve the objectives of the Niger SPCR.

4.2.2 The project implementation schedule is presented in the table below:

Table 0-1: Project Implementation Schedule

Activities	Responsible	Time Frame
Appraisal	PPCR/ADB	April 2012
Negotiations	Government / ADB	May 2012
Loan Approval	PPCR / ADB	June 2012
Signing of the Loan Agreement	ADB / Government	July 2012
Authorization of 1st Disbursement	ADB	September 2012
Project Launching	Executing Agency / ADB	September 2012
Agreements with Technical Services	Executing Agency / Gvt	December 2012
Signing of contracts	Government	February 2013 to end 2015
Service Delivery	Executing Agency / Gvt	September 2017
Mid-Term Review	Government / ADB	February 2015
Completion of Activities	Government / ADB	September 2017
Borrower's Completion Report	Government	June 2017
Completion Report	ADB	September 2017
Audits	Executing Agency	Annually

4.3 Governance

In the rural sector, there is a Rural Code Secretariat at regional and national levels, and Land Commissions have been established at departmental, municipal and local levels. With regard to public financial management, the studies conducted in 2008 and 2009 show that, despite some progress made in recent years, public financial management still shows some weaknesses. In order to address these challenges, the Government is envisaging, with technical and financial partner support, a three-stage approach: (i) validation of the Public Expenditure Management diagnosis; (ii) validation of the recommendations made, and (iii) preparation of a reform programme.

4.4 Sustainability

- 4.4.1 Project sustainability will depend on the close involvement of national stakeholder (Ministries, district councils, civil society, private sector, and beneficiaries) at all stages of its design. Its implementation will involve the participation of the Regional and Central Directorates, as well as community organizations, district councils, communities, NGOs and the private sector. Each stakeholder will contribute to the project through a participatory approach in which all activities are carried out in close consultation with the beneficiaries. The regional meteorological centres will be attached to urban communities, while the rain logger and rain gauge network will be managed by the district councils. In this connection, activities to build end-user capacity, disseminate climate products in the district councils, and provide agro-meteorological extension and support for producers on the PROMOVARE sites will be carried out by the PDIPC project as well as by the two other projects in the Niger PPCR through technical services and specialized NGOs.
- 4.4.2 Overall, project sustainability will depend on satisfactory implementation of the sustainability measures highlighted by the project: (i) building DMN's observation network management and maintenance capacities; (ii) support for the preparation and operationalization of a sustainable agro-meterological equipment maintenance strategy; and (iii) empowerment of the district council authorities in the management and maintenance of

rain gauges and regional centres. The SPCR, through IFC, will work towards establishing a climate information platform to recover the costs of climate information, an essential condition for sustainability of the investments.

4.5 Risk Management

he achievement of the project's expected outcomes could be jeopardized by the following potential risks:

- Lack of synergy among stakeholders: The smooth functioning of the institutional mechanism for project implementation, in particular, of the National Orientation and Steering Committee and the Regional Orientation and Steering Committee, should considerably mitigate this risk.
- Low Government financial participation: This risk will be minimized by the preparation and implementation of a new climate information cost recovery and maintenance strategy.
- Lack of producer receptiveness: Agro-meteorological support is proposed for producers in order to accelerate the mainstreaming of climate change in agricultural activities.
- Weak network management and maintenance capacity: The Government will strengthen DMN personnel by providing 38 new network observers and 3 equipment maintenance workers. The district councils will ensure management and maintenance of the rain gauges provided.

4.6 Knowledge Building

The PDIPC will generate reliable climate information for the Government, Sector Ministries, local authorities, civil society and the TFPs to ensure better planning and implementation of their respective activities. Under the SPCR, the climate information generated will be used by the PSCRC and PROMOVARE projects in their community sensitization and extension activities. The district councils and beneficiary communities will build knowledge on the use of climate information to ensure better management of agro-silvo-pastoral activities. The lessons learned will be disseminated through periodic meetings of the pilot countries, and will be consolidated for replication of the SPCR intervention strategy in the sub-region and elsewhere in the world. SPCR knowledge management falls under the strategic coordination sub-component of the PARC programme. The SPCR will help to build knowledge on the close links between development and adaptation to climate change.

II. LEGAL FRAMEWORK

5.1 Legal Instrument

The financial instruments to be used for the project are a grant and loan from the PPCR resources of the SCF. A Grant Agreement and Loan Agreement will be concluded between the African Development Bank as executing agency of the SCF Trust Fund, and the Republic of Niger.

5.2 Conditions Associated with Bank's Intervention

- 5.2.1 Conditions Precedent to Grant and Loan Effectiveness: Effectiveness of the Grant Agreement shall be subject to its signature by the Bank and the Republic of Niger, while effectiveness of the Loan Agreement shall be subject to fulfillment, by the Republic of Niger, of the conditions stipulated under Section 12.01 of the General Conditions applicable to Loan Agreements and Guarantee Agreements of the Bank.
- 5.2.2 **Conditions Precedent to First Disbursement**: In addition to the grant and loan effectiveness, the first disbursement shall be subject to fulfillment, by Niger and to the Bank's full satisfaction, of the following conditions:
 - (i) Submit to the Bank a copy of the signed Ministerial Order on the establishment of the Programme Strategic Coordination Unit and the PDIPC Project Coordination Unit (4.1.5).
 - (ii) Provide the Bank with evidence of the opening of a special account in the name of the project with a bank acceptable to the Fund, to receive the loan resources allocated for project management (4.1.5)

5.2.3 **Other Conditions:** Furthermore, the Government of Niger shall:

- (i) Provide the Bank, no later than three months after the first disbursement of the grant and loan resources, with evidence of the recruitment of the financial management expert and the accountant (4.1.5);
- (ii) Submit to the Bank, for approval, no later than six (6) months after the first disbursement of the grant and loan resources, the project implementation and administrative and financial management procedures manual (4.1.5);
- (iii) Submit to the Bank, for approval, no later than six (6) months after the first disbursement of the grant and loan resources, the performance contract of the Project Coordination Unit (4.1.2);
- (iv) Provide the Bank, no later than one year after the first disbursement of the grant and loan resources, with evidence of the assignment to DMC, by the Ministry of Transport, of 38 network observers and 3 maintenance employees (4.4.2);
- (v) Submit to the Bank, no later than one year after the first disbursement of the grant and loan resources, a copy of the instrument establishing the national platform for climate risk reduction (2.1); and
- (vi) Submit to the Bank, no later than two years after the first disbursement of the grant and loan, a copy of the Ministerial Order on the DMN observation network maintenance strategy (4.4.2).

5.3 Compliance with Bank Policies and PPCR Criteria

The project will be implemented in compliance with the Bank's operations strategy for Niger as defined in the 2010-2012 RBCSP, the Pillars of which are: (i) rural development through water resource mobilization, and (ii) infrastructure development, including social infrastructure. The project is also consistent with the Bank's climate change adaptation and related risk management strategy, as well as with the criteria defined in the Pilot Programme for Climate Resilience (PPCR).

VI. RECOMMENDATIONS

The Bank's Management recommends that the Board of Directors should approve the proposal for a grant of 3.5 million US dollars and a loan of 9.5 million US dollars from the SPCR resources of the SCF to the Government of Niger, for the purpose and subject to the conditions stipulated in paragraph 5.2 of this report.

Appendix I

Niger: Comparative Socio-Economic Indicators

Social Indicators	Ni	Niger		Developing
	1990	2010	Africa	Countries
Area (000 Km²)		267	30,323	80,976
Total Population (millions)	7.9	15.9	1,031.5	5,658.7
Annual Population Growth (%)	3.1	3.9	2.3	1.3
Life Expectancy at Birth -Total (years)	41.6	52.5	56.0	67.1
Mortality Rate, infant (per 1000)	154.1	83.7	78.6	46.9
Physicians (per 100,000 people)	2.0	2.0	58.3	109.5
Births attended by skilled health staff (%)		32.9	50.2	64.1
Immunization, measles (% of children ages 12-23 months)	38.0	68.0	71.1	80.7
School enrolment, primary (% gross)	29.0	66.6	102.7	107.2
Ratio of girls to boys in primary education (%)	56.4	81.8	91.7	96.2
Illiteracy rate (% of population >15 years)		28.7	64.8	
Access to safe water (% of population)	41.0	48.0	64.5	80.3
Access to sanitation (% of population)	3.0	9.0	41.0	53.6
HDI rank (over 169 countries)		167.0	n.a	n.a
Human Poverty Index (HPI-1) (% of populations)		55.8		
Macroeconomic Indicators			Niger	
	2000	2008	2009	2010
GNI per capita, Atlas method (current US\$)	170	280	34	
GDP (Million current US\$)	1.667	5.380	5.264	5.700
Real GDP Growth (annual %)	-2.6	9.3	-1.2	5.5
Per capita real GDP growth (annual %)	-5.8	5.2	-4.9	1.6
Gross Domestic Investment (% of GDP)	13.9	29.2	29.3	30.3
Inflation (annual %)	2.9	11.3	4.9	3.4
Budget surplus/deficit (% of GDP)	-3.8	1.4	-6.6	-3.2
Trade, External Debt & Financial Flows	2000	2008	2009	2010
Change in the volume of exports (%)	27.4	-1.1	1.9	3.0
Change in the volume of imports (%)	6.7	30.8	22.0	8.7
Change in the terms of trade	-17.7	23.3	3.2	-11.9
Trade balance (million US\$)	-47.6	-438.4	-619.0	-874.4
Trade balance (% of GDP)	-2.9	-8.1	-11.8	-15.3
Current Account Balance (Million US\$)	111.5	-697.6	-1233.6	-1033.2
Current Account Balance (% of GDP)	-6.7	-13.0	-23.4	-18.1
Debt service (% of exports)	73.4	1.8	2.0	1.7
Total external debt (% of GDP)	89.1	14.0	15.8	17.2
Net total financial flows (million US\$)	183.0	575.2	474.3	
Net Official Development Assistance (Mn US\$)	208.5	606.7	470.0	
Net Foreign Direct Investment (Million US\$)	8.4	565.9	738.9	
Private Sector Development and Infrastructure	2000	2008	2009	2010
Time required to start a business (days)		35	19	17
Investor Protection Index (0-10)		3.3	3.3	3.3
Main Telephone Lines (per 1000 people)	1.8	1.8	4.4	
Internet users (per 1000 people)	0.2	24.7	129.1	129.1

Source: ADB Statistics Department. Based on national and international sources

Appendix II

Appendix III

Major Related Projects Financed by the Bank and the Country's Other Development Partners

Niger's development is largely dependent on aid provided by its external partners, including the Bank Group. The Bank contributes significantly to the financing of the General Government Operating Budget through budget aid, and ensures the implementation of virtually all development or capacity building projects. Details are provided in Volume II of the report.

Priority Areas	Donors Currently Operating	Observations
Productive Sector Agriculture, forestry, livestock, fisheries, trade, tourism and crafts	Leaders: European Union for the rural sector (agriculture, livestock and fisheries). Other Operators: UNDP/WFP/EU/IFAD/AFD/ABEDA/IDB/Franc e/KFW/ FAO/GTZ/Belgium/Denmark/Japan.	The European Union, World Bank and the Bank support food security and the agricultural, livestock and forestry sub-sectors. The Bank, Belgium, and the World Bank provide local development assistance; IFAD supports the promotion of microfinance The Bank and IFAD complement each other in the rehabilitation of the agricultural sector.
Social Sector Education and Health, Gender	Leaders: France for education Other Operators: World Bank, ADB/ADF, France, AFD / ADF/ IDA/ ISB/EU/UNDP /France /Japan/Switzerland/UNFPA/Canada/Denmark/UN ICEF/ UNDP/ WFP/UNFPA/GTZ/KFW/Holland/OXFAM Leaders: Belgium for Health; Spain for Gender Other Operators: ADB/ ADF/ France/ EU/ Japan/ UNFPA/ WHO/ Luxemburg/World Bank.	- Synergies exist between the World Bank, ADF, the United Nations System Agencies and bilateral agencies. However, there is close coordination in the education sector.
Infrastructure and Public Utilities Public Works, Mines, Industry, Water, Energy, Sanitation and Town Planning.	Leaders: European Union (Transport), Switzerland (water) Others: ADF/EU/IDA/France/UNDP/WADB	The main partners operating in this sector are the World Bank, the European Union and ADB.
Cross-Cutting Issues Women's Advancement, Governance, Decentralization, Capacity Building	Leaders: France (local governance), UNDP (capacity building) Other Operators: ADF/IDA/AFD/ Germany /Switzerland/ IMF-Afritac/Afristat/ World Bank /French Cooperation/ Belgium/ AFD /UNDP	Activities need to be coordinated by the Authorities in this sector
Economic Reforms Support for Reforms and Debt relief	Leaders: IMF (macroeconomic framework), World Bank (structural reforms) IMF/IDA/ADF/EU/France/Belgium/WADB/Paris Club countries	Close coordination is maintained.
Multinational/Niger Basin Shared Vision ABN Priority Investment Programme	Leader: World Bank EU/France/Canada/ADB with ABN as Executing Agency	Close coordination is maintained under the ABN 2008/2012 Priority Investment Programme
Kandadji Programme	Leader: African Development Bank BIB/OFID/ABEDA/KFAED/WADB/EBID/FSD/ ABU DHABI	Close coordination is maintained.

Appendix IV

Maps of Niger

