



AFRICAN DEVELOPMENT BANK GROUP

**PROJECT : Rural, Pastoral and Transhumance
Infrastructure Project**

COUNTRY : Republic of Chad

PROJECT APPRAISAL REPORT

Date: APRIL 2011

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Currency Equivalents (Reference Value)

Currency Unit	=	CFAF
UA 1	=	CFAF 740

Fiscal Year

1 January – 31 December

Weights and Measures

1 ton (t)	=	2,204 pounds
1 kilogramme (kg)	=	2.200 pounds
1 metre (m)	=	3.28 feet
1 millimetre (mm)	=	0.03937 inch
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

List of Acronyms and Abbreviations

ACTT	:	Chadian Association of Traditional Chiefs
AFD	:	<i>Agence Française de Développement</i> (French Development Agency)
AFPAT	:	<i>Association des Femmes Peules Autochtones du Chad</i> (Association of Indigenous Fulani Women's Association of Chad)
AMECET	:	<i>Association de Médiation pour l'Entente entre les Eleveurs et les Agriculteurs du Chad</i> (Association for Mediation of Understanding between Stockbreeders and Farmers in Chad)
ATNV	:	<i>Association Tchadienne pour la Non-violence</i> (Chadian Association for Non-violence)
CASSET	:	<i>Collectif des Associations des Eleveurs du Tchad</i> (Collective of Stockbreeders Associations of Chad)
CEMEC	:	<i>Comité d'Entente et de Médiation Eleveurs-Cultivateurs</i> (Committee for Mediation and Understanding between Stockbreeders and Farmers)
COJO	:	Bid Opening and Evaluation Commission
DGREP	:	General Directorate for External Resources and Programming
DOPSSP	:	Department for Pastoral Organisation and Securing Pastoral Systems
GPHC	:	General Population and Housing Census
IFAD	:	International Fund for Agricultural Development
IsDB	:	Islamic Development Bank
LS	:	Livestock Schemes
MDGs	:	Millennium Development Goals
MEP	:	Ministry of Economy and Finance
MERA	:	Ministry of Livestock and Animal Resources
MERH	:	Ministry of Environment and Fishery Resources
NGO	:	Non-Governmental Organisation
PARG	:	Governance Reform Support Project
PASEP	:	Pastoral Livestock System Support Project

PCVZS	:	Cotton and Food Crop Production Project in the Sudan Region
PDRPL	:	Lac Prefecture Rural Development Project
PGRN	:	Natural Resource Management Project
PO	:	Professional Organisation
PRGS	:	Poverty Reduction and Growth Strategy
PRODEPECHE	:	Fisheries Development Project
PVERS	:	Surface Run-Off Water Development Project
ROPANAT	:	Natural Grazing Land Observation Network in Chad
SIPSA	:	Information System for Pastoralism in the Sahel

Project Information

Client Information

BORROWER/DONEE	:	Government of Chad
EXECUTING AGENCY	:	Department of Pastoral Organisation and Securing Pastoral Systems (DOPSSP) of the Ministry of Livestock and Animal Resources (MERA)

Financing Plan

Source	Amount (UA)	Instrument
ADF	10,400,000	ADF 12 (50% grant, 50% loan)
Government	1,040,000	
TOTAL COST	11,440,000	

ADB Key Financing Information

Loan Currency	UA
Interest Type	N/A
Interest Rate Spread	N/A
Commitment Fee	N/A
Service Charge	0.75% per annum on the amount disbursed and outstanding
Tenor	50 years
Grace Period	10 years
FRR, NPV (baseline scenario)	20%, CFAF 5 billion
ERR (baseline scenario)	24%

Timeframe-Main Milestones (expected)

Concept Note Approval	16 March 2011
Project Approval	June 2011
Effectiveness	July, 2011
Last Disbursement	June, 2016
Completion	June, 2016
Last Repayment	July 2071

Project Summary

1 Project Overview

1.1 The Republic of Chad is a landlocked country, located at the centre of the African continent. Despite its natural wealth, the country is among the poorest on the continent. To support the Chadian Government's Poverty Reduction Strategy, the Bank prepared RBCSP 2010-2014. The Rural, Pastoral and Transhumance Infrastructure Project (PIRPT) is aligned with the second pillar of this strategy. It aims to enhance the living conditions of the transhumant and sedentary population of the target area by improving access to pastoral infrastructure and resources (wells, ponds, transhumance corridors, livestock schemes), basic social services, including animal health, education for nomadic children, maternal and child health (nomadic school, clinic, storeroom, animal product processing plant, animal vaccination pen, water point). The project will be implemented over five years. PIRPT will be financed from ADF 12 resources for UA 10.4 million, of which 50% is a loan and 50% a grant.

1.2 PIRPT will target the poor rural population made up of transhumant livestock herders and sedentary agro-pastoralists, who account for almost 80% of the total population of the target area, or nearly 6.7 million inhabitants, of whom 52% women. The project will result in improved living conditions for this population through better access to pastoral facilities and resources, and to basic social services. The project beneficiaries were involved in all stages of project design and will be made to assume responsibility in settlement and works monitoring activities, and in managing the facilities set up.

2. Needs Assessment: Approximately 55% of the Chadian population live below the income poverty line. Stock breeding, which is the livelihood of 40% of the population, is dominated by transhumance (nearly 80% the livestock population). However, owing to drought and the growing pressure on land, there are increasingly bloody conflicts among users of pastoral resources. Added to this, there is a shortage of pastoral water points in some grazing areas. The different project stakeholders have been involved in all the stages of project design, including notably the line ministries in charge of livestock, water, environment, education, health and family, as well as pastoral organisations, NGOs and stockbreeders' rights associations (ATNV, ACTT, AMECET, AFPAT, CASSET); local administrative and technical authorities, and donors (AFD, EU, FAO, Swiss Cooperation Agency, IFAD). These consultations helped to identify needs in pastoral facilities and basic services, for better securing of stockbreeding and improved living conditions of the target population.

3. Bank's Value Added: The comparative advantages that make the Bank the best placed to support this project can be described as its sound knowledge of the rural sector, generally, and the livestock sub-sector, in particular, because of the nature and financial volume of its project portfolio in the country. In this regard, it is worth noting that the Bank financed: (i) under the FSF, a study on transhumance; (ii) the formulation of a medium-term strategy for the agricultural sector with emphasis on the development of rural infrastructure and natural resource management; and (iii) the provision of an ADF 12 financial instrument for the socio-economic development of RMCs. The PIRPT will contribute to improving access to pastoral infrastructure, basic social services as well as better governance in managing natural resources.

4. **Knowledge Management:** The Bank will draw lessons from the pastoralism information management system that the project will strengthen through its monitoring/evaluation system. To this end, the Information System for Pastoralism in the Sahel supported by the project will allow for collection, processing and dissemination of information on the trend of natural resources in the Sahel context. Project monitoring and evaluation will assess the impact of pastoral facilities on the level of livestock productivity and food security. Lastly, monitoring the climate risk management plan prepared at project appraisal and that helped to assess the operation's carbon balance will foster better knowledge of its impact on climate change.

Project Logical Framework

Country and Project Name : Chad - Rural, Pastoral and Transhumance Infrastructure Project.						
Project Goal : The project goal is to contribute to improved living conditions among the transhumant and sedentary population						
	Results Chain	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/ MITIGATIVE MEASURES
		Indicator	Baseline (Target (by project end in 2016)		
IMPACT	1. Poverty reduction among the population in targeted areas and easing of tensions between users of pastoral resources	Daily income of transhumant herders	CFAF 365/pers/d (2010)	CFAF 475/pers/d	Sources: MDG Report, baseline, Mid-Term Review, Completion Report, Final Impact Assessment WHO	Risks - Political and social instability that makes Chad a fragile State Mitigative Measures - Peace agreements signed with rebels and implementation of donor-supported development programme
		Length of conflict-generating transhumance routes	500 km	250 km		
OUTCOMES	2.1 Improved access and management of pastoral infrastructure	2.1.1- Dairy livestock productivity	Milk: 1.5 l/cow/d (2010)	3 l/cow/d	Supervision reports Methods: Surveys, studies	Risks - Vulnerability of pastoral system to climate change Mitigative Measures - Preparation of a climate risk management plan consisting of awareness raising activities among stockbreeders on the management of pastoral resources (bushfire control, better use of livestock, reforestation, proper management of water resources);
	2.2 Improved access to basic social services by the target population	2.1.2 Livestock mortality rate	30% (2008)	10%		
		2.2.1- Rate of access of children of transhumant herders to education	10% (2009)	50%		
		2.2.2- Infant and maternal mortality rates among transhumant herders	TMI: 191/1000 MMR: 1099/100,000 (in 2004)	IMR: 67/ 1000 MMR: 205/100.000		
OUTPUTS	3. Component A: Pastoral Facilities and Joint Management of Pastoral Resources 3.1-Construction of structures for securing livestock mobility 3.2- Implementation of joint pastoral resource management schemes 3.3- Setting up of basic social infrastructure	3.1.1 - Number of pastoral water points built and rehabilitated 3.1.2- Length of livestock corridors marked 3.2.1 – Number of pastoral schemes 3.2.2- Reforestation of fodder species 3.3.1 - Number of service centres including store, clinic, vaccination pen, school and water point 3.3.2- Number of livestock product conservation and processing centres		3.1.1- 70 new wells, 40 wells and 10 boreholes rehabilitated and 30 ponds deepened 3.1.2- 500 km 3.2.1- 10 3.2.2- 1 000 ha 3.3.1- 6 3.3.2 - 6	Project activity report, Bank monitoring and supervision report, mid-term review and completion reports	Risks - Delays and weaknesses in procurement process; Mitigative Measures - A procurement specialist will be recruited from project start-up, ORPF monitoring and training will be strengthened and the number of contracts reduced;
	Results Chain	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/ MITIGATIVE MEASURES

	<p>4. Component B: Capacity Building of Partners</p> <p>4.1- Strengthening MERA’s capacity to manage and monitor pastoralism</p> <p>4.2- Making stockbreeders’ organisations and structures for the management of livestock facilities and for conflict resolution operational</p> <p>4.3- Strengthening capacity for delivery of basic services (maternal and child health, education and animal health) tailored to the lifestyle of transhumant herders</p> <p>5 Component C: Project Organisation and Management</p> <p>5.1- Implementing the project in accordance with management procedures adopted and monitoring/evaluation of activities and outputs consistent with principles of results-based management.</p>	<p>4.1.1- Pastoral monitoring structures are operational</p> <p>4.1.2- DOPSSP is equipped with the appropriate tools for steering and managing pastoralism</p> <p>4.1.3- Number of MERA DOPSSP staff trained</p> <p>4.2.1- Number of members of POs and conflict resolution bodies trained.</p> <p>4.3.1- Community education system for nomadic children validated and implemented</p> <p>4.3.2 – Number of animal health personnel trained</p> <p>4.3.3 – Number of community health personnel and birth attendants trained</p> <p>5.1.1- Procedures manuals prepared and implementation mechanism operational</p> <p>5.1.2- Annual work plans, activity report and audit report prepared and submitted on time.</p>	<p>4.1.1.1- The 10 SIPSA and ROPANAT grazing land observation sites operational</p> <p>4.1.2.1- 1 bi-monthly produced and disseminated</p> <p>4.1.2.2- 1 advert/1 programme/news feature broadcast monthly</p> <p>4.1.2.3- 50 DOPSSP staff, of whom 30% women are trained</p> <p>4.2.1- 1,000 PO members, of whom 50% women are trained</p> <p>4.3.1- Education programme for nomadic children is implemented</p> <p>4.3.2- 500 animal health personnel, including 250 women</p> <p>4.3.3- 250 birth attendants and 100 community health personnel</p> <p>5.1.1- Financial management and accounting procedures manuals</p> <p>5.1.2.1- Annual Work Plan and Budget(AWPB) no later than January each year</p> <p>5.1.2.2- Audit report no later than six months after end of audited year</p> <p>5.1.2.3- Quarterly activity reports are produced regularly</p>	<p>Project activity reports, Bank monitoring and supervision mission report, mid-term review report, completion report, audit report and report on studies</p>	<p>Risks</p> <ul style="list-style-type: none"> - Delays and weaknesses in the procurement process; - Fiduciary risk deemed high for the country and implementing entity <p>Mitigative Measures</p> <ul style="list-style-type: none"> - A procurement specialist will be recruited from project start-up, Bank monitoring and training will be strengthened and the number of contracts reduced. - Recruitment of qualified personnel (AFO and Accountant) dedicated to financial management from project start-up; - Adaptation of administrative, accounting and financial procedures; procurement of appropriate accounting software and recruitment of a private external auditor regionally. - Adequate training of DOPSSP staff in Bank rules and best practices in procurement, disbursement and financial management
KEY ACTIVITIES	<p>Component A: Pastoral Facilities and Joint Management of Pastoral Resources</p> <ul style="list-style-type: none"> • Building and rehabilitation of pastoral water point infrastructure (wells, ponds) and marking of 500 km of transhumance corridors and development of livestock schemes. • Building of six centres to provide stockbreeders access to certain essential services (storage and supply of food and veterinary products, water, health and school) • Building of six milk processing units for women <p>Component B: Capacity Building of Partners</p> <ul style="list-style-type: none"> • Improving the technical and physical capacity of MERA structures responsible for managing, collecting, monitoring and disseminating information on pastoralism • Setting up and supporting a community teaching mechanism for nomadic children, drawing on previous experiences in the country and elsewhere • Training of stockbreeders’ organisations and structures for conflict resolution and management of pastoral facilities as well as providers of basic services to stockbreeders <p>Component C: Project Coordination and Management: Administrative, accounting and financial management, monitoring/evaluation and coordination of project activities</p>			<p>Inputs by Component</p> <p>Financing of project from ADF 12 resources to the tune of UA 10.4 million (50% loan and 50% grant)</p> <p>Government contribution in kind (salaries, office rental, operating costs) of UA 1.04 million</p> <p>Breakdown of ADF Cost by Component:</p> <p>Comp. A: UA 9.154 million (80.02%)</p> <p>Comp. B: UA 1.153 million (10.08%)</p> <p>Comp. C: UA 1.133 million (9.90%)</p>	

Implementation Schedule

ID	Task Name	Start	Finish	Timeline											
				2011	2012	2013	2014	2015	2016	2017	2018				
1	Negotiation and signature of grant/loan agreements	Tue 5/10/11	Thu 7/28/11												
2	Negotiations	Tue 5/10/11	Fri 5/13/11												
3	Loan approval	Wed 6/29/11	Wed 6/29/11												
4	Loan agreement signature	Thu 7/28/11	Thu 7/28/11												
5	Project start-up phase	Wed 6/29/11	Fri 3/30/12												
6	Fulfillment of conditions precedent to first disbursement	Wed 6/29/11	Fri 9/30/11												
7	First disbursement	Mon 10/3/11	Fri 10/14/11												
8	Project launching	Mon 11/21/11	Wed 11/30/11												
9	Preparation, validation of procedures manual and project's baseline situation	Wed 11/30/11	Fri 3/30/12												
10	Mobilisation of technical assistance	Tue 11/1/11	Fri 6/29/12												
11	Signing of partnership agreements with technical departments	Tue 11/1/11	Fri 12/30/11												
12	Recruitment of NGOs social mobilisation and mediation	Mon 1/2/12	Fri 4/27/12												
13	Recruitment of IC for technical studies and BDs	Mon 1/2/12	Fri 3/30/12												
14	Technical studies and definition of social accords with the beneficiaries	Fri 3/30/12	Fri 6/29/12												
15	Preparation and validation of BDs	Fri 6/1/12	Fri 6/29/12												
16	Bid invitation and recruitment of contractors	Fri 6/29/12	Fri 4/29/16												
17	Bid invitation to signing of contracts	Fri 6/29/12	Mon 12/31/12												
18	Works implementation	Tue 1/1/13	Thu 12/31/15												
19	Provisional reception of works	Mon 6/3/13	Thu 12/31/15												
20	Final reception of works	Mon 6/2/14	Fri 4/29/16												
21	Coordination-monitoring-evaluation	Mon 4/4/11	Thu 6/30/16												
22	Submission of PTBA and the project annual report	Mon 1/2/12	Fri 1/1/16												
28	External monitoring mission and CTO meeting	Fri 6/29/12	Tue 5/31/16												
38	Steering Committee	Tue 1/1/13	Fri 1/1/16												
43	Half-yearly supervision missions	Mon 4/4/11	Mon 4/18/16												
55	Annual audit	Fri 12/30/11	Thu 6/30/16												
63	Mid-term evaluation	Mon 6/2/14	Mon 6/30/14												
64	Project completion report	Mon 4/4/16	Fri 4/29/16												

REPORT AND RECOMMENDATION BY BANK GROUP MANAGEMENT TO THE BOARD OF DIRECTORS CONCERNING A PROPOSED LOAN/GRANT TO THE REPUBLIC OF CHAD TO FINANCE THE RURAL, PASTORAL AND TRANSHUMANCE INFRASTRUCTURE PROJECT

Management hereby submits the following report and recommendation concerning a proposal to grant a loan of *Five Million Two Hundred Thousand Units of Account (UA 5,200,000)* and award a grant of *Five Million Two Hundred Thousand Units of Account (UA 5,200,000)* to the Republic of Chad to finance the Rural, Pastoral and Transhumance Infrastructure Project, in favour of transhumant livestock herders and sedentary agro-pastoralists in the project area.

I. STRATEGIC THRUST AND RATIONALE

1.1. Project Linkages with Country Strategy and Objectives

1.1.1 PIRPT is consistent with the National Poverty Reduction Strategy (NPRS) prepared by the Chadian Government in 2003, the second phase of which was implemented through PRSP II 2008-2011. Three out of the five priority thrusts of PRSP II involve the rural sector, and are as follows: (i) creating a conducive environment for robust and diversified growth; (ii) tapping the rural development potential; and (iii) developing infrastructure. The PIRPT intervention is also aligned with the livestock sector strategy set forth in the National Livestock Development Strategy 2010-2017, the overall goal of which is to sustainably increase livestock production. PIRPT is also in step with the following priority areas of PNDE 2010-2017: (i) building on the achievements accomplished in animal health; (ii) better utilisation of pastoral resources; and (iii) gradual modernisation of stockbreeding and processing methods.

1.1.2 To support Chad's NPRS, the Bank prepared the Results-Based Country Strategy Paper (RBCSP) 2010-2014, which has the following pillars: (i) promoting good governance in the public sector; and (ii) developing basic infrastructure to create the conditions for sustained growth and diversification of the country's economy. The rural infrastructure project planned in 2011 is consistent with the second pillar of the Bank's assistance strategy for Chad and has been identified among the operations of RBCSP 2010-2014.

1.2. Rationale for Bank's Involvement

1.2.1 Chad is endowed with significant natural resources consisting of vast tracts of arable land and natural grazing land, and a herd strength of over 20 million animals. Despite this potential, about 55% of the population lives below the poverty line (USD 1.25 at 2005 prices), while 45% is affected by temporary or chronic food insecurity. For three decades, the country's socio-economic indicators have been among the lowest in sub-Saharan Africa¹. Livestock rearing in Chad, which is the livelihood of nearly 40% of the population, is dominated by transhumance and based on herd mobility (about 80% of the herd). However, with the recurrent drought in the Sahel, the shortage and early drying up of livestock watering points leads herdsmen to depart early from their land to cropped areas even before the harvest season, along the entire transit and parking route. At times, this creates deadly conflicts between sedentary agro-pastoralists and pastoralists, because of the destruction of fields not

¹ Chad is ranked 163rd out of the 169 countries in the Global Human Development Report, with a Human Development Index (HDI) below the average for Sub-Saharan Africa.

yet harvested. Furthermore, this mobility-driven existence does not foster adequate access of the transhumant population to traditional basic services that are not adapted to such itinerant lifestyle. PIRPT will help to improve access to pastoral infrastructure, basic social services as well as better governance in managing natural resources.

1.2.2 The Bank has several comparative advantages that make it an institution capable of supporting this project. These include notably: (i) its sound knowledge of the rural sector, in general, and the livestock sector, in particular, given the nature and financial volume of its project portfolio in the country; (ii) the fact that under the Fragile States Facility, the Bank financed a study on transhumance in Chad. This study helped to improve knowledge of the various conflict-generating transhumance routes and the priority needs of the transhumant livestock sector; and (iii) the existence of a medium-term strategy for the agricultural sector, with emphasis on the development of rural infrastructure and natural resource management. It is also worth mentioning the availability of an ADF 12 financial instrument for the socio-economic development of Regional Member Countries (RMCs).

1.3. Donor Coordination

1.3.1 Official Development Assistance (ODA) is coordinated by the Ministry of Economy and Planning (MEP), which acts as an interface between the Chadian Government and donors, through the DGREP. With regard to the rural development sector, the successive roundtable meetings of 1998 led to the formulation of the PIDR (Rural Development Intervention Programme) and the establishment of the Sector Consultative Monitoring Mechanism on Rural Development (MSCSDR). Currently, there is no formal mechanism for regular dialogue between rural sector partners. However, during the design of PIRPT, regular consultations were held with rural sector donors and particularly with those of the livestock sub-sector. To pursue this collaboration, donors will be invited to participate in the meetings of the operational technical committee, which will be the consultative and information exchange body for this project. Table 1.3 below gives the current status of aid in the livestock sector.

Table 1.3
Aid Coordination

Sector/Sub-Sector		GDP	Exports	Labour Force			
Rural Development/Livestock		14%	54%	40% (2007)			
Stakeholders – Annual Public Expenditure in the Rural Sector in UA (2005-2010 average)							
Government	AFD	ADB	IFAD	EU	ABEDA	OPEC	OTHERS
4%	29%	22%	14%	11%	10%	7%	3%
3 132 426	22 710 091	17 228 345	10 963 492	8 614 173	7 831 066	5 481 746	2 349 320
Level of Aid Coordination							
Existence of Thematic Working Groups						NO	
Existence of a comprehensive sector programme						YES	

II. PROJECT DESCRIPTION

2.1. Project Components

2.1.1 The project will hinge on the following three components: (i) pastoral facilities and joint management of pastoral resources; (ii) strengthening the capacity of transhumant livestock stakeholders; and (iii) coordinating project management. The measures planned for the different project components are outlined in the table below.

Table 2.1
Project Components

Component Title	Cost (UA million)	Component Description
Component A: Pastoral Facilities and Joint Management of Pastoral Resources	9.154	<ul style="list-style-type: none"> - Construction of 70 new wells and 30 ponds, rehabilitation of 40 old wells and 10 boreholes; - Marking of 500 km of transhumance corridors; - Development of 10 livestock schemes; - Reforestation of 1,000 ha on schemes; - Building of six service centres for stockbreeders, including: one mixed product storeroom, one vaccination pen, one clinic, one school and one water point; - Building of 6 livestock product (milk, meat) processing and conservation units for women.
Component B: Capacity Building of Transhumant Livestock Actors	1.153	<ul style="list-style-type: none"> - Technical support to MERA pastoralism steering and monitoring structures (rendering operational 10 SIPSA and PROPANAT grazing land observation sites, technical, physical and logistic support to DOPSSP, support for the dissemination of a bi-monthly newsletter and radio programmes on pastoral resource management, training of DOPSSP staff in management of pastoral resources and organisations); - Training of 1,000 members of stockbreeders' organisations, of whom 50% women in management of livestock facilities, conflict resolution, gender issues, HIV/AIDS, environment and climate change, literacy, etc.; - Designing a community programme for educating nomadic children (training of community teachers, definition of flexible schedules, etc.); - Training of 250 birth attendants and 100 community health workers, 100 livestock auxiliaries, of whom 30% women and 500 animal health workers, including 250 women.
Component C: Project Coordination and Management	1.133	<ul style="list-style-type: none"> - Implementation, coordination and monitoring/evaluation of project activities; - Project administrative/financial management and procurement (goods, works and services).

2.2. *Technical Solutions Retained and Other Alternatives Explored*

2.2.1 The technical solutions chosen are based on criteria and standards to ensure the sustainability of investments and proper ownership by the beneficiaries, namely: (i) drawing lessons from earlier interventions in the country relating to pastoral infrastructure and access to basic services by the nomadic population; (ii) involving stakeholders (users and supervisory agencies) in selecting the types and location of the infrastructure to put in place; (iii) opting for technical alternatives that can be easily implemented by local contractors and are simple for the users to manage and maintain; and (iv) ensuring that the environmental footprint of project outputs are minimised.

2.2.2 Thus, with the exception of eleven (11) existing boreholes that need to be rehabilitated, preference will be given to works to replace traditional wells, rehabilitate old wells in adequate numbers and ensure that they are interlinked. The deepening of small- and medium-sized ponds instead of large ones will also be adopted. The delivery of basic social services will draw on the experience of the Swiss Cooperation Agency in Chad in that area as well as the programme of the Ministry of National Education for nomadic education. A teacher training programme for nomadic schools is underway at the Chad Teacher Training College. In this regard, the education of nomadic children will be conducted as follows: awareness raising, negotiation with the transhumant communities and adoption of a curriculum, identification of children between the ages of 6 and 11 years, definition of terms, recruitment and training of teachers from among transhumant groups, drawing up of schedules tailored to suit transhumant communities, procurement of tents and office equipment, and catering for teachers by the communities.

Table 2.2
Alternatives Considered and Reasons for Rejection

Alternative Considered	Brief Description	Reason for Rejection
Construction of new boreholes	Construction of high flow boreholes	- High recurrent costs, equipment maintenance problems and excessive use of groundwater; - Risk of using water for farming purposes and therefore of conflict; attraction of large numbers of animals with possibility of degradation of pastoral resources.
Large ponds	Construction of ponds storing large volumes of water	- Possibility of using ponds for farming purposes with sedentarisation, risk of conflicts; concentration of large numbers of livestock with harmful effects on the environment; risk of water-borne diseases.
Electro-mechanical equipment for service centres	Generator for power supply to service centres	- High recurrent costs (fuel, spare parts).

2.3. Project Type

2.3.1 PIRPT is an investment operation that will be managed independently. The budget support will be used only when Chad's national procurement and financial management systems are deemed acceptable by the Bank. With the support of partners, the country is in the process of upgrading those systems. In this regard, ORPF conducted a study on Chad's national competitive bidding procedures. The results have not yet been published.

2.4. Project Cost and Financing Arrangements

2.4.1 The resources allocated by the Bank for implementing PIRPT are from the country allocation under ADF 12 and amount to UA 10.40 million. Since Chad has become a moderately indebted country, the ADF financing will be partly a grant (50%) and partly a loan (50%). The Government contribution will be in kind and is estimated at 10% of ADF resources, or UA 1.04 million (comprising the estimated cost of civil servant salaries, the rental value of the project premises at national and regional level, and various operating costs). Tables 2.3 to 2.6 below provide a summary of project costs.

Table 2.3
Estimated Cost by Component (UA million)

Components	Foreign Exchange	Local Currency	Total Cost	% F.E.
Component A: Pastoral Facilities and Joint Management of Pastoral Resources	5.811	2.591	8.402	69.16
Component B: Capacity Building	0.244	0.804	1.048	23.25
Component C: Project Management		1.069	1.069	-
Total Baseline Cost	6.055	4.465	10.520	57.55
Physical Contingencies	0.178	0.259	0.437	40.67
Price Escalation	0.222	0.261	0.483	46.01
Total Cost	6.454	4.986	11.440	56.42

Table 2.4
Sources of Financing (UA million)

Sources of Financing	Foreign Exchange	Local Currency	Total Cost	% F.E.
Government Contribution (10%)	0	1.040	1.040	0%
ADF Loan	3.227	1.973	5.200	62.06
ADF Grant	3.227	1.973	5.200	62.06
Total Project Cost	6.454	4.986	11.440	56.42

Table 2.5
Project Cost by Expenditure Category (UA million)

Expenditure Category	Foreign Exchange			Local Currency			Total Cost			% F.E.	
	ADF Loan	ADF Grant	GVT	ADF Loan	ADF Grant	GVT	ADF Loan	ADF Grant	GVT	ADF Loan	ADF Grant
Works	3.211	2.081	0	0.803	0.520	0	4.014	2.601	0	80	80
Goods	0.244	0.249	0	0.048	0.004	0	0.292	0.253	0	83	98
Services	0	0.270	0	0.460	0.689	0	0.460	0.959	0	0-	28
Operating Cost	0	0	0	0	0.490	0.514	0	0.490	0.514	0	0
Staff	0	0	0	0	0.506	0.431	0	0.506	0.431	0	0
Total Baseline Cost	3.455	2.600	0	1.311	2.209	0.945	4.766	4.809	0.945	72	54
Physical Contingencies	0.100	0.073	0	0.100	0.113	0.050	0.200	0.227	0.050	50	50
Price Escalation	0.119	0.100	0	0.120	0.100	0.040	0.235	0.164	0.045	50	50
Total ADF Cost	3.674	2.773	0	1.531	2.423	1.040	5.200	5.200	1.040	71	54

Table 2.6
Expenditure Schedule by Component (UA million)

Component	2 011	2012	2013	2014	2015	2016
Component A: Pastoral Facilities and Joint Management of Pastoral Resources	0.078	0.335	3.288	3.504	1.858	0.094
Component B: Capacity Building	0.001	0.566	0.257	0.168	0.088	0.03
Component C: Project Management	0.057	0.249	0.229	0.242	0.229	0.127
Total Project Cost	0.136	1.150	3.774	3.914	2.175	0.251

2.5. Project Target Area and Beneficiaries

2.5.1 The project will target the dwelling and stationing areas of transhumant herders in Western Chad. It will operate in the Lac, Kanem, Hadjer Lamis, Chari Baguirmi, Mayo-Kebbi East and West, Tandjilé, Logone East and West, Moyen Chari and Mandoul regions. The rural population consisting of transhumant herders and sedentary agro-pastoralists account for nearly 80% of the total population of the targeted areas, or close to 6.7 million inhabitants, of whom 52% women. Two out of three years, there is food production deficit. For three decades, the country's socio-economic indicators have been among the lowest in sub-Saharan Africa². The rural population is most vulnerable to poverty. The transhumant herder household income is estimated at CFAF 365³ daily per person.

2.5.2 The project will directly affect the transhumant population consisting of 387,000 inhabitants, or about 55,400 households. It will help to improve access to animal health

² Chad is ranked 163rd out of the 169 countries in the Global Human Development Report, with a Human Development Index (HDI) below the average for Sub-Saharan Africa.

³ The income estimate was calculated based on the sale of 4 bulls at a price of CFAF 200,000 for a household of six persons, with an average herd of 40 cattle and an annual growth rate of 10%.

services, livestock watering and grazing land, nomadic children's access to education, access to maternal and child health services, methods of conservation and processing of livestock products, particularly milk, which is a primary source of herder household income. The activities to support the direct beneficiaries of the infrastructure in terms of consultation and training will strengthen their organisational and technical capacity for proper handling of issues affecting them.

2.6 *Participatory Process for Project Identification, Design and Implementation*

2.6.1 The different stakeholders involved in the project participated in all stages of project design, including the line ministries responsible for livestock, water, environment, education, health and family; pastoral interest organisations, NGOs and herders' rights associations (ATNV, ACTT, AMECET, AFPAT, CASSET); local administrative and technical authorities, and donors (AFD, EU, FAO, Swiss Cooperation Agency, IFAD). The field visits conducted at different stages of the project made it possible to meet herder families in their settlements. Extensive consultations were held with the different actors who participated in identifying constraints, solutions adopted and arrangements for implementing the project. In the interest of project ownership and sustainability of interventions, the principle of stakeholder participation will be maintained during project implementation through the setting up by MERA of an Operational Technical Committee (CTO), which will serve as a project advisory body.

2.6.2 From project start-up, DOPSSP will mobilise technical assistance in social engineering to conduct information, consultation and training sessions for project beneficiaries, thus allowing them to be fully involved in project implementation. Each facility will be set up in compliance with the grassroots governance criteria defined below: consensus among beneficiaries on the type of infrastructure and its location; agreement on the management arrangements; respect for the environment; synergy with other operations and approval of local administrative and traditional authorities.

2.7 *Bank Group Experience and Lessons Reflected in Project Design*

2.7.1 The project design drew on lessons from previous and on-going Bank operations in Chad contained in the PVERS, PCVZS and PDRPL completion reports, the PASEP mission supervision and mid-term review reports as well as the last portfolio review conducted in 2009. Although improvements are observed, projects implemented in the country are beset with difficulties stemming from: (i) the slow procurement process; (ii) irregular payment of the counterpart contribution; and (iii) poor knowledge of Bank rules and procedures by some bid evaluation committees

2.7.2 These weaknesses will be addressed during the implementation of this project, notably through: (i) capacity building in procurement and financial management, and support to DOPSSP in terms of providing it with personnel with the requisite expertise; (ii) strict adherence to the procurement plan; (iii) semi-annual supervision and close supervision by TDFO; (iv) reducing the number of contracts to a bare minimum; and (v) determining the government's contribution in kind, which will involve upgrading the salaries of officials assigned to the project, the rental value of offices and premises made available to the project and some operating costs.

2.7.3 Technically, the analysis of past experiences of various pastoral operations served to draw lessons that guided the informed choices made regarding PIRPT activities and implementation strategies. Consequently: (i) non-confrontational mobility is the key to success in developing pastoral and agro-pastoral stockbreeding as opposed to the sedentary mode of production; (ii) unlike large hydraulic structures (boreholes, large ponds), proper interlinking of pastoral areas by a large number of wells (manual or animal-operated) and small- and medium-sized ponds may be more effective in reducing conflicts, allowing the effective use of pastoral resources and simpler management and maintenance; (iii) socio-economic support measures are necessary to reflect the positive effects of interventions in pastoral infrastructure; (iv) consultation with other stakeholders is crucial to choosing the type, location and terms of managing the infrastructure envisaged; (v) establishment and capacity building of local institutions involved in managing pastoral resources, based on the principles of inclusive participation, equality and subsidiarity would allow for enhanced conflict settlement.

2.8 *Key Performance Indicators*

2.8.1 In addition to the outputs resulting from implementing activities that are described in the project components table, the key project indicators consist of impact and effect (output) indicators. These include:

- *For impact indicators:* (i) the daily income of the transhumant herder, which will increase from CFAF 365 to CFAF 475 CFAF/daily; while (ii) the length of conflict-generating transhumance routes will reduce from 500 km to 250 km.
- *For outcome indicators:* (i) the livestock dairy production will increase from 1.5 l to 3 l/cow/day; (ii) the dry season livestock mortality rate will drop from 30% to 10%; (iii) the rate of access of nomadic children to education will rise from 10% to 50%; while (iv) the infant mortality and the maternal death rates will drop from 191/1,000 to 67/1,000 and 1,099/1,000 to 205/1,000, respectively.

2.8.2 Project monitoring/evaluation will be conducted based on a results-based management approach, which allows evaluation of the level of achievement of project results, analysis of forecast deviations and drawing of lessons on strengths and weaknesses. The project outcomes must be widely disseminated to various project stakeholders, especially policy makers, so that necessary adjustments are made on time to improve project implementation. Monitoring of project activities and outputs will be handled by DOPSSP Monitoring/Evaluation Officer. The MERA Statistics Department will be responsible for external monitoring, in liaison with MEP, through a Memorandum of Understanding. To this end, it will conduct baseline studies, mid-term review and final evaluation of the project, in addition to monitoring missions every six months. Officers of this Department as well as experts from DOPSSP, MERH and MEP will be trained in gender so that all indicators of project outcomes are gender disaggregated.

III. PROJECT FEASIBILITY

3.1. Economic and Financial Performance

Table 3.1
Key Economic and Financial Data

IRR and NPV (baseline scenario)	20% (CFAF 5 billion)
ERR (baseline scenario)	24%

NB: Detailed calculations are presented in Annex B6

3.1.1 The project has several financial and socio-economic benefits. Besides the fact that it will improve livestock productivity through optimum use of pastoral space and better animal care, PIRPT will help to reduce animal mortality and hence losses for pastoralists. With the setting up of infrastructure for the processing of dairy and other livestock products, the project will create opportunities for pastoralists to increase their income and thus improve their living conditions. The same will apply to sedentary farmers whose farms are often destroyed by the animals.

3.1.2 To calculate the IRR and ERR, incomes were determined based on the following assumptions: the livestock exploitation rate is 18%; the value of marketable livestock on hoof, or live livestock; marketable production exported is 55% and 75% for sheep and camels, respectively, while the other species are sold on the local market. The project impact will be felt from the third year. Prices are constant.

3.1.3 *Financial Performance:* The project has an internal rate of return (IRR) of 20% and a net present value (NPV) of CFAF 5 billion at 12% over 20 years. The IRR is sensitive to variations in cost, income and expenses incurred. With a 10% increase in income, the IRR is 24%. It drops to 17% if the income decreases by 10%. With a 10% decrease in expenses, the IRR reaches 26%. *Economic Profitability:* the economic rate of return is 24% while the NPV is CFAF 6.7 billion. The sensitivity analysis shows that a 10% increase in income generated raises the ERR to 26%. Similarly, with a 10% drop in expenses, the ERR drops to 23%.

3.2. *Environmental and Social Impact*

3.2.1 At the environmental level, the project is classified under Category 2. Given the nature of works to be undertaken (pastoral wells, small ponds, livestock schemes, basic infrastructure), potential direct and indirect impact could be generated, but is manageable. In compliance with the requirements of Bank Policy on the Environment and in keeping with the environmental policy and laws in force in Chad, an Environmental and Social Management Plan (ESMP) amounting to EUR 225,000 will be implemented. The ESMP summary is presented in Annex B8 of the technical annexes.

3.2.2 The construction of pastoral water points will not significantly increase the use of groundwater. The pastoral wells to be provided are either rehabilitated old wells or to replace traditional wells. They will be located mainly in the western part of Chad, which is a sedimentary area. The deepening of ponds will have a positive effect on recharging groundwater. However, the storage of surface water could lead to the proliferation of waterborne diseases. To mitigate this risk, the project makes provision for digging small ponds, educating herders on the use of surface water, animal health and communicable diseases. Project implementation will have significant positive effects on the environment. In this regard, there could be reduction of the severe soil degradation from overgrazing through better interlinking of water points. Indeed, it is clear that transhumant herders tend to stay in areas with fairly easy access to water for animals, leading to a concentration of the animals. This overgrazing has adverse effects on grassland recovery, erosion and the environment as a

whole. The ESMP has sub-plans, including the mitigative measures management plan, the monitoring plan, the capacity building plan and the climate risk integration plan (climate proofing or validation of climate risk), including the provisional project carbon balance.

3.2.3 The project contributes to the fight against climate change. A key activity will be to raise awareness for improving the level of livestock exploitation, which is currently at 18%, with proper nutrition and health care, selection to remove unproductive animals and reduction of the duration of animal exploitation, which is currently lengthy (5 to 6 years). Added to this, there will be: (i) reforestation and planting of biological hedges along the transhumance corridors as well as seeding of degraded grazing areas; (ii) establishment of pastoral schemes whose management will promote rejuvenation of the vegetation cover (favourable to carbon sequestration); and (iii) setting up of a methane digester to produce energy (biogas) on livestock schemes.

Gender

3.2.4 Gender aspects are integrated in a cross-cutting manner into project activities which, beyond easing social tensions, constitutes a response to the specific constraints facing women and youth in transhumant communities. All project activities and, in particular, management structures will respect the principle of gender equity.

3.2.5 Women in transhumant communities are responsible for fetching water and firewood as well as setting up and dismantling the camp during transhumance. However, because of the distance between water points and health facilities, these tasks affect the women, especially during pregnancy and after childbirth, making mortality during childbirth very high. They are also responsible for the sale and supply of essential commodities. The distance from markets makes such activities tedious and costly.

3.2.6 The project will have a positive impact on women and children, including: (i) a reduced workload associated with water supply; (ii) accessibility to maternal and child health, with the training of traditional birth attendants and community health workers; (iii) improved income through enhanced livestock productivity, construction of six livestock processing units (milk, meat) and training of women; (iv) improved supply of essential commodities and marketing of products with the construction of service centres along the transhumance routes; and (v) improved access by women to decision-making bodies.

Social

3.2.7 PIRPT will have a positive social impact on the transhumant herders as well as on agro-pastoralists and sedentary farmers.

3.2.8 One of the impediments to mobility lies in the unsuitability of services (animal health, maternal and child health, education) provided by conventional structures. It is observed especially that transhumant herders are extremely vulnerable to certain diseases⁴. The development by the project of service centres linked to the programme to build the capacity of midwives, community health workers (CSWs) and animal health workers, and implementation of the education strategy for nomadic children will help to improve access by

⁴ Often cited are communicable diseases such as conjunctivitis, pneumonia, malaria, water-borne diseases, etc., and those transmitted from animals such as tuberculosis, brucellosis, anthrax, viral fevers, etc. Source: Towards Securing Pastoral Systems: Issues and Possible Answers – Report (Fr.)

animals and humans to basic social services. The 250 midwives and 100 CSWs to be trained under the project will liaise with the Ministry of Health in the area of IEC on STDs/AIDS and other communicable diseases.

3.2.9 The choice of coordinated installation of water points and signposts along transhumance corridors as well as strengthening the capacity of the management/support structures of pastoral schemes and mediation bodies will help to ease the social tensions between pastoral resource users. In addition, the establishment of permanent structures (water points, storeroom, milk conservation units, clinics, vaccination pen) along the transhumance corridors will promote the development of other market- and transport-related services, and create opportunities for the semi-sedentarisation of transhumant herders.

3.2.10 The project does not involve the displacement or resettlement of people in the project area.

IV. IMPLEMENTATION

4.1. Implementation Arrangements

Project Steering and Implementation Bodies

4.1.1 Steering Committee: The project steering mechanism will be aligned with that of the MSCSDR, which has steering bodies at the national, regional, departmental and local levels, as well as a technical monitoring committee (CTS) and a permanent unit. The CTS of the MSCSDR, which comprises Secretaries-General of Ministries and representatives of civil society, oversees all rural development sector programmes and projects. It will meet once a year and will be responsible for reviewing and approving the annual report and annual work plan and budget (AWPB) prepared by the project.

Project Coordination and Management

4.1.2 The Ministry of Livestock and Animal Resources (MERA) will be responsible for project technical supervision. Management and coordination of project activities will be entrusted to the Department for Pastoral Organisation and Securing Pastoral Systems (DOPSSP), which has the necessary powers, pursuant to Decree no.1436/PR/PM/MERA/2009 of 05/11/09 on the MERA organisational structure.

4.1.3 DOPSSP is under the General Directorate of Livestock Development (DGDE), which is attached to the MERA General Secretariat. It is headed by a director and has an experienced technical team in the area of livestock. The routine running of the project will be carried out by an assistant, under the responsibility of DOPSSP Director. The two project components will be coordinated by the division managers in charge of facilities and capacity building of livestock organisations. The project will cover the travel expenses and allowances of officers of MERA and the other line ministries involved in implementing project activities, in accordance with the regulations in force in Chad. To allow DOPSSP to handle project financial management and procurement in compliance with Bank procedures and monitoring/evaluation according to a results-based management approach, its human resource capacity will be strengthened with an Administrative and Financial Officer, a Monitoring/Evaluation Officer, a Procurement Specialist and an Accountant.

4.1.4 MERA will set up an operational technical committee (CTO), comprising representatives of technical departments, stockbreeders' organisations, NGOs, projects and programmes/technical and financial partners involved in the pastoral sector. At least 30% of CTO (which is a consultative body) should be women. DOPSSP will be assisted at the regional level by the Regional Livestock Delegations (DRE), which will be strengthened with stockraising adviser/supervisors assigned by MERA. DOPSSP will use all structures of the line ministries, including MERA and the other ministries. In addition to the above-mentioned technical departments, the Department will also use private service providers for project implementation.

Procurement Arrangements

4.1.5 In 2010, the Bank embarked on an evaluation of Chad's national procurement system. This exercise is not yet completed. However, the Government, with the support of its development partners including the Bank (through PARG I), has begun to reform its national procurement system. This reform resulted in the introduction of a new operational framework for public procurement in December 2003. There are still texts to produce before full application of the new code. Despite this reform, the Bank's experience with the performance of projects financed in the country shows that there are still weaknesses in operationalizing the current system. The Government is aware of these issues and, with the Bank's support, is planning to finalise the reform measures taken, as part of the Governance Reform Support Programme (Phase I).

4.1.6 In view of the weaknesses identified above, all procurement of goods, works and consultancy services financed by ADF will be in accordance with the its *Rules and Procedures* (revised in May 2008) for *Procurement of Goods and Works* or, as appropriate, *Rules and Procedures for the Use of Consultants*, using Bank Standard Bidding Documents. Full details of the procurement and disbursement arrangements are given in Annex B5 of the technical annexes of the report.

4.1.7 DOPSSP will be responsible for managing the procurement process. Plans have been made to recruit a procurement specialist for four years to support the Procurement Department. In addition, DOPSSP will receive training in the Bank's procurement rules and procedures during project launching as well as technical assistance support (project management) in works procurement. With Bank support, the Government has prepared a procurement plan covering an initial period of 18 months. The project will update the plan annually or as needed, but always over a period of 18 months for the duration of project implementation. Any proposed revision of the procurement plan will be submitted to the Bank for prior approval.

Financial Management and Audit Arrangements

4.1.8 In view of the significant weaknesses identified by the 2009 PEFA and Bank guidelines, practices and risk tolerance, coupled with other factors such as the perceived levels of governance and corruption, the approach adopted for PIRPT is not based on the Public Finance Management System. It is based on the Bank's implementation and monitoring procedures, albeit drawing on the national system (mainly through a national executing agency strengthened with contract staff). Attached to the DGDE of the MERA General Secretariat, DOPSSP will be responsible for managing specific financial management activities. It will be reinforced by a qualified and experienced Accountant and an Administrative and Financial Officer. DOPSSP will keep separate project accounts in accordance with generally accepted accounting principles and International Accounting

Standards (IAS), or national standards compliant in all material respects, and using appropriate accounting software to be procured. DOPSSP will prepare a programme and an annual budget for implementation of project activities, which will be submitted to the MSCSDR Technical Monitoring Committee (CTS) for approval, and thereafter to the Bank. A specific Accounting, Administrative and Financial Procedures Manual will be adapted for the project, drawing on manuals of other Bank-financed projects. The project will prepare quarterly progress reports as required by the Bank, as well as financial statements, according to International Financial Reporting Standards or national standards compliant in all material respects. The project will undergo financial management supervision in the form of off-site reviews or as part of Bank supervision missions.

4.1.9 As required by the Bank, the project's financial statements will be audited annually by a private external auditing firm recruited internationally. Project audit will be conducted according to the Terms of Reference (TOR) approved by the Bank. Additionally, the audit will provide assurance that the works, goods and services financed by the project have been procured in accordance with the Bank's procurement rules and procedures. The audit report will be accompanied by a letter to Management, and will be forwarded to the Bank no later than six (6) months after the end of the fiscal year concerned. The first financial statements and project audit report will cover the period from project inception to 31 December 2012. Furthermore, the government oversight bodies have authority to conduct internal and external audits of DOPSSP, according to their respective mandates. Where necessary, the Bank will be interested in receiving copies of the reports of such public audits.

4.1.10 Subject to satisfactory implementation of the action plan provided in the technical annex and the adequate training of DOPSSP staff in Bank rules and best practices in procurement, disbursement and financial management, this financial management system will mitigate the overall fiduciary risk and allow: (i) the use of resources for the purposes intended and cost-effectively and efficiently; (ii) the preparation of true and reliable financial statements and the regular preparation of periodic financial reports; and (iii) the safeguarding of project assets.

Disbursement Arrangements

4.1.11 The disbursement methods to be used for components financed by the Bank are: (i) direct payment; and (ii) the revolving fund. The direct payment method will be used for the payment of suppliers under contract, while the revolving fund will be used to settle the operating costs incurred by DOPSSP under the project. Disbursements on the loan and grant will be made in conformity with the list of goods and services and the Bank's rules and procedures, as set out and applicable in the Disbursement Handbook. A *disbursement letter* will be reviewed during the negotiations and submitted to the Government upon approval of the project by the Bank. **Two (2) special accounts** to receive operating funds under the ADF grant and the ADB loan, respectively, will be opened in a commercial bank deemed acceptable to the Fund and held in local currency. The commercial bank shall make an irrevocable commitment in the form of a *comfort letter*, as described in the Bank's Disbursement Handbook. Each account will be replenished in conformity with the procedures of the Bank's Disbursement Handbook, based on a work programme and a budget estimate (extracted from the approved budget) for a period of six (6) months. The initial advance will be subject to fulfilment of all conditions precedent to first disbursement by the project. Each account will be replenished after satisfactory justification of the use of at least 50% of the previous deposit and of all previous payments, as well as submission of satisfactory audit reports due.

4.2. Monitoring

4.2.1 The project is to be implemented over five years. The Bank will field half-yearly supervision missions in addition to close procurement and financial management monitoring by TDFO experts. The table below provides a summary of the project timetable.

Project Activity Monitoring Table:

N	ACTIVITIES	INSTITUTIONS RESPONSIBLE	Deadline
1	Negotiations	Government/ADB	May 2011
2	Loan approval	ADB	June 2011
3	Signing of Loan Agreement	Government/ADB	July 2011
4.	Fulfilment of conditions precedent to first disbursement, of first activity plan and annual budget	Government	November 2011
5	Authorisation of first disbursement	Government/ADB	November 2011
6	Launching of project	Government/ADB	January 2012
7	Adaptation and validation of project procedures manuals	DOPSSP/ADB/GVT	March 2012
8	Signing of partnership agreements with technical departments	DOPSSP/Services	December 2011
9	Recruitment of NGOs for outreach and social mediation	DOPSSP	April 2012
10	Identification and prioritization of needs and definition of social pacts	DOPSSP/NGO/PO	June 2012
11	Recruitment of main contractor for engineering studies and BD	DOPSSP	March 2012
12	Issuing of bid invitations	DOPSSP	June 2012
14	Performance of services	Contractors	December 2015
14	Mid-term review	Government/ADB	June 2014
15	Completion of activities	Government/ADB	June 2016
16	Project Completion Report	Government	June 2016

4.3. Governance

4.3.1 The governance issues identified in the livestock sector in Chad are linked to the weak project procurement and financial management capacity. This contributes significantly to delays in procurement, replenishment of the revolving fund and submission of project audit reports because of repeated reservations by the Bank on documents submitted to it for approval. The performance of Chad's Public Finance Management System is limited by a number of weaknesses (rated mostly D and C in the PEFA Report, 2009). With a Corruption Perception Index of 1.7 in 2010, Chad's performance in this area remains among the lowest in the world, according to Transparency International (171st out of 178 countries). It is worth noting that for a decade, Chad has benefitted from several public finance modernisation support programmes (in the form of budget and institutional support) which have had limited outcomes mainly because of the political instability stemming from the successive crises since 2006. The Public Finance Modernisation Action Plan (PAMFIP), supported in 2003-2004 by all PTFs and intended to reform public procurement and the Civil Service, is still the main reference framework of the public finance reform process. The Chadian Government is also engaged in reforming its procurement system, with the backing of donors including the Bank. As recommended by PEFA 2009, the Government still needs to develop a five-year public finance reform strategic plan, for a holistic view of the reform objectives and appropriate support by the donor community. At sector level, governance problems are caused by the unreliability – if not unavailability - of statistical data on livestock. With regard to updating the statistics of the livestock sector, it should be noted that the Bank is currently financing the livestock census, under the Fragile States Facility.

4.4. *Sustainability*

4.4.1 During all Bank missions, the Government underscored the priority nature of this project for food security and poverty reduction in Chad. This commitment was confirmed with the submission of the formal request for financing the operation. The institutional anchoring of the project in MERA structures, which exercise management prerogatives over pastoral activities, will guarantee ownership and sustainability of project achievements. Moreover, the involvement of the Ministries of Health and Education in implementing and delivering basic services to transhumant herders will facilitate the operationalisation of these components (training and monitoring of nomadic teachers, midwives and community health workers)

4.4.2 To ensure the sustainability of project structures, users of each structure will be organised into management and maintenance committees (CGE), and will decide jointly on management arrangements. The project will support the definition of statutes and the rules of procedure of the CGEs of the different types of structures. The capacity of the CGEs will also be strengthened to enable them to adequately support the management, repair and maintenance of the structures through contributions and other arrangements for covering the recurrent operating costs (payment of community education and educational materials, guarding of facilities, appliances and or miscellaneous equipment, transportation). For pastoral water points, there is still no pricing for the payment of water bills. However, since the water lifting mechanism is manual, recurrent costs are negligible and routine maintenance works (cleaning of wells, cleaning of water troughs and surroundings of water points) are currently carried out by the users. The project will draw on models for joint management of water points between transhumant and sedentary stockbreeders.

4.5. *Risk Management*

4.5.1 Chad is a fragile country that has experienced recurrent episodes of instability linked to political conflicts. The security risk persists, especially in some border areas east of the country. However, with the agreements signed with Sudan and the rebels, as well as the economic and social development policy implemented by the Government and supported by donors, there is a significant improvement in the security situation. The risk relating to the weak procurement capacity will be mitigated by the recruitment of a procurement specialist to support the project, strengthening close monitoring of the project procurement plan and regular support of the project team by TDFO, as well as streamlining the number of contracts. To reduce the fiduciary risk to an acceptable level for the Bank, the financial management arrangements proposed include recruiting qualified personnel dedicated to financial management, adapting administrative, accounting and financial procedures, procuring appropriate accounting software and recruiting a private external auditor regionally. In terms of the risk relating to the country's vulnerability to climate change, a climate risk management plan was formulated during the project appraisal phase and it gives the carbon balance for the project area. Activities to raise awareness of stockbreeders on management of pastoral resources (bushfire control, better use of livestock, reforestation and proper management of water resources) will help to mitigate the risks associated with climate change.

4.6. *Knowledge Building*

4.6.1 Several actions will be undertaken to improve access to information on pastoralism for users, decision-makers at the local and central level, and stockbreeder support structures. The information that will be generated from the project's monitoring/evaluation system will help to inform policy makers and donors, including the Bank, on: (i) livestock productivity in Chad; (ii) the level of poverty and food security among the rural population in general and transhumant herders in particular; and (iii) the impact of stockbreeding in Chad on climate change and natural resources, and the use of renewable energies in rural areas.

4.6.2 The training and information sessions planned by the project for the beneficiaries and technicians of the technical structures are another channel for exchanging/disseminating knowledge and reconciling it with local knowledge in pastoral resource management.

V. **LEGAL FRAMEWORK**

5.1. *Legal Instrument:* The financial instrument to be used is ADF 12.

5.2. *Conditions Associated with Bank's Intervention*

5.2.1 Effectiveness of the Grant Agreement shall be subject to its signature by the Donee and ADF. Effectiveness of the Loan Agreement shall be subject to the fulfilment by the Borrower, to the satisfaction of the Fund, of the provisions of Section 12.01 of the General Conditions.

5.2.2 First disbursement of ADF resources (loan and grant) shall be subject to fulfilment by the Donee/Borrower, to the satisfaction of the Fund, of the following conditions:

- (i) Provide the decrees appointing the Assistant Director of DOPSSP and the heads of Components A and B. The qualifications and professional experience of shortlisted/prospective experts must first be deemed acceptable by the Fund, on the basis of the proposal of three (3) résumés for each position (cf. § 4.1.3);
- (ii) Provide evidence of recruiting contract staff to strengthen DOPSSP, namely an Administrative and Financial Officer, a Monitoring/Evaluation Officer, a Procurement Specialist and an Accountant (through local requests for applications) and submit the Terms of Reference and results in advance to the Fund for approval (cf. § 4.1.3);
- (iii) Provide evidence of opening two (2) accounts in a bank deemed acceptable by ADF, to receive the ADF loan and grant with the names of two signatories for each account (DOPSSP Director and the Administrative and Financial Officer) and their substitutes (cf. § 4.1.11), and accompanied by the corresponding letters of comfort; and
- (iv) Provide a half-yearly work plan and budget approved beforehand by the Fund (cf. § 4.1.11).

5.2.3 *Other Conditions:* There are no other conditions.

5.3 *Compliance with Bank Policies:* This project complies with all applicable Bank policies.

5.4 *Recourse in Case of Harm Caused by Non-Compliance with Bank Policies:*

The African Development Bank Group has established the Independent Review Mechanism (IRM) to allow affected people to complain to the Bank if they believe that as a result of non-compliance with the Bank's policies and procedures, their rights or interests have been, or are likely to be adversely affected in a direct and material way. The IRM handles the complaint through problem-solving (mediation) and/or compliance review. Information about the IRM and requirements for submission of complaints are available at www.afdb.org/irm.

VI. RECOMMENDATION

Management recommends that the Board of Directors approve the proposed loan of *Five Million Two Hundred Thousand Units of Account (UA 5,200,000)* and a grant of *Five Million Two Hundred Thousand Units of Account (UA 5,200,000)* to the Republic of Chad for the purposes and subject to the conditions stipulated in this report.

Country Comparative Socio-Economic Indicators

Chad - Development Indicators				
Social Indicators	Chad		Africa	Developing Country
	1990	2009 *		
Area (000 Km ²)	1 284		30 323	80 976
Total Population (million)	6.1	11.2	1 008.4	5 628.5
Annual Population Growth (%)	3.2	2.6	2.3	1.3
Life Expectancy at Birth -Total (years)	51.2	49.0	55.7	66.9
Infant Mortality Rate (per 1,000)	126.3	128.3	80.0	49.9
Number of Doctors (per 100,000 inhabitants)	...	3.4	42.9	78.0
Births attended by Trained Health Personnel (%)	...	14.4	50.5	63.4
Rate of Imm. against Measles (% of children ages 12-23 mths)	32.0	23.0	74.0	81.7
Primary School Enrolment Rate (% gross)	54.4	82.7	100.2	106.8
Ratio of Girls to Boys in Primary Education (%)	44.6	70.2	90.9	100.0
Literacy Rate (% of population >15 years)	...	32.7	64.8	81.0
Access to Safe Water (% of population)	...	50.0	64.0	84.0
Access to Health Services (% of population)	5.0	9.0	38.5	54.6
HDI Value (Rank among 169 countries)	...	163.0	N/A	N/A
Human Poverty Index (HPI-1) (% of population)	...	53.1	34.7	...
Chad				
Macroeconomic Indicators	2000	2007	2008	2009**
GNI per capita, Atlas method (current USD)	180	490	540	610
GDP (million current dollars)	1 386	6 996	8 496	7 223
Real GDP Growth (% annual)	-0.5	0.1	0.3	-0.8
Real GDP Growth per Capita (% annual)	-3.8	-2.6	-2.3	-3.3
Gross Domestic Investment (% of GDP)	17.5	16.2	15.3	20.5
Inflation (% annual)	3.8	-9.0	8.3	10.5
Budget Balance (% of GDP)	-6.8	2.5	5.2	-10.8
Trade, External Debt & Financial Flows	2000	2007	2008	2009
Volume of Exports Variation (%)	5.5	-8.2	-14.1	2.6
Volume of Imports Variation (%)	2.9	-3.7	0.5	3.6
Terms of Trade Variation	-19.0	-1.9	5.7	-49.6
Balance of Trade (USD million)	-56.4	2123.0	2273.7	133.5
Balance of Trade (% of GDP)	-4.1	30.3	26.8	1.8
Current Account Balance (USD million)	-213.1	768.0	-875.1	-2296.9
Current Account Balance (% of GDP)	-15.4	-11.0	-10.3	-31.8
Debt Service (% of exports)	12.8	1.6	3.2	2.8
Total External Debt (% of GDP)	72.8	25.2	18.1	21.2
Total Net Financial Flows (USD million)	226.0	412.8	435.7	...
Net Official Development Assistance (USD million)	130.2	357.6	416.2	...
Net Direct Investment (USD million)	115.2	-69.5	233.6	461.8
International Reserves (months of imports)	2.1	2.0	2.5	1.3
Private Sector Development and Infrastructure	2000	2005	2009	2010
Time required to start a business (days)	...	75	75	75
Investor Protection Index (0-10)	...	4.0	4.0	3.3
Fixed-Line Telephone Subscribers (per 1,000 inhab.)	1.2	1.3	1.2	1.2
Internet Users (per 1,000 inhab.)	0.7	21.0	165.8	165.8
Paved Roads (% of total roads)
Freight carried by Rail (million ton-km)

Source: ADB Statistics Department, based on national and international sources.

* Most recent year.

Last Update: November 2010

Appendix II

Summary of ADB Portfolio in Chad as at April 2011

Portfolio of Ongoing Projects in Chad as at 1 April 2011

No.	Name of Project	Effectiveness Date	ADF Commitment (UA)	% Disb. ADB	Closing Date
Agricultural Sector					
1	Pastoral Livestock Support Project (PASEP) LOAN	17/09/2003	14,640,000	84.59	31/12/2011
	Pastoral Livestock Support Project (PASEP) GRANT	08/05/2003	930,000	56.14	31/12/2011
2	Natural Resource Management and Development Project (PGRN) LOAN	16/02/2006	4,270,000	28.45	31/12/2012
	Natural Resource Management and Development Project (PGRN) GRANT	19/05/2005	2,000,000	66.18	31/12/2012
3	Lake Chad Basin Sustainable Development Programme/MULTINATIONAL GRANT	19/12/2008	30,000,000	2.86	31/12/2015
4	Cotton Sector Support Project/MULTINATIONAL GRANT	08/02/2007	5,000,000	14.89	31/12/2013
5	Fisheries Development Project (PRODEPECHE) GRANT	23/11/2005	10,000,000	33.18	31/12/2012
Total Agricultural Sector			66,840,000	30.47	
Water and Sanitation Sector					
6	National Rural Water and Sanitation Programme (PNEAR) GRANT	27/10/2006	13,000,000	49.79	31/12/2011
Total Water and Sanitation Sector			13,000,000	49.79	
Transport Sector					
7	Transport Facilitation Programme/MULTINATIONAL GRANT	05/03/2008	19,000,000	20.7	31/12/2011
8	Koumra-Sahr Road Asphaltting Project, GRANT	02/06/2009	31,600,000	0.08	31/12/2013
Total Transport Sector			50,600,000	7.83	
Social Sector (Education and Health)					
9	Lake Chad Basin Initiative Support Project (PAIBLT) / MULTINATIONAL GRANT	10/11/2006	10,000,000	45.76	31/12/2011
10	Education Sector Support Project (PASE) DON	26/05/2004	2,400,000	48.11	31/12/2011
Total Social Sector			12,400,000	46.22	
Grand Total			142,840,000	25.57	
Total LOAN			18,910,000	71.92	
Total GRANT			123,930,000	18.5	

Appendix III

Major Related Projects Financed by the Bank and other Development Partners of Chad

PRSP Priority Thrusts	Sector Priority Thrusts	Project	Estimate in (CFAF)	Period	Stakeholders
1. Creating a conducive environment for robust and diversified growth 2. Tapping the rural development potential 3. Developing infrastructure	1. Strengthening achievements in animal health 2. More effective use of livestock resources	Pastoral Livestock System Support Project (PASEP)	24,969,224,900	2004-2011	ADB, OPEC ABEDA, Chad Govt
		Study on Transhumance	115,991,300	2010-2010	ADB
		Transhumance Livestock Census	972,457,600	2010-2014	ADB, EU, GOVT
		Project to Improve Pastoral Resource Management in Chad (PAGRPT)	180,000,000	2009-2011	FAO
		Beef Industry Support Project	4,263,714,000	2009-2012	European Union
		"Almy Al Afia" Pastoral Water Project in Central Chad	12,196,000,000	2004-2008	AFD
		"Almy Bahaïm" Pastoral Water Programme in Eastern Chad (Phase III)	5,248,000,000	2005-2010	AFD
		Pastoral Water Project in Sahelian Areas	10,003,500,000	2010-2014	IFAD, Swiss Cooperation Agency
		Total		57,948,887,800	

Map of Project Area

