

Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No. PAD1333

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GLOBAL ENVIRONMENT FACILITY GRANT

IN THE AMOUNT OF US\$3.19 MILLION

AND A

PROPOSED GRANT

FROM THE GOVERNMENT OF THE KINGDOM OF DENMARK

IN THE AMOUNT OF US\$0.95 MILLION

TO THE

REPUBLIC OF MALI

FOR AN

OBSOLETE PESTICIDES DISPOSAL AND PREVENTION PROJECT

JULY 8, 2015

Environment and Natural Resources Global Practice (GENDR)
Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 16, 2015)

Currency Unit = CFA Franc
US\$1 = 584.62 CFA Franc

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AELP	Africa Emergency Locust Project
APCAM	Permanent Assembly of the Chambers of Agriculture of Mali (<i>Assemblée Permanente des Chambres d'Agriculture du Mali</i>)
ASP	Africa Stockpiles Program
CILSS	Permanent Interstates Committee for Drought Control in the Sahel (<i>Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel</i>)
CLI	CropLife International
CMDT	Malian Company for Textiles Development (<i>Compagnie malienne pour le développement du textile</i>)
CNGP	National Pesticides Management Committee (<i>Comité National de Gestion des Pesticides</i>)
CNLCP	National Center for Locust Control (<i>Centre national de lutte contre le criquet pèlerin</i>)
CQ	Consultants' Qualifications
CSCRP	Strategic Framework for Growth and Poverty Development
DA	Designated Account
DAC	Development Assistance Committee
DFM	Directorate of Finance and Material
DDT	Dichlorodiphenyltrichloroethane
DGD	General Directorate of Customs
DNA	National Directorate of Agriculture
DNACPN	National Department for Sanitation and Pollution Control (<i>Direction Nationale de l'Assainissement et du Contrôle des Pollutions et des Nuisances</i>)
DNCC	National Directorate of Commerce and Competition
DNP	National Directorate of Fisheries
DNS	National Directorate of Health
DNSV	National Directorate of Veterinary Services
DRS	Regional Directorate of Health
DRSV	Regional Directorates of Veterinary Services
ECOWAS	Economic Community of West African States

EHS	Environmental, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FAO	UN Food and Agriculture Organization
FM	Financial Management
FY	Fiscal Year
GDP	Gross Domestic Product
GEF	Global Environment Facility
GOM	Government of Mali
GPN	General Procurement Notice
HCB	Hexachlorobenzene
ICCM	International Conference on Chemicals Management
ICR	Implementation Completion and Results Report
IDA	International Development Association
IFAC	International Federation of Accountant
IFR	Interim Unaudited Financial Report
ISN	Interim Strategy Note
ISR	Implementation Status and Results Report
LC	Letter of Credit
LCV	Central Veterinary Laboratory
M&E	Monitoring and Evaluation
MEADD	Ministry of Environment, Sanitation and Sustainable Development <i>(Ministère de l'Environnement, de l'Assainissement et du Développement Durable)</i>
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali <i>(Mission multidimensionnelle intégrée des Nations unies pour la stabilisation au Mali)</i>
MOA	Ministry of Agriculture
MOH	Ministry of Health
MTR	Mid Term Review
NCB	National Competitive Bidding
NGO	Non-Governmental Organization
NDA	National Agriculture Directorate
NIP	National Implementation Plan
NSC	National Steering Committee
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OHADA	Organization for the Harmonization of Business Law in Africa <i>(Organisation pour l'Harmonisation en Afrique du Droit des Affaires)</i>
OHVN	Office of the Niger Higher Valley <i>(Office de la Haute Vallée du Niger)</i>
OP	Obsolete Pesticide
OPV	Office of Plant Protection <i>(Office de Protection des Végétaux)</i>
PA	Project Account
PAN-Mali	Pesticides Action Network of Mali
PAPAM	Agricultural Productivity Development Program in Mali
PDO	Project Development Objective

PMU	Project Management Unit
PNP	National Prevention Plan
POP	Persistent Organic Pollutant
POPTT	GEF POPs Tracking Tool
PPE	Personal Protective Equipment
PSMS	Pesticide Stock Management System
QCBS	Quality and Cost Based Selection
SAICM	Strategic Approach to International Chemicals Management
SCPC	Cooperative Societies of Cotton Producers (<i>Sociétés de Coopératives de Producteurs de Coton</i>)
SYSCOHADA	OHADA Accounting System
TTL	Task Team Leader
UNEP	United Nations Environment Program
UNIDO	United Nations Industrial Development Organization
WAEMU	West African Economic and Monetary Union
WHO	World Health Organization

Regional Vice President:	Makhtar Diop
Country Director:	Paul Numba Um
Senior Global Practice Director:	Paula Caballero
Practice Manager:	Benoît Bosquet
Task Team Leader:	Dahlia Lotayef

Republic Of Mali
Obsolete Pesticides Disposal and Prevention Project

TABLE OF CONTENTS

	Page
I. STRATEGIC CONTEXT	1
A. Country Context.....	1
B. Sectoral and Institutional Context.....	2
C. Higher Level Objectives to Which the Project Contributes.....	3
II. PROJECT DEVELOPMENT OBJECTIVES	4
A. PDO.....	4
B. Project Beneficiaries	4
C. PDO Level Results Indicators.....	5
III. PROJECT DESCRIPTION	5
A. Project Components	5
B. Project Financing	6
Project Cost and Financing	7
C. Lessons Learned and Reflected in the Project Design.....	7
IV. IMPLEMENTATION	8
A. Institutional and Implementation Arrangements	8
B. Results Monitoring and Evaluation	9
C. Sustainability.....	10
V. KEY RISKS AND MITIGATION MEASURES	11
A. Risk Rating Summary Table.....	11
B. Overall Risk Rating Explanation	11
VI. APPRAISAL SUMMARY	12
A. Economic and Financial Analysis.....	12
B. Technical.....	13
C. Financial Management.....	14

D. Procurement	15
E. Social (including Safeguards)	16
F. Environment (including Safeguards)	16
G. World Bank Grievance Redress	16
Annex 1: Results Framework and Monitoring	17
Annex 2: Detailed Project Description.....	22
Annex 3: Implementation Arrangements	33
Annex 4: Implementation Support Plan	50
Annex 5: Project Map.....	52

PROJECT APPRAISAL DOCUMENT

Republic of Mali
Obsolete Pesticides Disposal and Prevention Project

Report No.: PAD1333

Basic Information			
Project ID P146247	EA Category A - Full Assessment	Team Leader(s) Dahlia Lotayef, Laurent Granier	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints []		
	Financial Intermediaries []		
	Series of Projects []		
Project Implementation Start Date 24-Jul-2015	Project Implementation End Date 31-Jan-2020		
Expected Effectiveness Date 30-Nov-2015	Expected Closing Date 31-Jan-2020		
Joint IFC No	GEF Focal Area Persistent Organic Pollutants		
Practice Manager/Manager Benoit Bosquet	Senior Global Practice Director Paula Caballero	Country Director Paul Noumba Um	Regional Vice President Makhtar Diop
Borrower: Ministry of Finance, Republic of Mali			
Responsible Agency: DNACP-Direction Nationale de l'Assainissement et du Controle des Pollutions et des Nuisances			
Contacts:	Mr. Mahamadou KAYA	Title:	Director, DNACPN
	Demba Sidibe	Title:	Project Coordinator
Telephone No.:	22320221679	Email:	demba.sidibe@pasp-mali.org
Project Financing Data(in USD Million)			
[] Loan	[] IDA Grant	[] Guarantee	
[] Credit	[X] Grant	[] Other	
Total Project Cost:	5.14	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	Amount
Borrower	1.00
Global Environment Facility (GEF)	3.19
Government of the Kingdom of Denmark	0.95
Total	5.14

Expected Disbursements (in USD Million)

Fiscal Year	2016	2017	2018	2019	2020				
Annual	1.60	2.00	1.00	0.34	0.20				
Cumulative	1.60	3.60	4.60	4.94	5.14				

Institutional Data

Practice Area (Lead)

Environment & Natural Resources

Contributing Practice Areas

Cross Cutting Topics

- Climate Change
- Fragile, Conflict & Violence
- Gender
- Jobs
- Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100		
Total		100		

I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Pollution management and environmental health	100
Total		100

Proposed Global Environmental Objective(s)	
The proposed Project Development Objective (PDO) is to reduce risks from existing publicly-held obsolete pesticide stocks and associated waste; and strengthen the institutional framework for risk mitigation of obsolete pesticides.	
Components	
Component Name	Cost (USD Million)
Component 1: Disposal of publicly-held obsolete pesticides and associated waste and reduction of risk from three priority high-risk contaminated sites	3.45
Component 2: Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticides re-accumulation	0.97
Component 3: Project management, monitoring and evaluation	0.72
Systematic Operations Risk- Rating Tool (SORT)	
Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	High
7. Environment and Social	Substantial
8. Stakeholders	Low
9. Other	Low
OVERALL	Substantial
Compliance	
Policy	
Does the project depart from the CAS in content or in other significant respects?	Yes [] No [X]
Does the project require any waivers of Bank policies?	Yes [] No [X]
Have these been approved by Bank management?	Yes [] No []
Is approval for any policy waiver sought from the Board?	Yes [] No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X] No []

Safeguard Policies Triggered by the Project		Yes	No
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04			X
Forests OP/BP 4.36			X
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10			X
Involuntary Resettlement OP/BP 4.12			X
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Project Monitoring and Evaluation Manual.		31-Mar-2016	
Description of Covenant			
Schedule 2. Section I. B.2. The Recipient shall prepare and adopt, not later than four (4) months after Effective Date, the project Monitoring and Evaluation Manual in a manner satisfactory to the World Bank.			
Name	Recurrent	Due Date	Frequency
Installation of a computerized accounting software.		29-Jan-2016	
Description of Covenant			
Schedule 2. Section II.B. The Recipient, shall not later than two (2) months after Effective Date, acquire, install and thereafter maintain, for the purpose of the Project, an accounting software acceptable to the World Bank.			
Name	Recurrent	Due Date	Frequency
Recruitment of an external auditor.		29-Apr-2016	
Description of Covenant			
Schedule 2. Section II.B. The Recipient shall, not later than five (5) months after the Effective Date, appoint an external auditor, with qualifications and experience satisfactory to the World Bank, in accordance with the provisions of Section III.C of the Grant Agreement.			
Conditions			
Source Of Fund	Name		Type
GEF and Government of Denmark	Adoption of the Project Implementation Manual.		Effectiveness
Description of Condition			

Article IV.01. The Recipient has adopted the Project Implementation Manual in form and substance satisfactory to the World Bank.

Source Of Fund	Name	Type
GEF and Government of Denmark	Establishment of a Project Management Unit.	Effectiveness

Description of Condition

Article IV.01. The Recipient has established a PMU in a manner satisfactory to the World Bank.

Source Of Fund	Name	Type
GEF and Government of Denmark	Establishment of a National Steering Committee.	Effectiveness

Description of Condition

Article IV.01. The Recipient has established a National Steering Committee in a manner satisfactory to the World Bank.

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit
Dahlia Lotayef	Team Leader (ADM Responsible)	Lead Environmental Specialist	Environment	GENDR
Laurent Granier	Team Leader	Senior Environmental Specialist	Environment and hazardous waste	GCCIA
Mahamadou Bambo Sissoko	Procurement Specialist	Senior Procurement Specialist	Procurement	GGODR
Celestin Adjalou Niamien	Financial Management Specialist	Sr. Financial Management Specialist	Financial Management	GGODR
Aissatou Diallo	Team Member	Senior Finance Officer	Disbursement	WFALA
Ayala Peled Ben Ari	Team Member	Consultant	Environment	GENDR
Ellen J. Tynan	Team Member	Consultant	Environment	GENDR
Fatoumata Diourte Berthe	Team Member	Team Assistant	Team Support	AFCW3
Issa Thiam	Team Member	Finance Analyst	Financial Management	WFALA
Maman-Sani Issa	Safeguards Specialist	Senior Environmental Specialist	Safeguards	GENDR
Ruxandra Costache	Team Member	Counsel	Legal	LEGAM
Salamata Bal	Team Member	Senior Social Development Specialist	Social Safeguards	GSURR

Virginie A. Vaselopoulos	Team Member	Senior Program Assistant	Team Support	GENDR	
Extended Team					
Name	Title	Office Phone	Location		
Locations					
Country	First Administrative Division	Location	P l a n n e d	Actual	Comments
Mali	Koulikoro	Koulikoro Region	X		
Mali	Kayes	Kayes Region	X		
Mali	Gao	Gao Region	X		
Mali	Bamako	Bamako Region	X		Country wide activities
Mali	Kidal	Kidal Region	X		
Consultants (Will be disclosed in the Monthly Operational Summary)					
Consultants Required? Consulting services to be determined					

I. STRATEGIC CONTEXT

A. Country Context

1. **Located at the heart of the Sahel, Mali is a vast, semi-arid, landlocked and lightly populated country with the largest territory in the Economic Community of West African States (ECOWAS).** Mali has high demographic growth rates but uneven population density¹, and relatively limited natural resources. The country is extremely vulnerable to climate change, and is particularly affected by droughts and desertification. Uneven growth patterns and lack of a customized investment strategy for the Sahel and desert areas of the country have contributed to regional imbalances.

2. **The Malian economy is characterized by a narrow range of exports (gold, cotton) and a rain-fed subsistence agriculture that provides income for the majority of the population.** Excluding 2012, annual Gross Domestic Product (GDP) growth averaged five percent in the last decade. This economic growth performance, compared to a population growth rate of 3.6 percent, has been too modest to reduce poverty. Given Mali's exposure to significant exogenous shocks, economic growth has also been volatile, making investment risky. Low aggregate private and public investments² prevent deep economic diversification and the necessary productivity gains to reduce underemployment.

3. **The political and security situation has been particularly volatile in recent years, with a military coup in early 2012, and occupation of the northern regions by rebel and criminal groups.** This was followed rapidly by the deployment of French-led military forces in January 2013, which were handed over to the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) mission in July 2013. Widespread insecurity in the country, in particular in the north, led to profound challenges that have delayed program implementation. A terrorist attack in early March 2015 in Bamako targeting the international community, an escalation in attacks on UN Peacekeepers, and the migration of the conflict further south to Segou and Mopti have highlighted the spreading insecurity linked to the changing nature of the conflict. Violent and extremist groups continue to control vast areas of Malian territory.

4. **Peace negotiations between the government and the rebel coalitions (the "Platform" and "Coordination" groups) have been making progress and represent a positive development.** The peace accord initially signed on May 15, 2015 by the government and the "Platform" Group recently came to closure when the "Coordination" Group became party to the agreement on June 20, 2015. Signature by all parties of the peace agreement however only creates the minimum conditions for Malian authorities to address the challenges of poverty reduction in the North as security remains a pre-condition for economic recovery and poverty reduction. Any meaningful return of government presence and capacity to deliver services will depend on continued peacekeeping and support for early development efforts.

¹ Population density in Mali is 11 persons per km² on average and as low as 1 person per km² in the Saharan regions.

² At 15 percent of GDP in 2011, excluding Official Development Assistance (ODA) finance and gold-related investment projects.

B. Sectoral and Institutional Context

5. **Approximately 80 percent of agricultural pesticides in Mali are used in the cotton sector, of which 95 percent insecticides, distributed by the parastatal cotton development agencies and the Ministry of Agriculture (MOA).** The health sector is the second largest user of pesticides, e.g., for mosquito and black fly control. The Government of Mali's (GOM) efforts to boost agricultural productivity and combat periodic desert locust infestations have resulted in the accumulation of considerable quantities of obsolete pesticide (OP) stocks as well as considerable amounts of contaminated associated waste (empty containers, veterinary products, equipment and material) and polluted soil across the country.

6. **Accumulation of OPs in Mali has been aggravated by product bans, product expiration and deterioration as a result of improper storage.** Soil has been polluted as a result of accidental and intentional pesticide spills and leakage from improper storage facilities; this carries considerable risks to human and animal health from direct physical contact of humans and cattle with soil and run-off water, inhalation of volatilized pesticides, and consumption of polluted groundwater and crops/forage. Almost all OP stocks in Mali are held by the Malian Office of Plant Protection (OPV), the Malian Company for Textiles Development (CMDT), the Office of the Niger Higher Valley (OHVN); and, to a lesser extent, by private operators and development projects.

7. **OPs and associated waste are regulated and controlled by a number of laws and decrees³ which address pesticides registration and control, pollution and solid waste control principles, and methods for prevention and reduction of solid waste volumes.** A number of governmental departments are involved in pesticides management, the key ones being the Ministry of Environment, Sanitation and Sustainable Development (MEADD), the Ministry of Agriculture (MOA), Ministry of Trade (MOT), the Ministry of Health (MOH), the Ministry of Livestock and Fisheries, and the Ministry of Civil Protection. OP management is mandated to the National Department for Sanitation and Pollution Control (DNACPN) under the MEADD. At present, DNACPN's primary role is as a policy-making and regulatory body. In 2002, the National Pesticides Management Committee (CNGP) was formed and attached to the MOA following a governmental decision to have in place an executive body responsible for the implementation of the rules on registration and control of pesticides of the Permanent Interstates Committee for Drought Control in the Sahel's (CILSS).. As such, the CNGP, chaired by the MOA and vice-chaired by the MEADD and the MOH, is uniquely positioned to oversee coordination of pesticide management in Mali. However, the lack of a permanent budget, office and staff has prevented it from fulfilling its role.

³ In particular: 1) Act No. 02-014 (June 3, 2002) on pesticides approval and control, and Decree No. 02-306/P-RM (June 3, 2002), repealed by Decree No. 09-313/P-RM (June 19, 2009), defining law enforcement modalities; 2) Act No. 01-020 (May 30, 2001) on pollution and nuisance and related decrees. The types of pollution and harmful effect regulated by the provisions of this Act are, in particular, those caused by hazardous chemical substances, greenhouse gas emissions, noise and pollution; 3) Decree No. 07-135 (April 16, 2007) which established the list of hazardous waste; and 4) Decree No. 01-394 (September 6, 2001) that defined the methods of solid waste management to prevent and reduce the volumes of solid waste and related negative effects.

8. **Mali has benefited from a number of donor-funded projects, which helped strengthen its regulatory framework and institutional, technical and financial capacity to manage OPs, the key one being the Africa Stockpiles Program-Project 1 in Mali (ASP-P1 Mali, 2006-2012).**⁴ Under the supervision of DNACPN, ASP-P1 Mali financed the development of an OP database (based on FAO's Pesticide Stock Management System - PSMS) and preliminary inventories, pesticide management legislation and regulatory instruments, training of stakeholders and practitioners, implementation of a number of prevention activities and development of a draft National Prevention Plan (PNP). In addition, the project secured small amounts of low risk stocks at a central warehouse and decontaminated five highly polluted sites across the country, providing a strong baseline for the project. A second relevant project was the IDA-funded Africa Emergency Locust Project (AELP), in which Mali participated between 2005 and 2009.⁵ The project helped Mali create an inventory and put in place a stock management system for locust-related pesticides. In addition, the project helped construct storage facilities and built the capacity for pesticide formulation analysis. In collaboration with AELP, FAO established in 2006-2008 a national network for managing empty locust control pesticide containers.

C. Higher Level Objectives to which the project contributes

9. **The project contributes to international efforts to eliminate Persistent Organic Pollutants (POPs) and improve management of toxic chemicals.** It puts into implementation Mali's National Implementation Plan (NIP) to the Stockholm Convention on POPs by implementing priority actions for capacity building and raising the awareness of governmental and private sector stakeholders, and for the destruction, disposal and containment of stocks. The project also supports the implementation of the Basel Convention on Control of Transboundary Movements of Hazardous Waste and their Disposal; the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and the United Nations Strategic Approach to International Chemicals Management (SAICM) objective of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

10. **The project is aligned with the relevant Global Environment Facility (GEF) strategies.** It addresses GEF-4 Strategic Objective in the POPs Focal Area to protect human health and the environment by assisting recipient countries to reduce and eliminate production, use and releases of POPs, and consequently contribute to capacity development for sound management of chemicals. It also addresses the goal of the Chemicals Program under GEF-5, which is to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment; and the GEF-6 Chemicals and Waste Strategy of (i) developing the enabling conditions, tools and environment for the sound management of harmful chemicals and wastes, and (ii) reducing the prevalence of harmful chemicals and waste and supporting the implementation of clean alternative technologies/substances.

⁴ Mali was one of seven countries which participated in ASP-P1, namely: Ethiopia, Mali, Morocco, Nigeria, South Africa, Tanzania and Tunisia. ASP-Mali closed on December 31, 2012, as a result of the security situation, with a remaining balance in the multi-donor trust fund. The Government of the Kingdom of Denmark agreed to allocate its remaining contribution to this new proposed project.

⁵ The other beneficiary countries were Burkina Faso, Chad, The Gambia, Niger, Mauritania and Senegal.

11. **OP management is relevant to the country's transitional and development priorities, and to Mali's Interim Strategy Note (ISN) FY14-15** (Report No. 76233-ML), and its objective of increasing agriculture performance as a measure for resuming economic activity. **The project supports the World Bank Group's corporate goals of ending extreme poverty and boosting shared prosperity** by improving the quality of life of the most vulnerable and poorest communities through removal of toxic substances from their environment; and the **World Bank Group's Clean Agenda** (under the 2012-2022 Environment Strategy) of supporting new analytical work on hazardous waste, pesticides, and POPs; and helping countries fulfill their obligations to address global pollution risks. It further responds to the recommendations of the **Urban Environmental Analysis** carried by the World Bank and DNACPN in March 2011 (Report No. 60788-ML) by disposing of and/or safeguarding inventoried OPs in urban centers.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

12. **The Project Development Objective (PDO)** is: Reduce risks from existing publicly-held obsolete pesticide stocks and associated waste; and strengthen the institutional framework for risk mitigation of obsolete pesticides.

B. Project Beneficiaries

13. **The project is expected to have local, national and global benefits.** At the local level, beneficiaries are communities and individuals who live close to sites that contain OPs, contaminated associated waste and polluted soil. These are mostly poor farming households whose health is directly affected by the chemical substances, and whose awareness to the proper use of pesticides is low. Urban households that reside in proximity to pesticide storage facilities are also expected to benefit from project-funded activities, especially the collection and overseas disposal of stored OPs. The project will include education and awareness raising activities specifically targeting women, with focus on limiting women's exposure to pesticides. The project will work with local non-governmental organizations (NGOs) to teach women about the proper use of pesticides, safe handling of OPs and the health risks associated with reuse of empty pesticide containers. At the national level, a number of line ministries (MEADD, MOA and MOH), agencies (the National Center for Locust Control - CNLCP, OHVN, CMDT and OPV) and directorates (DNACPN, National Agriculture Directorate - NDA, National and Regional Directorates of Veterinary Services – DNSV/DRSV, and the National and Regional Directorates of Health – DNS/DRS) will benefit from increased pesticides management capacity. In particular, DNACPN's data management, strategic orientation, enforcement, and inspection and control capabilities will be strengthened. The removal of POPs pesticides from the environment is expected to generate substantial global environmental health benefits due to POPs' cross-border mobility.

14. The number of direct project beneficiaries, i.e., people living in the vicinity of the contaminated sites, and of the accumulated stocks, as well as individuals reached by communication activities and individuals who participate in project-funded training, is expected to be 2,000,000 in total, 50 percent of whom are women (1,000,000).

C. PDO Level Results Indicators

15. **The PDO Level Results Indicators are:**

- (a) POPs and POPs⁶ waste destroyed, disposed of or contained in an environmentally sound manner (Target: 666 tonnes) (Core Sector Indicator)
- (b) Contaminated land managed or dumpsites closed under the project (Target: 0.6ha) (Core Sector Indicator)
- (c) Revised National Prevention Plan (PNP) submitted to the Council of Ministers for adoption⁷
- (d) Direct project beneficiaries (number), of which female (percent) (Target: 2,000,000, 50 percent of which are women) (Core Indicator)

16. See Annex 1 for the project Results Framework.

III. PROJECT DESCRIPTION

A. Project Components

17. **The Mali Obsolete Pesticides Disposal and Prevention Project will be a four and a half year project (2015-2020).** The project's overall approach is to build on the accomplishments of ASP-P1 Mali to launch a disposal contract by a qualified international disposal company, reduce risks stemming from pre-identified sites which contain highly polluted soil, and implement activities which would enhance the capacity of the Government of Mali to minimize further accumulation of OPs and associated waste, using international and local expertise. These activities have been prioritized based on their expected impact on the pesticide life cycle, including pesticide management regulation and enforcement support, training of stakeholders, communication and awareness raising for a wide audience, piloting of a pesticide container collection and recovery strategy in Mali's cotton zone, and the updating and submission for adoption of a National Prevention Plan (PNP) by the Council of Ministers. Implementation will be carried out according to the following three components. See Annex 2 for a detailed project description.

Component 1: Disposal of publicly-held OPs and associated waste and reduction of risk from three priority high-risk contaminated sites (Total financing: US\$3.45 million: GEF: US\$2.70 million, Danish TF: US\$0.55 million, GOM: US\$0.20 million)

18. Component 1 will deal with the removal of immediate threats associated with obsolete pesticide stocks in the country and includes the following activities: 1.1) Nation-wide safeguarding and centralization of low-risk OP stocks; 1.2) disposal of low, medium and high risk stocks by a qualified international company in an established treatment or disposal facility in a highly regulated environment; this company will be hired by direct contracting as requested by the Recipient and approved by the World Bank at the appraisal stage; 1.3) risk reduction at three

⁶ In view of the operational difficulty in separating POPs pesticides from obsolete pesticides, "POPs" is understood in this context as meaning "obsolete pesticides including POPs", as also used in the GEF Chemicals strategy.

⁷ The PNP will be updated to reflect the results of Component 2 activities (regulation, financial sustainability, training, empty container management, communication and awareness raising). More details are provided in Annexes 1 and 2.

priority high-risk contaminated sites according to site-specific methodologies; 1.4) institutionalizing a system for regular updating of the national obsolete pesticide inventory; and 1.5) development of a national plan for decontamination of additional priority contaminated sites.

Component 2: Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticide re-accumulation (Total financing: US\$0.97 million: GEF: US\$0.34 million, Danish TF: US\$0.38 million, GOM: US\$0.25 million)

19. Component 2 will address key weaknesses along the pesticide life cycle, such as regulatory gaps related to container management and pesticide import, distribution and recording, sustainable financing for management of pesticides, obsolete pesticides and empty containers, the capacity for pesticide inspection and control and the continued need of awareness raising and communication with communities concerning poor pesticide management. It includes the following activities: 2.1) Finalization of draft ordinances and procedures for pesticide management, to be submitted for endorsement by the National Steering Committee (NSC) before submission for official approval by the Cabinet; 2.2) A feasibility study on sustainable financing instruments for pesticides management to be endorsed by the NSC; 2.3) Institutional support to DNACPN and CNGP for data management, strategic orientation and enforcement of regulation; 2.4) Stakeholder training in various pesticide management fields; 2.5) Assessment of gaps and updating of the PNP and having it officially endorsed by the NSC and submitted by the CNGP Chair for adoption by the Council of Ministers; 2.6) Piloting of a pesticide container collection and recovery strategy; and 2.7) Communication and awareness raising.

Component 3: Project management, monitoring and evaluation (Total financing: US\$0.72 million: GEF: US\$0.15 million, Danish TF: US\$0.02 million, GOM: US\$0.55 million)

20. This component will finance project management activities (procurement, financial management, preparation of work plans and procurement plans, facilitation of workshops and meetings), as well as Monitoring and Evaluation (M&E) of project progress and reporting.

B. Project Financing

21. **The project's total cost is US\$5.14 million: US\$3.19 million from GEF, US\$0.95 million from the Government of the Kingdom of Denmark⁸ and US\$1.00 million from the Government of Mali. The GEF and the Government of the Kingdom of Denmark funds will be fully blended and may jointly finance all project activities.** The Government's contribution will be made available starting Year 2 of the project, through four annual installments of US\$250,000 equivalent in local currency (in 2016, 2017, 2018 and 2019). CropLife International (CLI), representing the pesticide industry, will also make available an international disposal specialist to support the project in implementing Component 1 activities for a limited period of

⁸ ASP-Mali closed on December 31, 2012, as a result of the security situation, with a remaining balance in the ASP-Mali Multi-Donor Trust Fund. The remaining funds could not be utilized in full but the Government of the Kingdom of Denmark agreed to allocate its remaining balance of US\$1.35 million to this new project, of which US\$0.40 million will be allocated to a Bank-Executed Trust Fund to provide technical support and advisory services throughout the life of the project.

time and up to the value of its agreed voluntary contribution of US\$0.12 million. The project will finally benefit from a retroactive financing up to US\$200,000 for goods, non-consulting services, consultants' services, and operating costs and training expenses incurred under the project prior to the dates of the financing agreements but on or after April 17, 2015, on the basis of US\$154,000 from the GEF and US\$46,000 from the Danish contribution.

Project Cost and Financing

Project Components	Project cost	GEF Financing (US\$ M, %)	Danish TF Financing (US\$ M, %)	GOM Financing (US\$ M, %)
1. Disposal of publicly-held OPs and associated waste and reduction of risk from three priority high-risk contaminated sites	3.45	2.70 (78%)	0.55 (16%)	0.20 (6%)
2. Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticide re-accumulation	0.97	0.34 (35%)	0.38 (39%)	0.25 (26%)
3. Project management, monitoring and evaluation	0.72	0.15 (21%)	0.02 (3%)	0.55 (76%)
Total Project Costs	5.14	3.19 (62%)	0.95 (19%)	1.00 (19%)

C. Lessons Learned and Reflected in the Project Design

22. **The design of the project reflects lessons learned from the most recent and relevant investment in OPs management in Africa, namely the ASP-P1 and the AELP.** Mali participated in the projects in 2006-2012 and 2005-2009, respectively. The key lessons are:

- (a) *The dimension of OP disposal operations, in terms of the amount of stocks to be disposed of, should be carefully determined before implementation in order to ensure the allocation of sufficient time and resources.* Accordingly, the project preparation phase included an audit of OPs sites (see Annex 2), which helped determine the disposal budget.
- (b) *While it is important to determine the dimension of the task before implementation, it is equally important to develop a flexible implementation approach.* It is expected that the disposal contract will include a contingency amount in case additional stocks are found during the stocks collection operation. The World Bank team will closely monitor project progress and consider changes as appropriate during implementation.
- (c) *It has been shown that sustainable reduction of POPs is the result of both cleanup investments and preventative measures.* In view of food security concerns and agricultural intensification investments in Africa in general and in Mali in particular, OPs will continue to accumulate at a rapid pace unless the entire pesticide life cycle is considered. Therefore,

an array of regulatory, institutional capacity, knowledge, awareness and data management interventions have been included in the project as measures to reduce stockpiling.

- (d) *The complexity and length of the safeguard preparation process and the disposal bidding process could result in lagging disbursement.* The project has taken the following preventative measures: (i) safeguard documents were prepared and approved during project preparation, while site specific Environmental Management Plans (EMPs) will be prepared during implementation based on agreed templates, (ii) agreement on conservative timeline and disbursement estimate, and (iii) measures to expedite procurement, based on ASP-P1 achievements and experience gained, were discussed and options for sole sourcing or limited international bidding were agreed upon. See Section VI.B for further detail.
- (e) *The participation of qualified technical experts was shown to be crucial during project preparation and implementation.* The project was prepared with the support of experienced technical specialists in the fields of OPs disposal and prevention, as well as Bank staff with experience in similar projects. Project implementation will receive support from technical specialists who will work with the Project Management Unit (PMU); CLI, representing the plant science industry, will provide disposal support to the project during a limited period of time via an international consultant.
- (f) *Soil decontamination activities should be designed according to the specific conditions of each site.* A pre-feasibility study will be carried out for the three sites during Year 1, which would help determine the most technically appropriate and cost-effective risk reduction techniques for each site.
- (g) *National strategies for container management should be developed through a community-based approach.* The project, in association with local NGOs and other partners, will expand Mali's efforts under ASP-P1 to collect and recover empty pesticide containers in all of Mali's four cotton production zones. The financial sustainability study under Component 2 will recommend self-sustaining systems for the same, with an emphasis on the role of the private sector.
- (h) *Developing and implementing a pesticide management communication plan is a prerequisite for the implementation of sound pesticide management.* The project will update and implement Mali's communication plan under ASP-P1 for internal stakeholders, and develop and implement an external communication systems to communities and other stakeholders.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

23. **The Project Implementing Entity is DNACPN, which is the department responsible for pollution control under the MEADD. The project will be overseen by a National Steering Committee (NSC), which will be chaired by the Minister of MEADD or his representative and comprise representatives from relevant ministries and directorates, pesticide importers and NGOs.**

Each entity will designate a specific focal point to the NSC. The NSC will ensure the participation of key departments, the coordination among departments with a role to play in pesticide management and prevention of OPs, and the integration of the goals of the project in the long-term vision of each of these departments/agencies. In addition, the NSC will endorse project work plans, budgets and project deliverables, provide overall guidance to the PMU and ensure continued governmental commitment to project objectives. The NSC will be in place before project effectiveness.

24. **The PMU will be comprised of designated staff from DNACPN and other technical departments from within the Ministry as needed, as well as hired technical consultants.** The PMU will include a coordinator, a procurement specialist, a financial management specialist, a disposal specialist, a prevention specialist, an M&E specialist, a communications specialist, an accountant, a safeguards specialist, a staff assistant, a general office assistant and a driver. The fiduciary responsibilities (procurement and financial management) will be reinforced by hiring consultants for a limited period of time (during which they will train concerned staff within MEADD). The PMU, which will be established as a condition of effectiveness, will monitor and evaluate project progress; ensure compliance with safeguard requirements; prepare work plans, budgets and procurement plans; facilitate stakeholders' workshops and meetings; and report on project progress and financial status via periodical report according to an agreed timeline. The PMU coordinator will report to DANCPN's National Director.

25. **The CNGP has the national mandate of regulating the use of pesticides and is particularly relevant for the prevention of activities under Component 2.** It will be regularly kept informed of progress and serve as a forum for discussion of management options that will be developed by the project that are relevant to its mandate. The CNGP will benefit from capacity building activities under Component 2 in order to allow it to carry out this function effectively. See Annex 3 for further detail on institutional and implementation arrangements.

B. Results Monitoring and Evaluation

26. **The responsibility for project M&E will rest with the PMU,** which will submit progress reports on a semi-annual and annual basis, as well as a mid-term report and a completion report. The World Bank will monitor the implementation of the GEF and Danish TF financing agreements through routine missions and review of M&E data; project performance will be captured in missions' aide memoires and Implementation Status and Results Reports (ISRs), as well as a mid-term review (MTR) report and an Implementation Completion and Results Report (ICR) upon project completion.

27. **Achievement of the PDO will be evaluated against the four above-mentioned PDO Level Results Indicators:** The first indicator, which is a Core Sector Indicator, will be monitored by the disposal company's completion report and certificate/s of disposal, indicating the amount of OPs and associated waste destroyed, disposed of or safeguarded. The 666 tonnes target has been set on the basis of an OP sites' audit and data validation carried out by DNACPN in May-October 2014, which resulted in an overall amount of 666 tonnes of obsolete pesticides and associated waste country-wide. Therefore, the target represents 100 percent destruction, disposal or

safeguarding of the stocks. The second Indicator, which is also a Core Sector Indicator, will measure the outcome of risk reduction activities in high risk contaminated sites; the target has been set on the basis of the total area of the three targeted sites, as determined by a FAO/DNACPN analysis of contaminated sites across Mali in 2010.⁹ The third indicator will measure the overall success of project-funded prevention activities. The fourth indicator (also a Core Indicator) will be used to evaluate the number of direct project beneficiaries by gender throughout project implementation.

28. The PMU will utilize the most current version of the GEF POPs Tracking Tool (POPTT), specifically the worksheet for management and disposal of OPs, including POPs, which was designed with input from the GEF POPs Task Force, to track results of GEF-funded projects under the POPs Focal Area. The indicators that will be used are: (i) Number of countries receiving GEF support for environmentally sound management of OPs, including POPs; (ii) Baseline inventory of OPs, including POPs pesticides; (iii) Pesticides or POPs pesticides regulations in place; (iv) Waste management plans to prevent further accumulation of pesticide stockpiles and empty pesticide containers, in place; (v) OPs, including POPs pesticides, disposed of in an environmentally sound manner, and average cost of disposal; and (vi) OPs safeguarded, and average cost of safeguarding. The PMU will report to the World Bank on these indicators on an annual basis and at completion, and the World Bank will communicate the results to the GEF Secretariat as part of the GEF annual evaluation exercise. See Annex 3 for further details on M&E.

C. Sustainability

29. **The project is designed in full consideration of financial, institutional, environmental and social sustainability of investments.** Due to the strong demand of the agriculture and health sectors for pesticides, new accumulations of OPs and waste stocks cannot be entirely prevented; nonetheless, Component 2 activities will minimize new accumulation of stocks. The sustainable financing study under Component 2 will offer instruments for financing future inventory exercises, safeguarding of additional low risk stocks and waste, disposal operations for hazardous stocks and empty container management. The recommendations will be discussed and endorsed by the NSC for official approval by the Cabinet. The project also puts strong emphasis on enhancing the technical and operational capacity of DNACPN as the governmental entity in charge of OP management; mainstreaming container management into the cotton companies/pesticide distributors business plans; and passing regulations which guide the relevant institutions. In addition, raising community awareness about the proper management of pesticides and risks associated with mismanagement is likely to reduce future soil contamination. Under Component 1, the national decontamination plan will offer mechanisms for decontaminating existing sites that are not addressed by the project and for dealing with potential future contaminations. Institutional sustainability is embedded into project design by anchoring the PMU into DNACPN and strengthening CNGP's capacity to continue as the regulating entity on pesticide management issues. The project is expected to result in environmental and social benefits as explained, while

⁹ DNACPN. *Report of the first phase of the second investigation mission of new contaminated sites in Bambara Maoudé, Koriomé, Goundam and Diré (Tombouctou), conducted from September 17 to 26, 2010; and report of the second phase of the mission in Kara (Diafarabé), Niono et Marila (Kayes) conducted from October 27 to November 4, 2010. Bamako, 2010.*

ensuring that communities and the environment are safeguarded from any short-term adverse impact. See Section VI.B for further information on safeguards.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Rating Summary Table

Risk Categories	Rating
Political and governance	Substantial
Macroeconomic	Substantial
Sector strategies and policies	Substantial
Technical design of project or program	Moderate
Institutional capacity for implementation and sustainability	Substantial
Fiduciary	High
Environmental and social	Substantial
Stakeholders	Low
Other: Program and donor	Low
Overall	Substantial

B. Overall Risk Rating Explanation

30. **Implementation risk is rated Substantial.** This is due to the security situation in Mali in general, and specifically in the northern part of the country, where the targeted contaminated sites are located and contractors' access to these sites is limited. However, the 666 tonnes of OP stocks, which are the focus of the project, are in accessible areas. Indeed, based on the updated inventory conducted during project preparation, approximately only four percent of the obsolete pesticides stocks is located in Gao and Kidal, two of the sites facing heavy security constraints. In any case, removal and transport operations will be managed by an international disposal company contracted by the project which will be responsible for ensuring safety of transport, including vetting of the local transport company and use of UN approved containers as per the Environmental Management Plan. If in fact the security conditions would not allow this work to proceed safely in some specific sites, including Gao and Kidal, these sites would be excluded from the project and would likely be replaced with other accessible sites. This approach minimizes the risk to achieving the project objectives.

31. Health and environmental risks associated with OP handling, and the risk of having new accumulation of OPs due to insufficient technical and institutional capacity of the Government, locust outbreaks and the lack of sustainable financing for OP removal, are also substantial. Component 2 of the project tackles precisely these risks by focusing on the institutional, regulatory and technical capacity for prevention of obsolete pesticides re-accumulation. More specifically, the project will support the operationalization of the strategy for handling, collection and removal of empty containers generated in the four cotton production zones as these contaminated containers

are often used for carrying drinking water and food storage. Success under this component should tangibly reduce the environmental and the human health risks. Fiduciary risk is rated high since both procurement and financial capacity are weak and proper arrangements are yet to be established with support under the project. Enhanced implementation support will also be required and has been taken into account in the implementation support plan.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

32. **Project development impact:** The project is expected to result in reduced economic losses associated with land contamination (lost productivity), health impacts (healthcare costs, lost labor), impacts on livestock (death or illness) and crops (crop losses or contamination), degradation of natural resources (water and soil contamination) and wildlife impacts (poisoning of natural pest predators). At the national level, OP stockpiles are a burden on poor economies in that there is a financial cost associated with procurement of the original pesticides, as well as their replacements when they became obsolete. Management and storage of obsolete stocks has associated costs in terms of use of storage facilities and guards. Opportunity costs are lost when resources are diverted to management and replacement of OPs.

33. While these negative impacts associated with obsolete pesticides are readily understood, it is much more difficult to monetize these costs in a manner that would allow for a cost-benefit analysis due in part to data limitations, and in part because of remaining gaps in the current scientific understanding of dose-effect relationships for the chemicals involved. With this limitation, it is relevant to consider the project's cost-effectiveness, and in particular the estimated cost of removal and disposal of the publicly-held stocks of obsolete pesticides which constitutes the bulk of project financing: estimated at approximately US\$3,950 per tonne, which is fully in line with other similar projects around the world. As reported in the Implementation Completion Report of the Africa Stockpiles Program, the cost of removal and disposal of one tonne of obsolete pesticides was on average US\$3,800 in Ethiopia and US\$5,200 in Tanzania.

34. Finally, the cost of the project can be contrasted with the weight in the country's economy of the cotton sector – the most relevant for this project: it is estimated that close to four million farmers are engaged in cotton farming in Mali, accounting for between 50 and 75 percent of total export earnings for the country and 8-9 percent of GDP.

35. **Rationale for public sector provision or financing:** In Mali, pesticides are imported and distributed mainly by the parastatal cotton development agencies and the ministries of agriculture and health. Accordingly, the majority of OPs in Mali are generated and held by state-owned entities, namely CMDT, OPV and CNLCP. As the signatory on international conventions related to pesticide management, including Basel, Rotterdam and Stockholm conventions, the Government of Mali has committed itself to providing solutions to this problem.

36. **Value added of Bank's support:** The World Bank is strongly positioned to assist the Government of Mali in the area of OPs removal and actions to reduce future stockpiling. The World Bank has been engaged in the agriculture sector in Mali through an agricultural productivity

program, which places it in an advantageous position to further invest in this sector. Besides channeling the GEF financial support, the World Bank will also capitalize on its technical and operational experience in chemicals management in Mali and elsewhere in the world. World Bank's value added is also in its strong capacity to leverage and manage financing from additional sources, thereby allowing for a stronger project impact in terms of quantity of stocks disposed of and scale of prevention activities.

B. Technical

37. **Disposal.** Disposal will be carried out at licensed high-temperature incinerator facilities overseas, most likely in Europe, through maritime shipment via a transit country of packaged OP and associated waste stocks. Small and large quantities of stocks will be repackaged where needed, safeguarded in temporary secure storage facilities and transferred by road to a port of export and then to the disposal facility via sea. All collection, repackaging, transport and disposal stages will comply with international standards for environmentally sound management and disposal of POPs and associated wastes, including guidelines adopted as set forth in international instruments such as the Basel and Stockholm Conventions, under the responsibility of the disposal company selected and supervised by an external expert. Where relevant, sites will be cleaned up after removal of stocks/repackaging to avoid any further environmental impact.

38. **Risk reduction of contaminated sites.** The project will finance risk reduction activities in the three pre-identified sites (Goundam, Bambara Maoudé and Kara) according to site-specific strategies recommended by a pre-feasibility study, which will be carried out during Year 1 by a soil decontamination specialist. The study will consider the most cost-effective technology options to reduce exposure of select key receptors, based on the extent of contamination and soil characteristics such as the level of organic matter, clay particle content, water content and hydrology, access to water, natural soil flora and fauna, access to the site, and past experience with similar soils and contaminants. In general, risk reduction options can be grouped as follows:¹⁰

- (a) Options for low-level contamination, which poses limited threat to public health or the environment: fencing of the area, planting of cover crops to prevent dust migration and diversion of water courses to prevent spread of contamination.
- (b) Options for intermediate-level contamination, which poses a potential or actual threat to public health and the environment: land farming, in situ bioremediation using existing soil bacteria or added cultures, phytoremediation, and excavation of the soil and removal to a specially engineered landfill site for sequestration.
- (c) Options for World Health Organization (WHO) class 1 pesticides, POPs pesticides at a level greater than 50 ppm or which generally exhibit high levels of contamination with other pesticide classes: excavation and transportation to a licensed treatment facility; treatment options include a variety of thermal treatment techniques, mechanical destruction and soil washing.

39. **Empty container collection and recovery.** Unless managed correctly, empty pesticide containers are hazardous to both people and the environment. There is a danger that empty

¹⁰ FAO. *Environmental Management Tool Kit for Obsolete Pesticides Volume 3. FAO Pesticides Disposal Series No. 15*. Rome, 2011.

containers could be reused for storing food and water, which could result in pesticide poisoning. Containers discarded in the environment can lead to pesticide pollution in soil and groundwater. A container management scheme can minimize these risks and is part of the “life-cycle concept” as addressed in the International Code of Conduct on the Distribution and Use of Pesticides.¹¹ Collection of empty pesticide containers was partially tested through the collection of containers generated by the CMDT cotton production subsidiaries (*filiales*) Kita (West Branch Subsidiary) and Koutiala (North East Subsidiary); in Kita, the strategy was implemented in 11 of the 33 municipalities, and in Koutiala - in 18 of the 36 municipalities. The implementation of the strategy will be expanded to cover all the remaining municipalities in Kita and Koutiala. In addition, implementation of the strategy will be extended to the two other cotton production subsidiaries, namely Bougouni / Sikasso (South Subsidiary) and Fana / OHVN (Center Subsidiary). The strategy will be implemented in pilot municipalities through the involvement of the cotton producers which have already benefited in previous subsidiaries. The expansion of activities will be carried out in collaboration with the Cooperative Societies of Cotton Producers (SCPC), CMDT, CropLife and NGOs. The management of empty packaging involves a collection system, triple rinsing, and safe temporary storage, and disposal by distributors of pesticides or other interested entities.

40. **Specialized technical support.** Reflecting the lesson learned on the need for support from technical specialists during project implementation, DNACPN will receive support for component 1 from an international disposal expert for a limited period of time, funded by CropLife International (CLI). The project will hire an international soil decontamination specialist, who will help plan and supervise the soil risk reduction activities. Prevention activities will benefit from the support of national experts and NGOs belonging to the PAN-Mali network, especially in awareness raising and mobilization of communities, as well as independent monitoring of safeguarding activities.

C. Financial management

41. The Financial Management (FM) Assessment conclusion is that the DNACPN does not have acceptable FM arrangements in place to carry out the project implementation activities with regards to staffing, internal control and reporting.

42. As a result, **before the project becomes effective** (i) the PMU to be established within the MEADD will be reinforced with an experienced senior accountant recruited for a specified period of time based on terms of reference that will include a capacity transfer clause, and (ii) a good draft of the FM procedures that will be part of the Project Implementation Manual (a draft is available) will be elaborated.

43. **As dated covenants**, the PMU will (i) install a computerized accounting software with adequate training received by the PMU team within two months after effectiveness, and (ii) recruit an external auditor to conduct annual audit of the project Financial Statements within five months after effectiveness. With regards to the competency transfer requirements, the MEADD would consider adding to the FM team, on a part time or as needed, accountant(s) from the Directorate

¹¹ FAO. *International Code of Conduct on the Distribution and Use of Pesticides*. Rome, 2005 [available at: <http://www.fao.org/agriculture/crops/corethemes/theme/pests/pm/code/en/>].

of Finance of the MEADD. The performance of the senior accountant will be assessed based on the extent the competence transfer has reached its goal.

44. The financing agreements between the World Bank and the Government of Mali will be signed by the Minister of Finance on behalf of the GoM. For the Designated Account (DA) and Withdrawal Applications, the Coordinator and the Financial Management Specialist could be signatories in an arrangement to be agreed upon with the World Bank.

45. It is considered that the proposed FM arrangements to be put in place at the PMU satisfy the Bank's minimum FM requirements under OP/BP 10.00. See Annex 3 for further detail on financial management.

D. Procurement

46. Procurement for the project will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers", dated January 2011 and revised in July 2014; "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers", dated January 2011 and revised in July 2014; and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011. National Competitive Bidding (NCB) shall be in accordance with procedures acceptable to the Bank.

47. The World Bank team undertook a procurement assessment of the entity involved in the implementation of the procurement activities, the Directorate of Finance and Material in MEADD (DFM/MEADD). The assessment was carried out by the World Bank Procurement Specialist based in Bamako, in line with World Bank requirements and according to "Procedures for small recipient-executed trust fund grants guidance to staff" dated March 30, 2012, updated on July 28, 2014. Procurement will be conducted with the support of a PMU housed within DNACPN under the responsibility of the MEADD with technical and fiduciary skills necessary for managing project implementation.

48. World Bank operations in Mali have experienced extended delays in procurement processing, with a significant time lost in the preparation of: (i) procurement documents (Bidding Documents, Terms of Reference, Request For Proposals, Bidding Evaluation Reports and Technical Evaluation Reports of proposals tend to be of poor quality), and in particular due to (ii) delays in the contract award and signature processes of the Government. These experiences have been factored into the design of the procurement arrangements. Furthermore, the company in charge of the disposal of OPs will be hired through direct contracting as requested by the Recipient and approved by the World Bank at the appraisal stage; this will accelerate the processing of this contract that is the largest of the project. This company had been already selected during the implementation of the regional project (Africa Stockpiles Program) through a competitive process.

49. In order to mitigate the risks identified in the procurement assessment, an action plan was prepared in consultation with the client. See Annex 3 for further detail on procurement.

E. Social (including Safeguards)

50. The project's overall social impact is expected to be highly positive because it will reduce the risks of exposure and resulting potential acute intoxication of people. The project will include education and awareness raising activities specifically targeting women, with focus on limiting women's exposure to pesticides. The project will work with local NGOs to teach women about the proper use of pesticides, safe handling of OPs and the health risks associated with reuse of empty pesticide containers. The project does not trigger social safeguards. See Annex 3 for further details.

F. Environment (including Safeguards)

51. Safeguarding and disposal of obsolete pesticide and associated waste stocks, and reduction of risk caused by pesticide pollution are expected to have significant environmental protection impacts at both local, regional and global scales. Nonetheless, the project triggers OP/BP 4.01 on Environmental Assessment due to potential environmental and social risks from contacting highly toxic chemicals during the collection, repacking and transportation of obsolete pesticide stocks, risk reduction actions in pesticide polluted sites, and the temporary storage of stocks. The project is categorized as Category A (Full Assessment); an Environmental and Social Impact Assessment (ESIA) has been developed, including an Environmental and Social Management Plan (ESMP), and disclosed in country and at InfoShop on December 24, 2014. As part of the contracting clauses approved through the ESMP, the disposal company will prepare an Environmental, Health and Safety (EHS) plan, which will include emergency measures in case of leakages, awareness raising and occupational safety cautions; this specific plan will be approved both by the government and the World Bank before activities commence. The same will be carried out for safeguarding of low risk stocks by local teams.

52. The project triggers OP 4.09 on Pest Management. Pest management issues are addressed in the ESIA. The World Bank will supervise safeguard compliance on a semi-annual basis through its implementation support missions, and will provide guidance to the PMU, in particular to the safeguards specialist, on a regular basis, including by reviewing safeguard documents submitted to it by the PMU. See Annex 3 for further detail.

G. World Bank Grievance Redress

53. Communities and individuals who believe that they are adversely affected by a World Bank - supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and World Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Results Framework and Monitoring
Republic of Mali: Obsolete Pesticides Disposal and Prevention Project

Project Development Objective (PDO): Reduce risks from existing publicly-held obsolete pesticide stocks and associated waste; and strengthen the institutional framework for risk mitigation of obsolete pesticides											
PDO-Level Results Indicators	Core	Unit	Baseline	Cumulative Target Values				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition)
				YR1	YR2	YR3	YR4				
1. POPs and POPs waste destroyed, disposed of or contained in an environmentally sound manner	X	Tonne	0 tonnes	0	666 ¹²	666	666	Annual	Disposal firm's completion report and certificate/s of disposal	PMU	Destruction and disposal in licensed disposal facilities of the existing stock of 666 tonnes of obsolete pesticides and associated waste. This represents destruction, disposal or containment of 100 percent of OPs and associated waste stocks, as inventoried by DNACPN in May-October 2014.

¹² 666 tonnes is the total amount of OPs and associated waste destroyed, disposed of or contained by the project. Additional disposal activities are not expected in YR3 and YR4.

2. Contaminated land managed or dumpsites closed under the project	X	Hectare	0	0	0	0	0.6	End of Project	Contractors' completion reports, including lab tests of soil and/or water samples Project's supervision and monitoring reports	PMU	.
3. Revised National Prevention Plan (PNP) submitted to the Council of Ministers for adoption	<input type="checkbox"/>	Yes/No	No (A PNP is in place that needs to be updated)	No	No	No	Yes	End of Project	PNP and a letter from CNGP indicating the submission of the PNP for adoption by the Council of Ministers	PMU	The PNP was a deliverable of ASP-Mali (<i>Plan National De Prévention de l'accumulation de Stocks de Pesticides Obsolètes du Mali</i> , 2007). The PNP will be updated to reflect the various results of Component 2 (regulation, financial sustainability, training, empty container management, communication and awareness raising). The PNP will be endorsed by the NSC, and then submitted by the CNGP Chair for adoption by the Council of Ministers.
4. Direct project beneficiaries	X	Number	0	0	500,000	1,000,000	2,000,000	Annual	Monitoring reports	PMU	The people living in the vicinity of the contaminated sites, and of the accumulated

											stocks, as well as individuals reached by communication activities and individuals who participate in project-funded training will be considered direct project beneficiaries. It is expected that the first to benefit from the project (in YR2) will be communities residing near Bamako, in the vicinity of stored stocks.
Of which female	X	Percent	-	-	50	50	50	Annual	Monitoring reports	PMU	
Intermediate Results											
Intermediate Results Indicators Component 1: Disposal of publicly-held OPs and associated waste and reduction of risk from three priority high-risk contaminated sites											
Intermediate Results Indicators	Core	Unit	Baseline	Cumulative Target Values				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition)
				YR1	YR2	YR3	YR4				
<i>Intermediate Result Indicator 1: Stocks of obsolete pesticides contained and shipped</i>	<input type="checkbox"/>	Yes/No	No	No	Yes			Once	Signed contract by GOM and the disposal company Bill of landing issued by shipper	PMU	Contained stocks shipped out of Mali by an international disposal firm

Intermediate Results Indicators	Core	Unit	Baseline	Cumulative Target Values				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition)
				YR1	YR2	YR3	YR4				
<i>Intermediate Result Indicator 2: Number of priority sites where reduction risk measures have been applied</i>	<input type="checkbox"/>	Number	0	0	1	2	3	Semi-annual	Contractors completion reports, including lab tests of soil and/or water samples Project's supervision and monitoring reports	PMU	The reports will describe the risk reduction measures taken in the polluted sites of Bambara Maoudé, Kara and Goundam
<i>Intermediate Result Indicator 3: Plan for decontamination of prioritized polluted sites endorsed by the NSC</i>	<input type="checkbox"/>	Yes/No	No	Draft prepared	Draft validation	Final Plan endorsed		Annual	Plan and minutes of NSC meeting	PMU	The plan will identify potential sites representing health and environmental hazards, methodologies and measures to reduce risks, and preliminary cost estimates
Intermediate Results Indicators Component 2: Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticide re-accumulation											
<i>Intermediate Result Indicator 4: Sustainable financing instruments for pesticides management identified and</i>	<input type="checkbox"/>	Yes/No	No		Yes			Semi-annual	Final study report	PMU	A study identifying appropriate sustainable financing instruments for pesticides and analyzing the roles and responsibilities of the private and public sectors. The study will also include a road map

endorsed by the NSC											for the implementation of the key instruments
Intermediate Results Indicators	Core	Unit	Baseline	Cumulative Target Values				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition)
				YR1	YR2	YR3	YR4				
<i>Intermediate Result Indicator 5:</i> Piloting of final strategy in all four cotton production zones	<input type="checkbox"/>	Number	0	0	0	2	4	Semi-annual	Supervision reports and field visits	PMU	The existing approach for the management of empty pesticide packaging and containers has been partially tested through the collection of empty containers generated by the CMDT cotton production subsidiaries in selected municipalities. The approach will be formalized in a strategy for management of empty containers to be piloted in all four cotton production zones and to include consideration of final disposal. Temporary storage and disposal by distributors of pesticides or other interested entities (to be determined). The final strategy will take into consideration the recommendations of the financial sustainability study.

Annex 2: Detailed Project Description

Republic of Mali: Obsolete Pesticides Disposal and Prevention Project

A. Overview and background

1. Persistent Organic Pollutants (POPs) are pesticides, industrial chemicals or unwanted by-products of industrial processes that had been used for decades but have been found to share a number of unwanted and negative characteristics, including *persistence*—resisting degradation in air, water, and sediments; *bio-accumulation*—accumulation in living tissues at concentrations higher than those in the surrounding environment; and *long-range transport*—moving across great distances from the source of release through air, water, and migratory animals, often contaminating areas thousands of kilometers away from any known source. Of all the pollutants released into the environment every year by human activity, POPs are among the most dangerous. They are highly toxic and long-lasting, and cause an array of adverse effects, including disease and birth defects in humans and animals. Some of the severe health impacts from POPs include cancer, damage to the central and peripheral nervous systems, reproductive disorders, and disruption of the immune system.

2. Environmental and human health hazards created by POPs particularly affect developing countries, where systems and technologies for monitoring, tracking, and disposing of POPs are often weak or nonexistent. Over the past fifty years, many African countries have accumulated large quantities of pesticides, including POPs, which have since become unfit for use or reformulation, and are, therefore, obsolete. Although these chemicals are no longer effective for controlling pests, they remain potent chemical toxins, and thus need to be carefully safeguarded or disposed of. The unwanted build-up of such products normally results from inadequate stock management, non-distribution to farmers, bans, uncoordinated or inappropriate supply from donor agencies, unsuitable packaging, and supplier incentive programs.

3. Recognizing the dangers of POPs, many countries have begun limiting or banning their production, use, and release. These efforts culminated in the Stockholm Convention on POPs, adopted in 2001 and entered into force in 2004. More than 160 Parties to the Convention agreed to eliminate or reduce the release of POPs from their countries into the environment. The Stockholm Convention focuses on 26 POPs of immediate concern—pesticides, industrial chemicals, and unintentional byproducts.¹³

B. Project components

4. The Mali Obsolete Pesticides Disposal and Prevention Project will be a four and a half year project (2015 - 2020) with a total cost of US\$5.14 million. The project Implementing Agency will

¹³ The original 12 POPs are often referred to as “the dirty dozen”, namely: aldrin, chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, endrin, heptachlor, mirex, Toxaphene, hexachlorobenzene (HCB), polychlorinated biphenyls (PCBs), dioxin and furans. In May 2009, the Parties added nine new chemicals to the list of controlled substances under the Convention: alpha- and beta hexachlorocyclohexane (by-products); lindane and chlordecone (pesticides); tetra- and hexabromodiphenyl ether, hexabromobiphenyl, pentachlorobenzene, perfluorooctane sulfonic acid and perfluorooctane sulfonyl fluoride (industrial chemicals). Endosulfan (pesticide) was added in May 2011, hexabromocyclododecane in 2013, and three more chemicals in May 2015.

be the National Department for Sanitation and Pollution Control (DNACPN), which is responsible for pollution control issues under the Ministry of Environment, Sanitation and Sustainable Development (MEADD). The project's overall approach is to build on the work accomplished under the Africa Stockpiles Program-Project 1 in Mali (ASP-P1 Mali) to launch a disposal contract by a qualified international disposal company, reduce risks emanating from pre-identified sites which contain highly polluted soil, and implement prioritized activities aimed at reducing the re-accumulation of OPs, using international and local expertise.

5. The project is comprised of the following three components:

Component 1: Disposal of publicly-held OPs and associated waste and reduction of risk from three priority high-risk contaminated sites (Total financing: US\$3.45 million: GEF: US\$2.70 million, Danish TF: US\$0.55 million, GOM: US\$0.20 million)

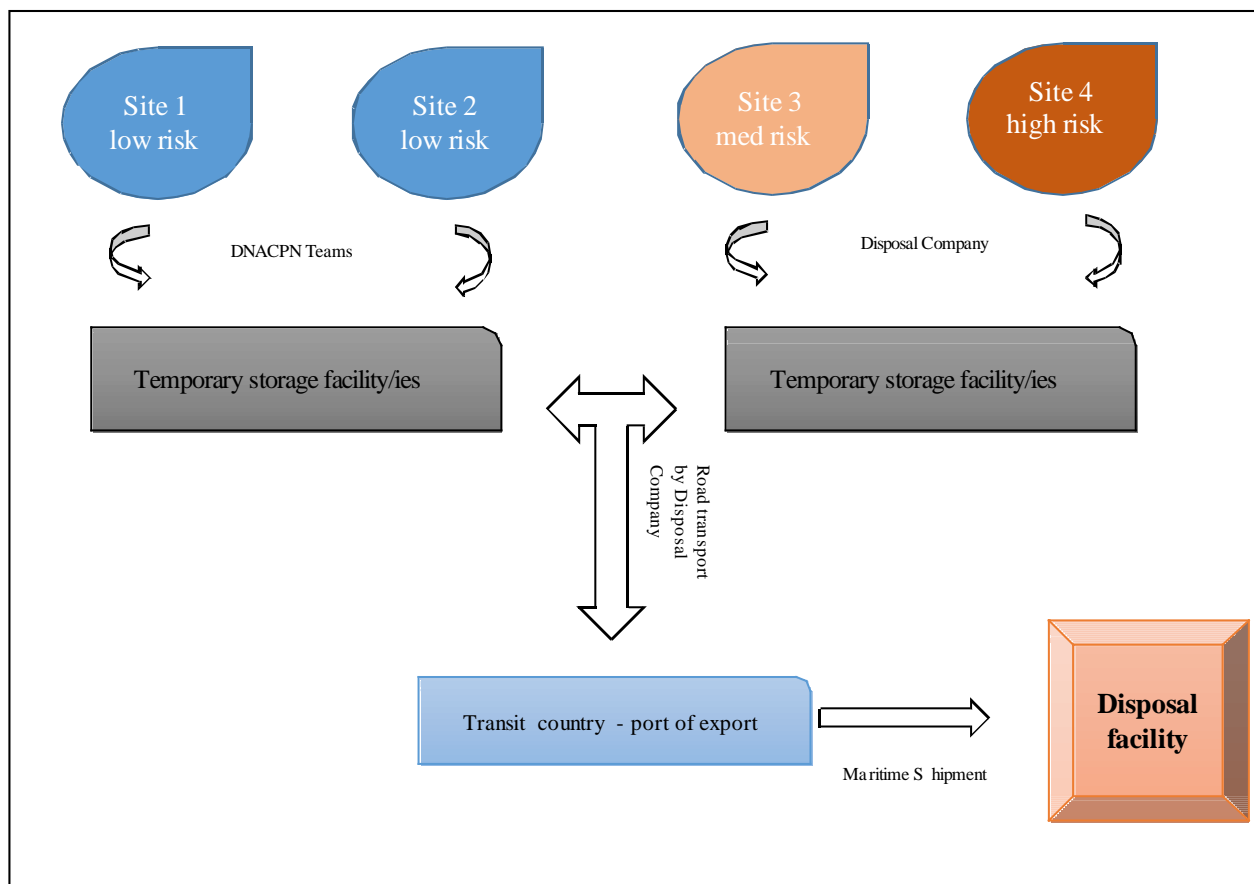
Sub-component 1.1: Disposal of publicly-held OPs and associated waste

- 1.1.1 **Safeguarding and centralization of low-risk stocks:** Trained DNACPN teams will safeguard and centralize low-risk stocks (defined as stocks which do not contain WHO class Ia (extremely hazardous) or Ib (highly hazardous) pesticides and weigh less than 500kg), prior to their disposal as described below. The ESIA guides the preparation of an Environmental Management Plan for the safeguarding and centralization actions, to be prepared by the project, approved by the Bank and publicly disclosed before the activities commence.
- 1.1.2 **Disposal of all stocks (low, medium and high risk):** The Recipient will hire through direct contracting the same international disposal company that was selected through a competitive process during implementation of the regional project (Africa Stockpiles Program). The company will be in charge of safeguarding, centralizing, transporting and disposing of all 666 tonnes of OPs and associated waste recorded in the PSMS (low, medium and high risk). As a first step, the company will repack and safeguard (where needed) all quantities of medium and high risk stocks, clean-up sites to avoid further environmental impact, and store the stocks in temporary secure storage facilities. Control of sites will be carried out after the repackaging is completed. The company will then transfer all stocks by road to an agreed port of export. From the port, the company will ship the stocks via sea to a licensed high-temperature disposal facility, most likely in Europe due to the relative proximity of acceptable disposal facilities (see Figure 1). All collection, repackaging, transport and disposal stages will comply with international standards for environmentally sound management and disposal of POPs and associated wastes, including the guidelines adopted by international instruments such as the Basel and Stockholm Conventions, under the responsibility of the disposal company and supervision of DNACPN (assisted by an international expert). The disposal company will use its own equipment, machinery and modes of transportation, while DNACPN will use existing valid equipment and transportation, and purchase additional equipment as needed.

Table 1: Publicly-held OP and Associated Waste Stocks in Mali (PSMS, October 2014)

Type of stocks	Quantity (tonnes)
Obsolete pesticides	580.12
Obsolete veterinary products	9.16
Contaminated material	21.58
Contaminated equipment	20.06
Empty pesticides containers	35.51
Total:	666.43

Figure 1: Disposal strategy



Sub-component 1.2: Risk reduction from contaminated sites

1.2.1 **Risk reduction at three priority high-risk contaminated sites:** According to a FAO/DNACPN analysis of contaminated sites across Mali ¹⁴, there are three high risk polluted sites in Mali, which pose the highest environmental and human health risks from soil and/or water contamination by pesticides: these are the sites of Goundam, Bambara

¹⁴ DNACPN. Report of the first phase of the second investigation mission of new contaminated sites in Bambara Maoudé, Koriomé, Goundam and Diré (Tombouctou), conducted from September 17 to 26, 2010; and report of the second phase of the mission in Kara (Diafarabé), Niono et Marila (Kayes) conducted from October 27 to November 4, 2010. Bamako, 2010.

Maoudé and Kara (see Table 2). The project will finance risk reduction activities at these three sites according to site-specific strategies recommended by a pre-feasibility study, which will be carried out during Year 1 by a soil decontamination specialist. The study will consider the most cost-effective technology options to reduce exposure of select key receptors, based on the extent of contamination and soil characteristics such as the level of organic matter, clay particle content, water content and hydrology, natural soil flora and fauna, access to the site, and past experience with similar soils and contaminants. In general, risk reduction options can be grouped as follows:¹⁵

- (a) Options for low-level contamination, which poses limited threat to public health or the environment: fencing of the area, planting of cover crops to prevent dust migration and diversion of water courses to prevent spread of contamination.
- (b) Options for intermediate-level contamination, which poses a potential or actual threat to public health and the environment: land farming, in situ bioremediation using existing soil bacteria or added cultures, phytoremediation, and excavation of the soil and removal to a specially engineered landfill site for sequestration.
- (c) Options for WHO class 1 pesticides, POPs pesticides at a level greater than 50 ppm or which generally exhibit high levels of contamination with other pesticide classes: excavation and transportation to a licensed treatment facility; treatment options include a variety of thermal treatments, mechanical destruction and soil washing.

1.2.2 Institutionalizing a system for regular updating of the national OP inventory: Currently, collection of data on the location, amount and condition of OPs and associated waste in Mali is carried out in a fragmentary manner by DNACPN staff and consultants on a need basis. The project will develop a system for regular updating of a nation-wide inventory (the PSMS) by the Government, and provide the necessary training to relevant stakeholders. It is expected that this system will be used by the Government to conduct future inventories on an annual/bi-annual basis.

1.2.3 National plan for decontamination of priority sites: The project will develop a national plan for decontamination of other polluted sites, already identified or to be identified in the country. The plan will be based on characterization of sites and proposals for risk reduction and financing options (including national and donor funding). In particular, it is expected that the national plan will confirm sites in the north which have been difficult to evaluate due to security reasons, among these are: Tin Essako (a burial site 150km from Kidal), Gao (a destroyed pesticide store, 1,200km from Bamako), and Anéfis (a well and surrounding area heavily contaminated by dieldrin, 90km from Kidal).

6. Local NGOs will provide oversight of safeguarding and contaminated soil risk reduction activities via the Pesticides Action Network in Mali (PAN-Mali), a network of NGOs which was instrumental during the implementation of ASP-P1 Mali, especially in mobilizing communities and raising local awareness, with the aim to ensure the objectivity of safeguarding and risk reduction operations and promoting awareness of civil society.

¹⁵ FAO. *Environmental Management Tool Kit for Obsolete Pesticides Volume 3. FAO Pesticides Disposal Series No. 15*. Rome, 2011.

7. Expected outcome: Elimination of the risks caused by POPs, POPs waste and other harmful substances originating from publicly-held OPs and associated waste, and reduction of health and environmental risks from highly contaminated soil.

8. Expected key outputs:

- (a) Disposal of 666 tonnes of publicly-held OPs and associated waste
- (b) Reduction of risk emanating from highly polluted soil in Goundam, Bambara Maoude and Kara
- (c) An inventory updating system mainstreamed into governmental functions
- (d) A national plan for risk reduction at prioritized polluted sites

Table 2: Background information on highly risk polluted sites in Goundam, Bambara Maoudé and Kara

Site	Location/Region	Site size (m²)	Contaminants	Volume of contaminated soil (m³)	Other site characteristics	Risk reduction technique/s¹⁶
Goundam	North central Mali/Tombouctou Region	2,500	Organochlorines (DDT and HCH)	65	A closed pesticides storage site where pesticides are buried in the ground. The site is at the center of the city.	Safeguarding of stocks and heavily contaminated soil, repackaging, confinement and isolation, including formation of strongly adsorbed compounds.
Bambara Maoudé	North central Mali/Tombouctou Region	1,700	Organochlorines Organophosphate carbamates	510	An old pesticides store at the town center. It drains into a nearby pond.	Landfarming and various environmental management techniques aimed at reducing exposure such as controlling run-off from the site.
Kara	Central Delta of the Niger River/ Mopti Region	1,845	Organochlorines Organophosphate carbamates	350	In the center of the village on a flooded island (three months per year). Contains discarded OPs and empty containers.	Removal, repackaging and confinement of the most heavily contaminated soil and material, and landfarming.

¹⁶ To be confirmed based on pre-feasibility study to be conducted during Year 1 of the project.

Component 2: Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticide re-accumulation (Total financing: US\$0.97 million: GEF: US\$0.34 million, Danish TF: US\$0.38 million, GOM: US\$0.25 million)

9. Component 2 finances stocks reduction measures using the achievements of ASP-P1 Mali as baseline. Under ASP-P1 Mali, DNACPN: (i) developed a draft National Prevention Plan (PNP)¹⁷, (ii) developed and updated several regulations on pesticide management, (iii) provided regulation enforcement support to government agencies, (iv) trained stakeholders in pesticide and waste management, and (v) supported the activation of the National Pesticides Management Committee (CNGP) as the national multi-stakeholder body responsible for pesticide management. However, the CNGP stopped functioning once ASP-P1 Mali closed due to lack of funding. PAN-Mali, which partnered with the ASP-P1 Mali, conducted training and raised the awareness of producer groups to the health risks of pesticide and empty container mismanagement. NGO members of PAN-Mali also participated in the implementation of a communication strategy on empty containers in two of Mali's four cotton production zones.

10. Key remaining weaknesses along the pesticide life cycle in Mali will be addressed, i.e., i) regulatory gaps related to container management and pesticide import, distribution and recording; ii) sustainable financing for management of pesticides, OPs and empty containers, and for the CNGP; iii) information exchange between pesticide importers/distributors and control entities; iv) capacity for pesticide inspection and control; v) continued need of awareness raising and communication with communities concerning poor pesticide management; and v) finalization and submission for adoption of the PNP by the Council of Ministers, which reflects the results of all the various activities under Component 2.

Sub-component 2.1: Pesticide management regulation and institutional support

2.1.1 Finalization of draft ordinances and procedures for pesticide management, and submission for endorsement by the NSC before submission for Cabinet approval:

- (a) Draft Ordinance on the implementation of the Polluter Pays Act No. 01-020 (May 30, 2001) related to management of pollution and nuisance from seized OPs and related waste;
- (b) Draft Inter-Ministerial Ordinance on empty pesticide containers management;
- (c) Draft Inter-Ministerial Ordinance on rules for packaging, transportation, storage and disposal of pesticides;
- (d) Draft ordinance on pest and pesticide control agents' registration;
- (e) Draft ordinance determining terms and conditions for pesticide use;
- (f) Forms and procedures for inspection and control of pesticides sale, import and/or formulation;
- (g) Procedure for pesticides transportation control;
- (h) Procedures for managing seized pesticides and closed off stores;
- (i) Procedure for pesticide marketing applications;
- (j) Procedure for notification of OP detention to DNACPN; and

¹⁷ DNACPN. *Plan National De Prévention de l'accumulation de Stocks de Pesticides Obsolètes du Mali*. Bamako, 2007.

- (k) Draft text on OPs confiscation and detention notification, in accordance with Article 38 of Act No. 01-020 (May 30, 2001) on Pollution and Nuisance.

2.1.2 **A feasibility study on sustainable financing instruments for pesticides management in Mali:** The study will include sections on the pesticide life cycle, empty container management, review/analysis of the role of the private sector, and actions to ensure the sustainable operation of the CNGP. With regard to empty containers, the study will explore the possibility of having a collection and treatment scheme financed through a levy on imported pesticides, and the involvement of private or semi-private operators.¹⁸ Once finalized, the study will be endorsed by the CNGP and submitted to the Cabinet for approval with concrete recommendations.

2.1.3 **Institutional support:**

- (a) Support to DNACPN's strategic orientation and management capabilities;
- (b) Support to DNACPN's capacity to enforce the polluter pays principle for OPs;
- (c) Review pesticide import and stock management procedures, and propose changes which would reduce OP generation;
- (d) Training stakeholders in pesticide inspection and control, management of confiscated pesticides and pesticides distribution/sale.

Sub-component 2.2: Empty pesticide container management

11. DNACPN estimates that 2.5 million empty containers are generated in Mali's four cotton production zones each year. This carries immediate environmental and human health problems as often containers are used for carrying drinking water, for food storage, etc. Under ASP-P1 Mali, DNACPN began raising communities' awareness to the dangers of such practices, and collected containers generated by the CMDT cotton production subsidiaries (*filiales*) Kita (West Branch Subsidiary) and Koutiala (North East Subsidiary); in Kita, DNACPN operated in 11 of the 33 municipalities, and in Koutiala - in 18 of the 36 municipalities by signing agreements between local authorities and producer organizations. This approach had been developed in consultation with cotton producers' unions, representatives of local authorities, community leaders, DNACPN, the Malian Company for Textiles Development (CMDT) and representatives of PAN-Mali member NGOs. This sub-component will formalize the approach in a strategy for management of empty containers and pilot its implementation in all the remaining municipalities in Kita and Koutiala, and in the two other cotton production subsidiaries.

2.2.1 **Finalization of the Empty Container Community Management Strategy:** The approach piloted under ASP-P1 offers a container collection methodology, which entails stakeholder training on container rinsing procedures (triple-rinse), awareness raising on risks, identification of roles and responsibilities and identification of suitable temporary storage facilities. The strategy to be developed will be expanded by incorporating recommendations from the financial

¹⁸ The project could exchange with Tunisia's National Agency for Waste Management (Agence Nationale de Gestion des Déchets -ANGed), which led similar work under ASP-P1 Tunisia.

sustainability study (see sub-component 1.1), including consideration of final disposal, consulting with stakeholders from the public, civil and private sectors, and learning from successful systems elsewhere (such as Tunisia). The strategy will be finalized by incorporating lessons from implementation (see below), and submitted for endorsement by the NSC.

- 2.2.2 **Implementing the Empty Container Community Management Strategy in the four cotton production zones:** Collection of empty containers will be repeated and expanded to cover all the remaining municipalities in Kita and Koutiala. In addition, implementation of the strategy will be extended to the two other cotton production subsidiaries, namely Bougouni / Sikasso (South Subsidiary) and Fana / OHVN (Center Subsidiary). The strategy will be implemented in pilot municipalities through the involvement of the cotton producers which have already benefited in previous subsidiaries. The expansion and extension of the strategy will be introduced in collaboration with the Cooperative Societies of Cotton Producers (SCPC), CMDT, CropLife and NGOs. The recovery of empty packaging involves a collection system, triple rinsing, safe temporary storage and consideration of disposal by distributors of pesticides or other interested entities (to be determined).

Sub-component 2.3: Communication and awareness raising

12. An internal communication plan (for communication between the DNCAPN and other relevant stakeholders from the Government) was prepared by DNACPN under ASP-P1 Mali. This sub-component will finance the updating and implementation of this plan, and the development and implementation of an external communication and awareness raising plan for affected communities and non-governmental stakeholders.

13. **Finalization and submission for adoption of the PNP:** The PNP will be updated to reflect the various results of Component 2 (regulation, financial sustainability, training, empty container management, communication and awareness raising). Once finalized, the PNP will be submitted to the NSC for endorsement, to be then submitted by the CNGP Chair for adoption by the Council of Ministers.

14. Expected outcome: Sustainable reduction of new accumulations of OPs and associated waste

15. Expected key outputs:

- (a) Finalized ordinances and procedures for management of pesticides, OPs and waste endorsed by the NSC and submitted for Cabinet approval
- (b) A feasibility study on sustainable financing instruments for pesticides management endorsed by the NSC and submitted to Cabinet for approval
- (c) Training sessions for DNACPN staff and other stakeholders
- (d) Collection and recovery of empty pesticide containers in all municipalities of Kita, Koutiala, Bougouni/Sikasso and FANA/OHVN
- (e) Implementation of communication and awareness raising tool for internal and external

audiences

- (f) An updated PNP submitted for adoption by the Council of Ministers (on the basis of other outputs)

Component 3: Project management, monitoring and evaluation (Total financing: US\$0.72 million: GEF: US\$0.15 million, Danish TF: US\$0.02 million, GOM: US\$0.55 million)

16. The project will be managed according to the following principles: (a) timely and effective project delivery; (b) building on existing expertise from ASP-P1 Mali; and (c) ensuring sustainability of institutional arrangements (including sustainable financing) and capacity development. The Project Management Unit (PMU) will include designated staff from DNACPN and other technical departments from within the Ministry as needed, as well as hired technical consultants. The PMU will comprise a coordinator, a procurement specialist, a financial management specialist, a disposal specialist, a prevention specialist, a communications specialist, an accountant, a safeguard specialist, a staff assistant, a general office assistant and a driver. The fiduciary responsibilities (procurement and financial management) will be reinforced by hiring consultants for a limited period of time, during which the consultants will provide training to concerned services within MEADD. The PMU's main tasks will be to coordinate project activities, carry out procurement and financial management of both GEF and Danish TF grants (and other funds if they become available), monitor and evaluate project progress; ensure compliance with safeguards requirements; prepare annual work plans, budgets and procurement plans; facilitate stakeholder workshops and meetings; and report on project progress and financial status via periodical report according to an agreed timeline. M&E will be carried out using ASP-P1 Mali's existing M&E system, including software, data collection methods and reporting formats according to the project results framework.

17. Expected outcome: Effective project management and M&E.

18. Expected key outputs: Semi-annual, annual, mid-term and completion reports, Interim unaudited Financial Reports (IFRs), internal and external financial audits, annual work plans, budgets and procurement plans.

C. Project costs and financing

Table 3: Detailed financing estimates (US\$ M)

Project component	GEF	Danish TF	GOM	Total
1. Disposal of publicly-held OPs and associated waste and reduction of risk from three priority high-risk contaminated sites	2.7	0.55	0.2	3.45
1.1. Disposal of publicly-held OPs and associated waste	2.63	0.25	0.2	3.08
1.2. Risk reduction from high risk contaminated sites	0.07	0.3	0	0.37
2. Strengthening the institutional, regulatory and technical capacity for prevention of obsolete pesticide re-accumulation	0.34	0.38	0.25	0.97

2.1. <i>Pesticide management regulation and institutional support</i>	0.13	0.15	0	0.28
2.2. <i>Empty pesticide container management</i>	0.21	0.23	0.1	0.54
2.3. <i>Communication and awareness raising</i>			0.06	0.06
2.4 <i>Finalization and endorsement of the PNP</i>			0.09	0.09
3. Project management, monitoring and evaluation	0.15	0.02	0.55	0.72
3.1. Personnel	0.15	0.02	0.33	0.5
3.2. Management			0.15	0.15
3.3. Monitoring and evaluation			0.07	0.07
TOTAL	3.19	0.95	1.00	5.14

Annex 3: Implementation Arrangements
Republic of Mali: Obsolete Pesticides Disposal and Prevention Project

A. Project institutional and implementation arrangements

1. The project Implementing Entity is the National Department for Sanitation, Pollution and Nuisance Control (DNACPN) under the Ministry of Environment, Sanitation and Sustainable Development (MEADD). DNACPN was established in 1998 by Ordinance No. 98-027-P-RM, of August 25, 1998, which was ratified by Law N. 98-058 of December 17, 1998. It employs about 320 agents and has representation in all eight regions, the capital district of Bamako and Mali's main cities. It has a mandate to (i) integrate environmental concerns into policies and programs; (ii) supervise environmental impact assessments; and (iii) train and sensitize the population about pollution in collaboration with local authorities and civil society. At present, DNACPN's primary role is as a policy-making and regulatory body. It has regulatory oversight of waste issues through its division for solid waste management. A national strategy for hazardous waste management was adopted in 2009, however it is not yet fully operational. As the Implementing Agency of the closed ASP-P1 Mali and the beneficiary of past capacity building investments (e.g., from FAO), DNACPN has gained experience in social and environmental impact assessment, carrying out OP inventory, creating and utilizing the PSMS, OP safeguarding and soil remediation, and managing multi-stakeholder projects. However, DNACPN's overall management capacity, strategic direction and technical capabilities require further strengthening, an issue which will be addressed by the project.

2. A National Steering Committee (NSC), chaired by the Minister of MEADD or his representative, will be established prior to project effectiveness to oversee project implementation. The NSC will have representatives from the following institutions and groups, or their successors as appropriate:

- (a) Ministry of Rural Development
- (b) Ministry of Health and Public Hygiene
- (c) Ministry of Economy and Finance
- (d) Ministry of Regional Development and Population
- (e) Ministry of Territorial Administration and Decentralization
- (f) DNACPN
- (g) National Directorate of Agriculture
- (h) National Directorate of Fisheries
- (i) National Directorate of Veterinary Services
- (j) National Directorate of Health
- (k) National Directorate of Commerce and Competition
- (l) General Directorate of Customs
- (m) Office of Plant Protection – OPV
- (n) General Directorate of Civil Protection
- (o) Representative of the Agricultural Productivity Development Program in Mali (PAPAM)
- (p) Malian Company for Textiles Development - CMDT

- (q) Office of the Niger Higher Valley - OHVN
- (r) Permanent Assembly of the Chambers of Agriculture of Mali (APCAM)
- (s) Central Veterinary Laboratory (LCV)
- (t) National Center for Locust Control (CNLCP)
- (u) Association of Pesticide Distributors (CropLife-Mali)
- (v) Pesticide Action Network in Mali (PAN-Mali, an NGO network)
- (w) Mali Stockholm Convention Focal Point
- (x) Basel Convention Focal Point
- (y) Designated National Authority of the Rotterdam Convention
- (z) Focal Point for the Strategic Approach to International Chemicals Management

3. Each NSC member will designate a specific focal point to the NSC. The main functions of the NSC will be project-specific by ensuring the participation of key departments, the coordination among departments with a role to play in pesticide management and prevention of obsolete stocks, and the integration of the goals of the project in the long-term vision of each of these departments/agencies. In addition, the tasks of the NSC will include: (i) approval of annual work plans and budgets; (ii) review and endorsement of project deliverables; and (iii) providing guidance and orientation to facilitate project implementation.

4. The National Pesticide Management Committee (CNGP), having the national mandate of regulating the use of pesticides, will be regularly kept informed of progress and serve as a forum for discussion of management options that will be developed by the project that are relevant to its mandate. CNGP was legally formed in 2002¹⁹ and attached to the MOA following a governmental decision to have in place an executive body responsible for the implementation of the Permanent Interstates Committee for Drought Control in the Sahel's (CILSS) rules on registration and control of pesticides. In specific, the CNGP is responsible for:

- (a) Ensuring the implementation of the decisions of Sahelian Pesticides Committee (CSP);
- (b) Proposing to the Minister of Agriculture measures to contribute to standardization, defining and establishing the terms and conditions of pesticide management;
- (c) Proposing principles and general guidelines for the regulation of pesticides;
- (d) Updating the list of authorized and prohibited pesticides;
- (e) Ensuring the implementation of a national safety plan for toxins;
- (f) Issuing opinions on requests for pesticides import.

5. The CNGP is chaired by the minister of MOA, co-chaired by the ministers of MEADD and MOH, and comprises a wide range of representatives from the Government (Ministry of Finance, Territorial Administration, Commerce, Industry, Justice, DNACPN and other relevant national directorates), CMDT, OHVN, CNLCP, the Central Laboratory, Chamber of commerce, focal points of the relevant international conventions, NGOs and industry. The project will provide the necessary support to the CNGP to perform its duties in the short-run, and develop mechanisms to sustain its functionality beyond the lifetime of the project, as proposed in the sustainable financing report under Component 2.

¹⁹ Decree No. 09-313 of June 19, 2002 on detailed rules for the application of Law No. 02-014, Chapter II on powers and composition of the CNGP.

6. A Project Management Unit will be in place as a condition of effectiveness and it will be comprised of designated staff from DNACPN and other technical departments from within the Ministry as needed, as well as hired technical consultants. The PMU will have a coordinator, a procurement specialist, a financial management specialist, a disposal specialist, a prevention specialist, a monitoring and evaluation specialist, a communications specialist, an accountant and a safeguard specialist. Procurement and financial management (FM) responsibilities will be reinforced by hiring consultants for a limited period of time who will train concerned MEADD services during their consultancy. The PMU's main tasks will be: (i) coordination of project implementation; (ii) preparation and/or submission of documents/reports which require World Bank review and/or clearance; (iii) ensuring sound FM and proper documentation of receipt and expenditure of funds; (iv) submission of external annual audit reports to the World Bank; (v) preparation of annual work plans and budgets, semi-annual and annual progress reports, mid-term and completion review reports and quarterly Interim unaudited Financial Reports (IFRs), and submission to the World Bank; (vi) updating the procurement plan, and submission to the World Bank; (vii) conducting M&E; (viii) ensuring preparation, implementation and compliance with relevant safeguard documents and agreed upon occupational health and safety procedures; and (ix) acting as the NSC Secretariat by convening meetings, drafting agendas and minutes and following up on implementation of NSC decisions. The PMU coordinator will report to DANCPN's National Director.

7. Where appropriate, the project may seek specialized guidance from consultants and ad hoc thematic working groups, comprising stakeholders from all levels, which will be adjourned by the NSC. An international disposal consultant will be contracted by CropLife International (CLI) for a limited period of time through a direct agreement between CLI and the GOM to support DNACPN in the implementation of disposal activities.

8. The project will establish strategic partnerships with the following projects in Mali:

- (a) "Agricultural Productivity Development Program in Mali (PAPAM)" (World Bank, 2010-2016): the projects will collaborate on ensuring high quality of inputs and extension services (accreditation and control of service providers for example), as well as training and monitoring of pesticides handling.
- (b) "Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention NIPs in African Least Developed Countries of the ECOWAS Sub-region" (UNEP/UNIDO, 2011-2016): the projects may collaborate on training of environmental and agricultural specialists in POPs inventory, the use of the PSMS, and educating stakeholders and vulnerable communities on POPs.
- (c) "Disposal of Obsolete Pesticides including POPs and Strengthening Pesticide Management in CILSS Member States" is a regional project under FAO with GEF funding, including interventions in Mali. Collaboration will be focused on container management and working with the cotton industry.

B. Financial Management, Disbursement and Procurement

Financial Management

Overall

9. The financial management (FM) responsibility will be ensured by the PMU to be established within the MEADD. The PMU will be adequately staffed to carry out the project FM activities. An accounting software will be installed and used for budgeting, accounting and reporting purposes. The FM team will need to ensure the transmission of financial data, archiving of financial data, and additional controls to be implemented in the context of the grant, so to ensure accuracy and completeness of the grant financial data. The team will thus ensure that every transaction is duly authorized and properly recorded and that assets are safeguarded.

Budgeting

10. The budgeting process will be clearly defined in the Project Implementation Manual under the FM procedures section, and the budget will be reviewed and adopted by the NSC before the beginning of the year. Annual adopted budgets will be submitted for the Bank's non-objection no later than November 30 every year.

Accounting

11. The accounting standards of the OHADA Accounting System (SYSCOHADA), in use in Mali, will apply to the project. Project accounts will be maintained on a cash basis, supported with appropriate records and procedures to track commitments and to safeguard assets. Annual financial statements will be prepared by the PMU accounting team in accordance with the accounting referential. The accounting and control procedures will be documented in the FM section of the Project Implementation Manual.

Internal control

12. A Project Implementation Manual will be elaborated and will include FM arrangements, i.e., budget process, accounting and reporting, internal controls, assets safeguards, and clarify roles and responsibilities of all the stakeholders.

Reporting

13. The financial team will ensure the production of periodic financial information (Interim Financial Report) for the grant on a quarterly basis that details for the semester and the cumulative: (i) the funds received, (ii) the expenditures broken down by components/categories or activities, (iii) the funds available at the beginning of the semester, (iv) the Net fund available, and (v) a Note to the Financial Statement detailing for instance the activities performed. The World Bank FM Specialist will ensure that these Interim Un-Audited Financial Reports (IFRs) are produced and transmitted to the Bank no later than 45 days from the end of the quarter.

14. The PMU will also produce the project's Annual Financial Statements and these statements will comply with SYSCOHADA and World Bank requirements. These Financial Statements will be comprised of:

- (a) Statement of Sources and Uses of Funds which includes all cash receipts, cash payments and cash balances;
- (b) Statement of Commitments;
- (c) Accounting Policies Adopted and Explanatory Notes; and
- (d) A Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.

External audit

15. The Financing Agreement will require the submission of Audited Financial Statements for the project within six months after year-end. An external auditor with qualification and experience satisfactory to the World Bank will be recruited to conduct an annual audit of the project's financial statements. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant (IFAC) will be required. The external auditor will prepare a Management Letter giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the financing Agreement.

Funds flow and Disbursement

Financing sources arrangement

16. Three financing sources: GEF, Government of the Kingdom of Denmark, and Government of Mali, will fund the project activities. GEF and Government of the Kingdom of Denmark financing will be pooled together and will finance the activities of the project on the basis of their shared contribution towards the cost of each component (excluding the financing share of the Government). The Government's contribution will be made available starting Year 2 of the project, through four annual installments of US\$250,000 equivalent in local currency (in 2016, 2017, 2018 and 2019).²⁰ Any activity under a specific component financed by the Government funds will be at 100 percent. In addition, its first disbursement is not expected before January 2016 due to national financing rules and process. The fact that all operations financed from counterpart funds will be 100 percent (Government is not part of the co-financing arrangement) and all activities will be financed independently of the source of funds will help mitigate related risk.

²⁰ As confirmed in the letter of the Ministry of Finance and Economy addressed to the Bank dated March 18, 2015.

Table 4: Financing figures (US\$ M)

Category	Amount of the Grant Allocated (expressed in USD)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, non-consulting services, consultants' services, Operating Costs and Training under the Project (for all project components from the GEF grant)	3,190,000	77%
(1) Goods, non-consulting services, consultants' services, Operating Costs and Training under the Project (for all project components from Government of Denmark's grant)	950,000	23%
TOTAL AMOUNT	4,140,000	

17. One category of project expenditures will be set under the project, with shared co-financing from the GEF grant (77%) and the Government of Denmark's grant (23%). Retroactive financing of an aggregate amount not to exceed US Dollars one hundred fifty and four thousand (USD 154,000) and US Dollars forty six thousand (USD 46,000) equivalent may be made from the GEF Grant and the Government of Denmark's Grant respectively for payments made prior to this date but on or after April 17, 2015, for Eligible Expenditures under the disbursement Category (1).

Designated Account

18. A pooled Designated Account (DA) and a specific dedicated Project account (PA) for the counterpart funds will be opened at *Banque de Développement du Mali* ("BDM-SA") to facilitate payment for eligible expenditures. The DA and the PA will be managed by the PMU according to the disbursement procedures described in the Administrative, Accounting and Financial section of the Project Implementation Manual and the Disbursement Letter.

Disbursement Methods

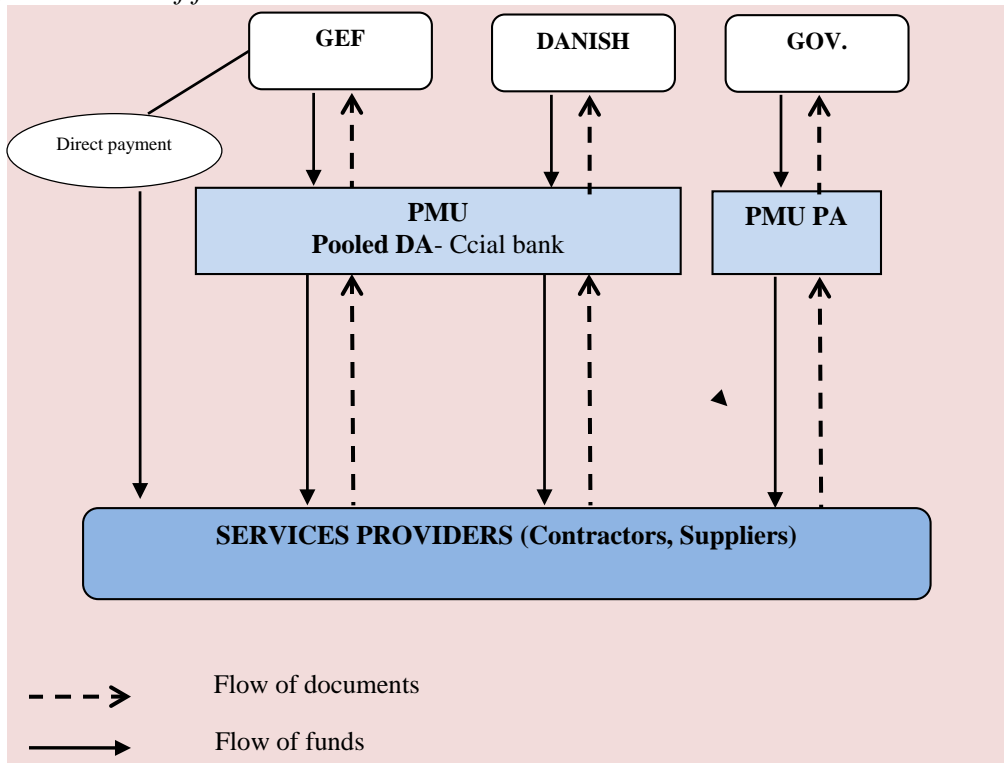
19. Disbursement procedures and arrangements will be detailed in the accounting, administrative and financial procedures in the Project Implementation Manual and the Disbursement Letter. Upon project effectiveness, transaction-based disbursements will be used. An initial advance up to the ceiling of the DA as stated in the disbursement letter will be made into the DA and subsequent disbursements will be made on a monthly basis against submission of SOE or records as specified in the Disbursement Letter. Thereafter, the option to disburse against submission of quarterly unaudited IFR (also known as the Report-based disbursements) could be considered subject to the quality and timeliness of the IFRs submitted to the Bank and the overall FM arrangements as assessed in due course.

20. In addition to the “advance” method, the option of disbursing the funds through direct payments to a third party, for contracts above a pre-determined threshold for eligible expenditures (e.g., 20 percent of the DA ceiling), will also be available. Another acceptable method of withdrawing proceeds from the GEF grant is the special commitment method whereby the Bank may pay amounts to a third party for eligible expenditures to be paid by the under an irrevocable Letter of Credit (LC).

Funds flow diagram

21. The project’s total cost is US\$5.14 million: US\$3.19 million from GEF, US\$0.95 million from the Government of the Kingdom of Denmark and US\$1.00 million from the Government of Mali. Funds will flow from the DA and the PA to suppliers and contractors.

Figure 2: Flow of funds



Procurement

22. The procurement arrangements for the project have been designed with consideration of the weakness of national procurement rules and procedures, and past experience in procurement carried out under other World Bank-financed projects.

Reference to National Procurement Regulatory Framework

23. A Country Procurement Assessment Review for Mali was carried out in 2007 and an evaluation of the national procurement system based on the methodology of the Organization for Economic Co-operation and Development of the Development Assistance Committee (OECD/DAC) was conducted in September 2011 under EU funding. The assessment highlighted that the existing procurement principles and most of the procedures needed to be strengthened. The current regulation on Public Procurement in Mali is the Decree No. 08-045/P-RM dated August 11, 2008.

24. The focus has progressively shifted from reforming the legal and regulatory framework to focusing on strengthening the procurement capacity and the transparency of the national procurement system. In this regard, the Government has taken the following steps: (i) adopted an action plan based on the finding of the Country Procurement Assessment Review; (ii) set up a new legal and regulatory framework under the new Procurement Code; (iii) issued procurement regulations and standard bidding documents; and (iv) created a Regulatory body for public procurement and established procurement units in regions and technical ministries, including the Ministry of Finance.

25. In 2013, under the initiative of the West African Economic and Monetary Union (WAEMU) Commission, the World Bank funded a study on how to boost Budget Execution for better development impact. Based on data suggesting that a significant part of the capital investment budgets of WAEMU member states is underspent, this study was undertaken with a view to provide a comprehensive review of the systems, processes and practices used by Finance and Procurement to manage capital expenditure and to identify practical recommendations that would allow countries to enhance the levels of budget execution. The country report for Mali recommended a series of actions in order to reduce the significant delays of the procurement process and to improve the value for money. The action plan of this study at the regional level was approved on February 28, 2014 when the meeting of the “*Comité d’Experts*” (Experts Committee) of the WAEMU was held in Burkina Faso. Mali had implemented some of the measures of the action plan before its approval by the Council of Ministers of WAEMU held in June 28, 2014 in Dakar.

26. A Prime Ministerial Decree was taken already in April 10, 2014 and it determined authorities in charge of conclusion and approval of contracts and raised the threshold for concluding and approving all the authorities. This contributes in theory to reducing the time of the procurement cycle of a number of contracts (Decree No. 2014-0256 / PM-RM). As for the ministerial decree of April 25, 2014, it has significantly raised the threshold for concluding and approving contracts and reduced the time of the different stages of the cycle of procurement and especially a fact major, it removed the double review of Government / donors for contracts subject to prior review (Decree No. 2014-1323 / MEF-SG). These different measures aim to reduce the procurement cycle and to boost budget execution.

27. National Competitive Bidding (NCB) will be acceptable to the World Bank subject to the procedures below and as reflected in the Financing Agreement:

- (a) **Using of competitive method:** Even though the National Procurement Code does not apply to some small contracts, the procedures will require that for such contracts, a competitive method be used;
- (b) **Advertising:** The General Procurement Notice would be advertised in the United Nations Development Business (UNDB) online and on the World Bank's external website; specific invitation to bids would be advertised in at least one national widely circulated newspaper or on a widely used website or electronic portal of the Recipient with free national and international access;
- (c) **Standard Bidding Documents:** All standard bidding documents to be used for the project shall be found acceptable to the World Bank before their use during the implementation of the project;
- (d) **Eligibility:** No restriction based on nationality of bidder and/or origin of goods shall apply. Foreign bidders shall be allowed to participate in NCB without restriction and shall not be subject to any unjustified requirement which will affect their ability to participate in the bidding process. Recipient's government-owned enterprises or institutions shall be eligible to participate in the bidding process only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not dependent agencies of the Recipient;
- (e) **Bid preparation:** Bidders shall be given at least thirty (30) days from the date of the invitation to bid or the date of availability of bidding documents, whichever is later, to prepare and submit bids; except in cases of emergency declared by the Recipient, and provided that such emergency is recognized by the World Bank and the World Bank has given its approval for less time for the bids submission;
- (f) **Bid Evaluation and Contract Award:** The evaluation and contract award process of alternative bids would be revised according to Bank's Procurement guidelines. The criteria for bid evaluation and contract award conditions shall be clearly specified in the bidding documents;
- (g) **Preferences:** No domestic preference shall be given to domestic/ WAEMU countries bidders; to domestically/WAEMU area manufactured goods; and to bidders forming a joint venture with a national firm or proposing national sub-contractors or carrying out economic activities in the territory of the Recipient;
- (h) **Fraud and Corruption:** In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the World Bank's policy to sanction firms or individuals found to have engaged in fraud and corruption as set forth in the paragraph 1.16 (a) of the Procurement Guidelines;
- (i) **Right to Inspect and Audit:** In accordance with paragraph 1.16 (e) of the Procurement Guidelines, each bidding document and contract financed from the proceeds of the financing shall provide that: (i) the bidders, suppliers, and contractor and their

subcontractors, agents personnel, consultants, service providers or suppliers, shall permit the World Bank, at its request, to inspect their accounts, records and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the World Bank; and (ii) the deliberate and material violation by the bidder, supplier, contractor or subcontractor of such provision may amount to obstructive practice as defined in paragraph 1.16 (a) (v) of the Procurement Guidelines; and

- (j) **Suspension and debarment:** The cases of suspension/debarment under the Recipient system shall result from fraud and corruption as set forth in paragraph 1.16 (a) of the Procurement Guidelines and approved by the World Bank provided that the particular suspension/debarment procedure afforded due process and that the suspension/debarment decision is final.

Use of Bank Guidelines

28. Procurement for the proposed Project would be carried out in accordance with the World Bank's "*Guidelines: Procurement under IBRD Loans and IDA Credits*", dated January 2011 and revised in July 2014; and "*Guidelines: Selection and Employment of Consultants by World Bank Borrowers*", dated January 2011 and revised in July 2014, and the provisions stipulated in the Legal Agreement. In addition, procurement will also comply with the Mali Public Procurement Decree. However, in the event of a conflict between the Bank guidelines and the Procurement Law, the regulations of the World Bank will prevail. The various items under different expenditure categories are described in general below. For each contract to be financed by the Grants, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Recipient and the Bank in the 18-month Procurement Plan that was approved during negotiations. The Procurement Plan will be updated at least annually, or as required, to reflect the actual project implementation needs and institutional capacity. The implementation entities, as well as contractors, suppliers and consultants will observe the highest standard of ethics during procurement and execution of contracts financed under this project. "Guidelines on preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA and Grants" dated October 15, 2006 and revised in January 2011 (the Anti-Corruption Guidelines) shall apply to the project.

Advertising

29. A General Procurement Notice (GPN) will be prepared and published in United Nations Development Business (UNDB) online and on the Bank's external website and in at least one national widely circulated newspapers or on a widely used website or electronic portal of the Recipient with free national and international access after the project is approved by the Bank Board, and/or before effectiveness. The GPN will show all International Competitive Bidding for works and goods contracts and all consulting services involving international firms. Specific Procurement Notices for all goods and works to be procured under ICB and Expressions of Interest (EoI) for all consulting services to cost the equivalent of US\$200,000 and above would also be published in the same manner as the GPN.

Procurement methods

30. **Procurement of Goods and Non-consulting services:** Goods and non-consulting services procured under this project will include, inter alia: disposal of obsolete pesticides, acquisition of equipment, office equipment and furniture, software, teacher training institute (and service providers), and equipment for vocational training facilities. Procurement will be done under ICB or NCB using the Bank's Standard Bidding Documents for all ICB and National Standard Bidding, or Documents agreed with or satisfactory to the Bank. Shopping in accordance with paragraph 3.5 of the Procurement Guidelines will be used for procuring readily available off-the-shelf goods of values less than US\$100,000. Direct contracting will be used where necessary as agreed in the procurement plan in accordance with the provisions of paragraph 3.7 to 3.8 of the Procurement Guidelines. In this regard, the company in charge of the disposal of OPs will be hired in direct contracting as requested by the Recipient and approved by the World Bank at the appraisal stage. This company had been already selected during the regional project (Africa Stockpiles Program) through a competitive process.

31. **Selection and employment of Consultants:** Consultancy services would include, inter alia, advisory services (recruitment of an international expert who will assist DNACPN), the developing of a national plan for decontamination of other polluted sites, the recruitment of local and international NGOs will carry out independent monitoring of disposal and contaminated soil risk reduction activities via the Pesticides Action Network in Mali (PAN-Mali,), the feasibility study on sustainable financing instruments for pesticides management in Mali, the financial audits of the project, etc. The selection method will be Quality- and Cost-Based Selection (QCBS) method whenever possible. The following additional methods may be used where appropriate: Quality-Based Selection (QBS); Selection under a Fixed Budget (FB); and Least-Cost Selection (LCS); Selection Based on Consultants' Qualifications (CQ), Single Source Selection (Firm and Individual) and Selection of Individual Consultants (IC).

32. Short lists of consultants for services estimated to cost less than the equivalent of US\$200,000 per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. However, if foreign firms express interest, they will not be excluded from consideration.

33. Single Source Selection (SSS) may be employed with prior approval of the Bank and will be in accordance with paragraphs 3.8 to 3.11 of the Consultant Guidelines. All services of Individual Consultants (IC) will be procured under contracts in accordance with the provisions of paragraphs 5.1 to 5.6 of the Guidelines.

Procurement Implementation Arrangement

34. **The project will be implemented by DNACPN, which is the department responsible for pollution control under the MEADD.** Due the lack of qualified staff within the Directorate of Finance and Material (DFM), the central service of the MEADD dedicated to procurement, to deal with the procurement under Bank procedures, the procurement responsibilities will be carried out by hiring a skilled consultant for a limited period of time, to be later entrusted to concerned services within MEADD. The procurement consultant main tasks will be: (i) preparation and/or

submission of procurement documents which require World Bank review and/or clearance; (ii) contribute to the preparation of annual work plans and budgets, semi-annual and annual progress reports, mid-term and completion review reports and (iii) updating and implementing the procurement plan, and submission to the World Bank.

Procurement arrangements for Training and Workshops:

35. For all training activities, the PMU shall prepare and submit for Bank approval, annual training plans and budgets including the objectives of the training, the target participants, format of delivery and the qualifications of the resource person(s) as well as the expected impact of the training before the training can be undertaken. In case the training is to be outsourced, the procurement of the Trainer or the training institution shall be integrated into the project procurement plan and agreed with the Bank. Similarly, the procurement of venues for workshops and training materials will be done by comparing at least three quotations.

Assessment of the capacity to implement procurement

36. Procurement capacity assessment of the DFM was carried out to determine the institutional and management arrangements that would ensure proper execution of the project. It mainly focused on the capacity and internal arrangements of the recipient and the executing agency to carry out by themselves procurement planning and implementation, or otherwise proposed alternative arrangements to ensure transparent and efficient implementation.

37. **Assessment of the DFM of the MEADD:** A procurement assessment was carried out on December 3, 2014, in the relevant central unit for finance and procurement of the Ministry of Environment, Sanitation: the Directorate of Finance and Material (DFM). Procurement issues and risks for the implementation of the project which have been identified include: (i) the absence of a manual of procedures within DFM; (ii) the lack of proficient procurement personnel to implement procurement actions in line with Bank procedures; (iii) the high level staff within DFM responsible for process control and approval are not familiar with Bank procurement procedures; and (v) the shortage of space and the lack of adequate record keeping system.

38. The overall unmitigated risk for procurement is “High”. The action plan in order to have a “Moderate” residual risk will address the risks identified during the assessment and includes the following main actions in the following table, in order:

Table 5: Action plan for strengthening procurement capacity

Risk	Action	Responsibility	Due date
DFM-MFPE			
1-Absence of a manual of procedures within DFM	Prepare the Procurement section of the Project Implementation Manual in line with World Bank procurement procedures and Public Procurement Code	PMU/ MEADD	Before effectiveness
2- Lack of proficient procurement personnel to implement procurement actions in	Recruitment of a skilled procurement specialist within the PMU through a competitive process to review the quality of all procurement documents prior to submission to the World Bank	PMU/MEADD	Before effectiveness

line with Bank procedures	Identifying and training of DFM staff (2) preferably young professional on World Bank procurement procedures in specialized institution	DFM	No later than three months after effectiveness
	Hands-on training of these 2 staff within the DFM on Bank procurement procedures for bringing support to the Procurement Specialist	Procurement Consultant	No later than the hiring of the Procurement Consultant
3- High level staff within DFM responsible for process control and approval are not familiar with Bank procurement procedures	Hands-on training of identified high level staff within the DFM on Bank procurement procedures	Procurement Consultant	No later than three months after effectiveness
	The Control Body (DGMP) and the Regulation Authority (ARMDS) will have to play their role to ensure good governance and limit the opportunities for undue influence by anyone	DGMP-DS/ ARM-DS	Throughout the project life
4- Shortage of space and lack of adequate record keeping system	Provision of equipment and adequate space for filing and archiving in order to better keep procurement documents and reports and identify a staff responsible for this task. Train staff in data management.	DFM	No later than 3 months within the project implementation

39. **Operating Costs:** Operational costs are incremental recurrent expenditures under the project based on the annual Work Plans and incurred by the project Management Unit on account of Project implementation. They would include travel expenditures and other travel-related allowances; building and equipment rental and maintenance; vehicle operation, maintenance, repair and insurance but not the purchase of fuel; office space rental and maintenance, materials and supplies but not the purchase of equipment; utilities, media information campaigns and communications expenses, monitoring and evaluation expenses, bank charges, excluding the salaries of officials and public servants of the Recipient's civil service. These items will be procured using the procedures detailed in the Project Implementation Manual, which will be reviewed and found acceptable to the Bank before effectiveness.

40. **Procurement Plans:** The Recipient has developed a procurement plan indicating procurements to be carried out over the first 18 months of the project. The procurement plan consists of the procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements and has been confirmed by the Recipient and the World Bank during negotiations. The procurement plan would be updated at least annually, or more frequently as required, to reflect the actual project implementation needs and improvements in institutional capacity.

41. **Prior-Review Thresholds:** The Procurement Plan sets forth those contracts which shall be subject to Bank Prior Review. All other contracts shall be subject to Post Review by the Bank. However, relevant contracts below prior review thresholds listed below which are deemed complex and/or have significant risk levels will be prior-reviewed. Such contracts will also be identified in the procurement plan updates. A summary of prior-review and procurement method thresholds for the project are indicated in the table below. All terms of reference for consultant services, regardless of contract value, shall also be subject to the Bank's prior review.

Table 6: Thresholds for procurement methods

Expenditure Category	Contract Value (Threshold) (US\$ 000)	Procurement Method	Contract Subject to Prior Review (US\$ 000)
1. Goods and Non-consulting services	3,000 or more	ICB	All
	Below 3,000	NCB	All except contracts below 500
	Below or equal to 100	Shopping	None unless contract specified in the PP
	No threshold	Direct Contracting	All
2.Consultancy	Firms	QCBS, QBS, FBS, LCS, QC	All contracts of 200 and more and contracts specified in the PP
	Individual	IC (at least 3 CVs)	None unless contract specified in the PP
	No threshold	Single Source	All

NB: All terms of reference for consulting services will be subject to the Bank’s prior review.

42. **Frequency of Procurement Supervision:** In addition to the prior review carried out by the Bank, the procurement capacity assessment recommends at least two supervision missions each year and also one visit to the field to carry out post-review of procurement actions.

43. **Post Review Procurement:** Post-reviews can be done either by Bank specialists or by independent consultants hired under the project according to procedures acceptable to the Bank to ascertain compliance with the procurement procedures as defined in the legal documents. The procurement post-reviews should cover at least 20 percent of contracts subject to post-review depending of the level risk. Post review consists of reviewing technical, financial and procurement reports carried out by the Recipient’s executing agencies and/or consultants selected. Procurement performance will be assessed on an annual basis (in the form of procurement audits by an external agency). The threshold levels for various methods of procurement may be revised based on the assessment results.

C. Monitoring & Evaluation

44. An M&E system, which will be maintained by the PMU, will serve as a management tool by enabling the PMU, NSC and the World Bank to assess project effectiveness during implementation and take actions to improve performance accordingly. A Project M&E Manual will be prepared by the project and approved by the World Bank within four months after effectiveness.

45. Achievement of the PDO will be measured by the following PDO Level Results Indicators:

- (a) **POPs and POPs²¹ waste destroyed, disposed of or contained in an environmentally**

²¹ In view of the operational difficulty in separating POPs pesticides from obsolete pesticides, “POPs” is understood in this context as meaning “obsolete pesticides including POPs”, as also used in the GEF Chemicals strategy.

sound manner (Target: 666 tonnes) (Core Sector Indicator): this indicator will be monitored by the disposal company's completion report and certificate/s of disposal, indicating the amount of OPs and associated waste destroyed, disposed of or safeguarded. The 666 tonnes target has been set on the basis of an OP sites' audit and data validation carried out by DNACPN in May-October 2014, which resulted in an overall amount of 666 tonnes of obsolete pesticides and associated waste country-wide; therefore, the target represents 100 percent destruction, disposal or safeguarding of the stocks.

- (b) **Contaminated land managed or dumpsites closed under the project (Target: 0.6ha) (Core Sector Indicator):** This indicator will measure the outcome of risk reduction activities in high risk contaminated sites; the target has been set on the basis of the total area of the three targeted sites, as determined by a FAO/DNACPN analysis of contaminated sites across Mali in 2010.
- (c) **Submission for adoption of a revised National Prevention Plan by the Council of Ministers:** This indicator will measure the overall success of project-funded prevention activities.
- (d) **Direct project beneficiaries (number), of which female (percent) (Target: 2,000,000, 50 percent of which are women) (Core Indicator):** This indicator will be used to evaluate the number of direct project beneficiaries by gender throughout project implementation. Direct beneficiaries are people who reside in proximity to OP and associated waste stocks, the three polluted sites in Goundam, Kara and Bambara Maoudé, people who will benefit from communication activities and individuals participating in project-funded training.

46. **GEF POPs Tracking Tool.** The PMU will utilize the most current version of the GEF POPs Tracking Tool, specifically the worksheet for management and disposal of OPs, including POPs, which was designed with input from the GEF POPs Task Force, to track results of GEF-funded projects under the POPs Focal Area. The indicators that will be used are: (i) Number of countries receiving GEF support for environmentally sound management of OPs, including POPs; (ii) Baseline inventory of OPs, including POPs pesticides; (iii) Pesticides or POPs pesticides regulations in place; (iv) Waste management plans to prevent further accumulation of pesticide stockpiles and empty pesticide containers, in place; (v) OPs, including POPs pesticides, disposed of in an environmentally sound manner, and average cost; and (vi) OPs safeguarded, and average cost. The PMU will report to the World Bank on these indicators on an annual basis and at completion, and the World Bank will communicate the results to the GEF Secretariat as part of the GEF annual evaluation exercise.

47. The World Bank will supervise safeguards compliance on a semi-annual basis through its implementation support missions, and will provide guidance to the PMU on a regular basis, in particular to the safeguards specialist, including by reviewing safeguard documents submitted to it by the PMU.

48. **Reporting.** The PMU will submit:

- (a) Semi-annual progress reports within 30 days after the end of a reporting period. The reports will describe the implementation status of key activities, project outputs derived during the previous six months compared to benchmarks, a brief overview of financial status and disbursement (for both GEF and Danish TFs), a summary of project challenges and

constraints, and recommended actions. Each report will provide information needed to evaluate the progress toward achieving the PDO using the indicators outlined in the results framework.

- (b) Annual progress reports which will cover project implementation over the previous year (combined with the semi-annual report for the second half of the year), and provide a proposed budget and work plan for the subsequent year. It will also provide revised projections for project targets with respect to changes in the implementation plans. Data will originate from a synthesis of the semi-annual reports, verification reports, and monitoring tools. These reports should be submitted annually, within thirty days after the end of each implementation year.
- (c) A Mid-Term Review (MTR) report at the end of the second year of the project and submitted prior to the MTR mission. The MTR report will evaluate the project's overall performance in terms of achieving its expected outcomes; its efficiency and effectiveness; implementation arrangements; supervision mechanisms; project expenditures compared to planned disbursements; and offer a revised project implementation plan, targets, and disbursement projections. The results of the review will form a basis for any modifications to the design.
- (d) A Project Implementation Completion and Results Report (ICR), which will assess the achievement of the PDO, provide details on the status of implemented activities and the overall use of funds. This report will also include a summary of the project's performance and monitoring indicators throughout the project's lifecycle. This report is to be submitted to the World Bank no later than six months after the project closing date.
- (e) Interim Unaudited Financial Reports (IFRs) on a quarterly basis (within 45 days after the end of a quarter) according to an agreed format provided by the World Bank.

49. The World Bank will monitor the implementation of the GEF and Danish TF financing agreements through routine missions and review of M&E data; project performance will be captured in missions' aide memoires and Implementation Status and Results Reports (ISRs).

D. Environmental and Social (including Safeguards)

50. The project's overall environmental and social impact is expected to be highly positive because of the nature of its activities: the project will reduce the risks of exposure and resulting potential acute intoxication of human and the environment by safeguarding and safely disposing of hazardous wastes (OPs and associated waste) and reducing risk from polluted soil. Risks and negative impacts are related to contact with the chemicals, mainly during the repacking, transportation, treatment of polluted sites, and temporary storage prior transportation and disposal. These adverse consequences could affect human health (the communities living close to the sites and the employees of the contractor) and the environment through contaminated dusts or in cases of accidental leakage or spills. The project triggers OP/BP 4.01 on Environmental Assessment and OP 4.09 on Pest Management due to potential environmental and social impacts from dealing with highly toxic chemicals. Since the project carries some short-term high environmental risks, the project is categorized as Category A (Full Assessment). An Environmental and Social Impact Assessment (ESIA) has been developed, including an Environmental and Social Management Plan (ESMP), and disclosed in country and at InfoShop on December 24, 2014. As part of the contracting clauses approved through the ESMP, the disposal company will prepare an

Environmental, Health and Safety (EHS) plan, which will include emergency measures in case of leakages, awareness raising and occupational safety cautions; this specific plan will be approved both by the government and the World Bank before activities commence. The same will be carried out for safeguarding of low risk stocks by local teams. The PMU will comprise a safeguards specialist, whose capacity will be reinforced by the World Bank as needed.

Safeguards Policies Triggered

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
Natural Habitats (OP/BP 4.04)		X	
Forests OP/BP (OP/BP 4.36)		X	
Pest Management (OP 4.09)	X		
Physical Cultural Resources (OP/BP 4.11)		X	
Indigenous Peoples (OP/BP 4.10)		X	
Involuntary Resettlement (OP/BP 4.12)		X	
Safety of Dams (OP/BP 4.37)		X	
Projects on International Waterways (OP/BP 7.50)		X	
Projects in Disputed Areas (OP/BP 7.60)		X	

**Annex 4: Implementation Support Plan
Republic of Mali: Obsolete Pesticides Disposal and Prevention Project**

A. Strategy and Approach For Implementation Support

1. DNACPN will receive support for component 1 from an international disposal expert for a limited period of time, funded by CropLife International (CLI). The project will hire an international soil decontamination specialist, who will help plan and supervise the soil risk reduction activities. Prevention activities will benefit from the support of national experts and Non-Governmental Organizations (NGOs) belonging to the Pesticide Action Network in Mali (PAN-Mali), especially in awareness raising and mobilization of communities, as well as independent monitoring of safeguarding activities.

2. The World Bank will provide fiduciary and operational support through a core task team that will be comprised of a Task Team Leader (TTL), and procurement, financial management, environmental and safeguard specialists. The team will conduct implementation support missions on a semi-annual basis, with the purpose of ensuring that the GEF Grant and Government of the Kingdom of Denmark’s TF proceeds are used only for the purposes for which they were approved, with due regard to economy and efficiency and with a view to sustainability of project results. Each mission will include procurement and financial reviews as well as safeguards compliance reviews. In addition, close contact will be maintained with the Implementing Agency, the National Department for Sanitation and Pollution Control (DNACPN), to ensure that implementation is on track and that bottlenecks are resolved in an expedited manner in-between missions. Finally, the team will also ensure collaboration with the regional GEF/UN Food and Agriculture Organization (FAO)-funded project, titled “Disposal of Obsolete Pesticides including POPs and Strengthening Pesticide Management in CILSS Member States” (2015-2019), especially on container management and working with the cotton industry.

B. Implementation Support Plan

Table 7: Implementation Support Main Focus

<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>	<i>Partner Role</i>
Procurement, financial management, disbursement and safeguards support (including training, processing of payments, ongoing technical support and supervision).	Knowledge of World Bank procurement, financial management, disbursement and safeguard guidelines/procedures/policies.	Total: US\$153,600 (US\$38,400 per annum)	
Operations, with specific focus on hazardous waste management	Ability to evaluate impact and risks, provide operational guidance and review project deliverables		

Table 8: Skills Mix Required

<i>Skills Needed</i>	<i>Number of Staff Weeks</i>	<i>Number of Trips</i>	<i>Comments</i>
Knowledge of World Bank procurement, financial management, disbursement and safeguard guidelines/procedures/policies	A total of 36 staff weeks for two semi-annual missions per annum and ongoing desktop fiduciary support.	8 in total for each specialist (two per annum, procurement, financial management/disbursement, safeguards)	Financial, procurement/disbursement and safeguard specialists will be based in the field
Ability to evaluate impact and risks, provide operational guidance and review project deliverables	A total of 12 staff weeks for field and desktop support	8 in total (two per annum)	
TTL: good technical and operational skills, strong familiarity with country settings	A total of 16 staff weeks for field and desktop support	8 in total (two per annum)	The TTL will be based at headquarters. Grouping of missions will take place to the extent possible to save costs

Table 9: Partners

<i>Name</i>	<i>Institution/Country</i>	<i>Role</i>
CLI	Representing the pesticide industry, with representation in Mali (CropLife Mali)	Provision of international disposal expertise
PAN-Mali	A national network of NGOs with focus on pesticide management	Collaboration in awareness raising and mobilization of communities, as well as independent monitoring of safeguarding activities
FAO	“Disposal of Obsolete Pesticides including POPs and Strengthening Pesticide Management in CILSS Member States” (2015-2019), implemented in Mali by the Ministry of Agriculture in collaboration with the CILSS across the country	Complementary activities in container management and working with the cotton industry

Annex 5: Project Map

Republic of Mali: Obsolete Pesticides Disposal and Prevention Project

IBRD 33443R



MAY 2009