



Nigeria Erosion and Watershed Management Project (P124905)

AFRICA | Nigeria | Environment & Natural Resources Global Practice |
IBRD/IDA | Investment Project Financing | FY 2012 | Seq No: 13 | ARCHIVED on 13-May-2019 | ISR36805 |

Implementing Agencies: Federal Ministry of Finance

Key Dates

Key Project Dates

Bank Approval Date: 08-May-2012

Effectiveness Date: 16-Sep-2013

Planned Mid Term Review Date: 25-Jan-2016

Actual Mid-Term Review Date: 25-Jan-2016

Original Closing Date: 30-Jun-2020

Revised Closing Date: 30-Jun-2021

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

To reduce vulnerability to soil erosion in targeted sub-watersheds.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components

Name

Component 1: Erosion and Watershed Management Infrastructure Investments:(Cost \$659.20 M)

Component 2: Erosion and Watershed Management Institutions and Information Services:(Cost \$74.99 M)

Component 3: Climate Change Response:(Cost \$50.38 M)

Component 4: Project Management:(Cost \$124.02 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Satisfactory	● Satisfactory
Overall Risk Rating	● High	● High

Implementation Status and Key Decisions

Project implementation has improved greatly since the last review. States continue to collaborate with respective MDAs and Local Government Authorities (LGAs) to deliver activities and ensure sustainability of the project. Additional Financing (AF) of USD 400 million (USD 300 million from IDA 18 and USD 100 million from IDA 18 Scale-up Facility) was approved by the World Bank's Board of Executive Directors on June 27th, 2018. Good progress has been achieved towards the effectiveness of the AF. During the period under review, both the Financial Agreement and Legal Opinion were signed by the Federal Government of Nigeria.



Significant achievements since the last review period include:

1. Average physical progress within the 21 old sites is 92% with over 1,558.62 hectares of degraded land reclaimed.
2. Storm Water Master Plan developed for Onitsha in Anambra State.
3. 15 participatory sub-watershed management plans developed under the project in the States of Cross-River (5), Abia (5) Anambra (4) and Enugu(1).
4. 13 improved erosion risk maps developed in Abia, Anambra, Cross River, Edo, Enugu, Ebonyi, Akwa Ibom, Delta, Kogi, Plateau, Kano and Sokoto States.
5. The project's original ambition of restoring 30 gullies has been exceeded. Currently, 55 sites specific designs are ready for implementation.
6. By providing technical, advisory, financial and global knowledge, the project supported the issuance of Africa's First Sovereign Green Bonds: In December 2017, Nigeria issued Africa's first sovereign Green Bond with a capital value of US\$30 million. The is also providing continuous support to the issuance of the second Green Bond.
7. 9, 318.00 households are benefitting from livelihood enhancement activities such as gabion box welding, cement sales, block molding, aquaculture, tailoring, horticulture (plant nurseries, vegetable farming, planting of fruits etc.), renting of chairs and canopy (done by the physically challenged), cassava processing, palm oil production and processing etc.
8. Erosion and Watershed Management Agency has been established in Enugu State by, His Excellency, Rt. Hon. Ifeanyi Ugwuanyi, Executive Governor.
9. According to the client's progress report of March 2019, NEWMAP has supported the installation of 61 Hydrological and Meteorological Stations across Anambra-Imo River Basin Development Authority and Cross-River Basin Development Authority. Also, 10 Automated Early Flood Warning Systems (AFEWS) have been installed. The stations are providing data/for flood outlook and rainfall prediction.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Substantial	● Substantial
Macroeconomic	--	● High	● High
Sector Strategies and Policies	--	● Moderate	● Moderate
Technical Design of Project or Program	--	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	--	● Substantial	● Moderate
Fiduciary	--	● High	● Substantial
Environment and Social	--	● High	● High
Stakeholders	--	● Substantial	● Substantial
Other	--	--	--
Overall	--	● High	● High

Results

PDO Indicators by Objectives / Outcomes

To reduce vulnerability to soil erosion in targeted sub-watersheds.



► Targeted gully complexes and other erosion sites treated with 100% of planned measures for targeted sub-watersheds (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	20.00	21.00	55.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Number of sites increased from 20 to 21 sites as a result of the ongoing civil works in Umuagu/Umuda in Abia State and Ebonyi State (Ebia River and Odunukwe Nkaliki). Works have largely been completed on the initial 21 gully sites in the seven Tier 1 States. Currently 56 new sites have been approved, and gully remediation has been started on fifteen of these sites.			
► Targeted gully complexes and other erosion sites with reduced severity level after treatment (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	20.00	26.00	55.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jul-2021
► Area under bio-remediation in targeted sub-watersheds (Hectare(Ha), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	947.87	1,093.32	400.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Bio-engineering is a major focus in the Project and is embedded in all designs and this has resulted to the project achieving double of the end target. Activities cut across the Northern States, in addition to bio-engineering done when sites have been completed in Southern States. There has been increase in hectares from 947.87 to 1,093.32, majorly from activities in Gombe and reforestation activities in Kogi State.			
► Land area under sustainable landscape management practices (Hectare(Ha), Corporate)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,408.80	1,558.62	400.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	1,558.62 hectares under sustainable landscape management practices. The over 149.82 hectares increase is as a result of reclaimed degraded land in the States of Gombe (120 hectares) , Kogi (20 hectares) and Ebonyi (civil works at Ebia River and Odunukwe Nkaliki in Ebonyi State).			
► Net Greenhouse Emissions (tones CO2 annually) (Tones/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	-2,411.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	The indicator has been added as this is an applicable corporate results indicator. Greenhouse gas (GHG) accounting analysis found that the project will have emission reductions based on the target Area under			



bio remediation in targeted subwatersheds (1093.32 ha). The ToR for this activity has received Bank's no objection.

Intermediate Results Indicators by Components

Component 4: Project Management				
► Reports produced on project progress at federal and state levels (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	16.00	18.00	18.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	18 States (Anambra, Abia, Cross River, Ebonyi, Edo, Enugu, Imo, Delta, Gombe, Kano, Kogi, Plateau, Sokoto, Akwa Ibom, Borno, Katsina, Nasarawa and Niger) are currently producing progress reports.			
Component 1: Erosion and Watershed Management Infrastructure Investments				
► Targeted land treated for erosion with selected measures in targeted sub-watersheds (Hectare(Ha), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,409.00	1,558.62	20,000.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
► Participatory sub-watershed Management plans developed under the project for targeted erosion affected sub-watersheds (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	14.00	15.00	38.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	15 participatory sub-watershed management plans developed under the project in the States of Cross-River (5), Abia (5) Anambra (4) and Enugu(1).			
► People receiving project-supported advisory support services in integrated land/water management practices, planning, and/or monitoring under the Project (of which 40% female) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5,159.00	5,866.00	90,000.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Additional 707 people benefitted from advisory support services in integrated land/water management practices, planning, and monitoring during the sensitization and awareness on rainfall prediction and flood forecast from NIMET's 2019 Sectional Rainfall Prediction Workshop.			



Note: NEWMAP is currently supporting NIMET through the installation of 61 hydromet stations for flood outlook and rainfall prediction.

►Households benefitting from livelihoods enhancement activities under the Project (of which 40% female) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9,318.00	9,318.00	12,000.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	9, 318.00 households are benefitting from livelihood enhancement activities such as gabion box welding, cement sales, block molding, aquaculture, tailoring, horticulture (plant nurseries, vegetable farming, planting of fruits etc.), renting of chairs and canopy (done by the physically challenged), cassava processing, palm oil production and processing etc.			

►Packages with detailed design for treatment of gully complexes and erosion sites in targeted subwatersheds prepared under the project that have received WBG No-Objection but not financed by NEWMAP (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	30.00
Date	27-Jun-2018	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	The indicator has been added to reflect the additional funds made available and the forward look as these detailed design packages will be left with Government to carry on erosion control beyond project closing. The setting of the end-of-project target is based on the following (April 2018). <ul style="list-style-type: none"> • 55 designs with no objections given 			

Component 3: Climate Change Response

►Technical reports/ guidelines on promoting low carbon development or enhancing climate resilience completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.00	6.00	7.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	The technical reports/ guidelines on promoting low carbon development or enhancing climate resilience developed under NEWMAP include: i) NAMAS Report (National Appropriate Mitigation Actions on Climate Change); ii) Off-Grid Solar Power Feasibility Study Report; iii) Climate data Management System Report; iv) Baseline Survey of Clean Cook Stoves; v) Report for installation of Low Carbon Bakery in Jigawa State; and vi) LPG as a Low Carbon alternative to Firewood and Kerosene.			

►Climate adaptation /low carbon demonstration projects completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	5.00	10.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Five (5) demonstration projects around climate adaptation have been implemented. This include: i) one oven bakery in Jigawa; and ii) four different types of clean cook stoves distributed in seven NEWMAP States.			



►Development and Issuing of Green Bond Phases (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	1.00
Date	27-Jun-2018	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	<p>The indicator has been added to reflect realistic achievement of green bond development under the project.</p> <p>By providing technical, advisory, financial and global knowledge, the project supported the issuance of Africa's First Sovereign Green Bonds: In December 2017, Nigeria issued Africa's first sovereign Green Bond with a capital value of US\$30 million. The project is currently supporting the issuance of the second Green Bond. The Green Bond will enable capital-raising and investment for new and existing projects with environmentally sustainable benefits, and that have the capacity to meet Nigeria's NDC targets of 20% emission reduction by 2030.</p>			

Component 2: Erosion and Watershed Management Institutions and Information Services				
►Spatial Knowledge Management Information System on erosion and watersheds operational (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	4.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	<p>Through the China-World Bank Partnership Facility Trust Fund, the Bank is supporting the Federal Government of Nigeria to establish a Spatial Knowledge Management Information System on erosion and watersheds. Deliberation ongoing between NEWMAP, Antrix, ISRO and NASRDA.</p>			
►Upgraded and newly installed stations providing data for integrated catchment planning (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	34.00	61.00	100.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	<p>Towards strengthening the enabling environment and in line with providing information services, a total of 61 stations installed which comprise of 7-Automatic Weather Observation Systems (AWOS), 12-Agromet systems and 39-Manual and automatic hydrological stations for surface water monitoring have been installed and/or rehabilitated in the Anambra-Imo River Basin Development Authority (AIRBDA) and Cross-River Basin Development Authority (CRBDA). This also include the installation of 3 Telemetry systems (Data Collection Platforms) for flood monitoring and flood forecasting.</p>			
►City storm water master plans developed which are informed by climate projections of increased rainfall intensity and risk assessments (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1.00	0.00	2.00	3.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	<p>In addition to the Storm Water Master Plan in Edo State, Anambra Master Plan has been approved.</p>			



►EIA guidelines developed for targeted investment types that affect erosion (road cross drainage, urban water supply and drainage) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1.00
Date	08-May-2012	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Discussions in progress to finalize the guidelines.			
►National Centers of Excellence in erosion control established, operational and functional (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	27-Jun-2018	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	Ongoing discussion with University of Lagos and NASRDA on National Centers of Excellence for safeguards and erosion risk mapping and monitoring.			
►States with improved erosion risk mapping (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10.00	13.00	19.00
Date	27-Jun-2018	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	13 improved erosion risk maps developed in Abia, Anambra, Cross River, Edo, Enugu, Ebonyi, Akwa Ibom, Delta, Kogi, Plateau, Kano and Sokoto States.			
►Community Interest Group collecting municipal solid waste in project intervention areas (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	27-Jun-2018	28-Sep-2018	23-Apr-2019	30-Jun-2021
Comments:	New indicator added with Additional Financing restructuring, approved June 27, 2018. The process of setting up Community Interest Group collecting municipal solid waste in project intervention areas ongoing.			

Overall Comments

The Project Development Objective (PDO) remains valid. Work being undertaken in the project is still very much in line with the PDO.

Data on Financial Performance

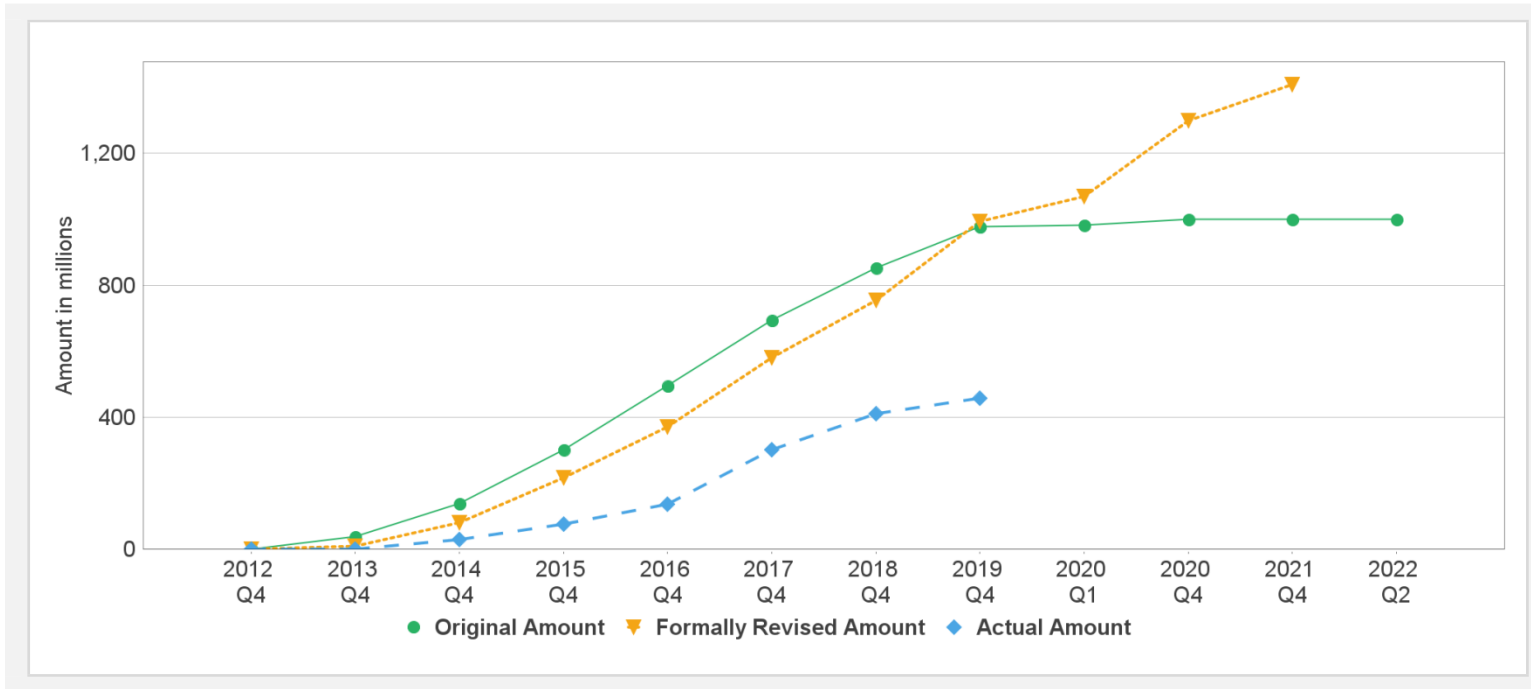
**Disbursements (by loan)**

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P124905	IDA-51050	Effective	USD	500.00	500.00	0.00	451.10	0.00	100%
P124905	IDA-62770	Not Effective	USD	300.00	300.00	0.00	0.00	293.92	0%
P124905	IDA-62780	Not Effective	USD	100.00	100.00	0.00	0.00	100.00	0%
P126549	TF-12434	Effective	USD	3.96	3.96	0.00	3.44	0.52	87%
P126549	TF-12435	Effective	USD	4.63	4.63	0.00	2.22	2.41	48%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P124905	IDA-51050	Effective	08-May-2012	16-Apr-2013	16-Sep-2013	30-Jun-2020	30-Jun-2020
P124905	IDA-62770	Not Effective	27-Jun-2018	--	--	30-Jun-2021	30-Jun-2021
P124905	IDA-62780	Not Effective	27-Jun-2018	--	--	30-Jun-2021	30-Jun-2021
P126549	TF-12434	Effective	16-Apr-2013	16-Apr-2013	16-Apr-2013	30-Jun-2020	30-Jun-2020
P126549	TF-12435	Effective	16-Apr-2013	16-Apr-2013	16-Apr-2013	30-Jun-2020	30-Jun-2020

Cumulative Disbursements



Restructuring History

Level 2 Approved on 27-Apr-2018

Related Project(s)

P126549-Nigeria Erosion and Watershed Management Project ,P164082-Nigeria Erosion and Watershed Management Project (NEWMAP) - Additional Financing