



## Nigeria Erosion and Watershed Management Project (P124905)

AFRICA WEST | Nigeria | Environment, Natural Resources & the Blue Economy Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2012 | Seq No: 17 | ARCHIVED on 29-Jun-2021 | ISR46995 |

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 Table**

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	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

**Implementation Status and Key Decisions**

The NEWMAP is being implemented across 23 States in northern and southern regions of Nigeria that are grouped into four tiers based on when they joined. While the Project Development Objective (PDO) continue to be rated as Satisfactory, Implementation Progress (IP) is downgraded to Moderately Satisfactory accounting for implementation delays. Progress against the Results Framework shows that of the 21 PDO and intermediate indicators, 14 have already either been met or exceeded, with significant progress on the remaining 7. During the period under review, a new Government Agency was signed into law in Katsina State bringing the total number of agencies into three (i.e., three agencies for Erosion and Watershed Management have been established in Enugu, Anambra and Katsina States.), number of targeted gully complexes and other erosion sites with reduced severity level after treatment increased from 44 to 66, number of completed sites increased from 21 to 30 and all



indicators under component 3 have already been met or exceeded. It was agreed during the December 2020 supervision mission that the Task Team will have regular check-in meetings with States starting from January 2021 to support the project in unblocking identified bottlenecks in the management of the project hence, the Bank instituted weekly fiduciary and safeguards clinic. The Project has continued to perform at an overall satisfactory level. Key achievements include:

- a. A total of 142 sites have approved Detailed Engineering Designs (DEDs). From these, gully restoration work has been fully completed on 30 sites.
- b. Gully erosion severity has been reduced on 66 sites (against a target of 55). Gully stabilization and road construction work has created temporary jobs, facilitated the return of businesses, improved access to markets, schools & healthcare facilities, and anecdotally led to a rise in property values.
- c. A total of 59 participatory Catchment Management Plans have now been completed and approved (versus a target of 38).
- d. The Project has directly benefitted about 35,000 people and more than 100,000 have benefitted indirectly through the small grants to Community Interest Groups (CIGs). New businesses and livelihood activities (poultry, fishing, soap-making, welding, chair & canopy rental (by a physically challenged CIG), horticulture, nursery-raising, etc.) have positively impacted a range of stakeholders.
- e. A total of 103 automated HydroMet and Flood Early Warning Systems, are supporting flood forecasts and rainfall predictions (and also being used for university-based research).
- f. Environmentally sustainable technology demonstrations have been carried out that can reduce carbon emissions and improve rural access to electricity, water, health services, and sustainable livelihoods.
- g. The Project has trained 185,058 persons (42 percent women) to improve knowledge, awareness, and capacities of government staff in environmental management (land degradation, soil and water conservation, catchment management planning, sustainable farming, waste management, water harvesting, etc.).
- h. Capacity enhancement have been made in several government institutions under the project (through training, technology demonstrations, Green Bonds, EIA and Liquid Petroleum Gas (LPG) frameworks, feasibility studies, etc.) to improve environmental management and help Nigeria meet its Paris Climate commitments and the Sustainable Development Goal (SDG) for Climate Action.
- i. The Project has tested the application of 360-degree cameras and drones for remote supervision, which will be important as COVID-19 travel restrictions are likely to continue well into 2021. Remote sensing and GIS technics are used in resolving grievance associated with social safeguards (compensation).
- j. States are preparing for longer-term sustainability of their environmental management efforts. Three agencies for Erosion and Watershed Management have been established in Enugu, Anambra and Katsina States. Sixteen other States have made good progress advancing legislation to establish their own agencies.
- k. The recent Environment and Social Incident Response Toolkit (ESIRT), triggered due to the two kidnapped expatriate contractors on Friday, December 11th, 2020 in Plateau State was completed, and the Stop Work Order, lifted. Significant progress has been achieved on the site with more stringent attention to security and Occupational Health and Safety issues across all sites.

Under **Component 1 - Erosion and Watershed Management Infrastructure Investments**, while the indicator on area of land area under sustainable landscape management practices continued increased from 2,201 ha to 5,167 ha. The number of targeted gully complexes and other erosion sites with reduced severity level after treatment increased from 44 during the last mission to 66. In addition, 30 sites have achieved 100 percent completion, an increased from 21 sites during the last mission. Current number of households benefitting from livelihoods enhancement activities stands at 25,491 and increase from 19,971 during the previous mission exceeding the end target of 12,000. **Component 1** is downgraded to Moderately Satisfactory accounting for implementation delays.

In **Component 2 - Erosion and Watershed Management Institutions and Information Service**, good progress has been made to build institutional and human capacities in relevant Ministries, Departments and Agencies. Of the three proposed National Centres of Excellence envisioned in project design, good progress has been made with two institutions. Highlights from the review period at the national level include the review of two draft thematic Environmental Impact Assessment guidelines. Also, flood early warning systems, using 99 automated HydroMet and Flood Early Warning Systems, are supporting flood forecasts and rainfall predictions, and university-based research.

Under **Component 3 - Climate Change Response**, a key success was facilitating the issuance of the country's first Green Bond (also the first in Africa) in December 2017, with a second tranche of Green Bond issued in 2019. These bonds have encouraged private sector investment in climate smart activities. The component is financing 44 climate adaptation /low carbon demonstration projects, These include: solar-based electricity supply for rural health centers, drip irrigation, cassava mills, fish and (kilishi) meat driers, green houses, borehole water pumps, and the distribution of 8,057 fuel-efficient cookstoves that reduce wood & kerosene use and are reducing carbon emissions and improving rural access to electricity, water, health services, and sustainable livelihoods.

In **Component 4 - Project Management**, the Project has adapted to the COVID-19 induced challenges through virtual missions. Following the December 2020 mission, an in-depth review of the Project was carried out, including the development of a comprehensive database for clarity on the status of the Project in each state, on a site-by-site basis. The data base includes very detailed information on work progress, safeguards status, procurement data (contract dates, etc.), in addition to a broader analysis of financial requirements for approved work relative to funds remaining in Designated Accounts (DA). Furthermore, several lingering project managements issues such as staffing, counterpart funds payment, incidence (ESIRT), and the functionality of three PMUs in Oyo, Ogun and Kaduna were resolved. With the weekly clinic, various issues around procurement/STEP were also resolved. Following a downgrading to Moderately Satisfactory in January 2021, a further temporary downgrade of Project Management rating to MU is proposed to recognize project management issues identified in the recent detailed review, and requiring optimization. Insufficient reporting accuracy on implementation progress and disbursements across multiple subprojects in 23 states had indeed



contributed to an unclear vision of NEWMAP's completion path. The rating will be revised as soon as the project is getting more accurate project report on implementation progress and disbursements across multiple subprojects.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial
Macroeconomic	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Sector Strategies and Policies	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Technical Design of Project or Program	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Institutional Capacity for Implementation and Sustainability	--	<input type="checkbox"/> Low	<input type="checkbox"/> Low
Fiduciary	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Environment and Social	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Stakeholders	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Other	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Overall	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

## 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	21.00	30.00	55.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	30 sites have been treated with 100% of planned measures ranging from slope stabilization, planting of grasses and trees, construction of drainage, road rehabilitation, earthworks, etc.			
▶ 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	44.00	66.00	55.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jul-2021
Comments:	66 sites have achieved at least 50% of works and have reduced in severity.			



► Area under bio-remediation in targeted sub-watersheds (Hectare(Ha), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,432.79	1,658.10	400.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	1, 658.1 area under bio-remediation in targeted sub-watersheds.			
► Land area under sustainable landscape management practices (Hectare(Ha), Corporate)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2,201.00	5,227.00	400.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	5,227.08 ha of land area are under sustainable landscape management practices area. A significant increase from 2,201 ha recorded previously.			
► 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	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Being a corporate result indicator, the indicator is focused on reducing greenhouse emissions expected to be measured at the end of the project. A procurement process has been completed.			

### 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	21.00	21.00	18.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:				
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	2,201.00	5,272.08	20,000.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	5,227.08 ha indicates land treated for erosion with selected measures in targeted sub-watersheds and increase from 2,201 ha.			
► 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	31.00	59.00	38.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	59 Participatory sub-watershed Management plans (CMPs) developed under the Project .			
► 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	176,904.00	185,058.00	90,000.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Exceeded the end target of 90,000.00. A total of 185,058 people receiving project-supported advisory support services in integrated land/water management practices, planning, and/or monitoring under the Project.			
► 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	19,971.00	25,491.00	12,000.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	25, 491 households benefited from livelihoods activities. The indicator exceeded the end target of 12,000.00.			
► 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	46.00	30.00
Date	27-Jun-2018	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	This indicator tracks detailed design packages that will be left for Government to carry on erosion control beyond NEWMAP closure. Currently, 115 designs with no objections given.			



Component 2: Erosion and Watershed Management Institutions and Information Services				
<b>► Spatial Knowledge Management Information System on erosion and watersheds operational (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	1.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	A functional MIS including a spatial component exist at the FPMU. The planned upgrade on the MIS is expected to be linked to a national geo-database on erosion and watershed management developed under the project.			
<b>► Upgraded and newly installed stations providing data for integrated catchment planning (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	88.00	103.00	100.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Currently, a total of 103 hydromet stations have been installed under the project as a result of additional 11 Stations installed in Kano (4 Stations), Kogi (3 Stations) and Nasarawa (4 Stations). With ongoing installations in Gombe (3), Plateau (3) & Niger (4), the end target of 100 states has been exceeded.			
<b>► City storm water master plans developed which are informed by climate projections of increased rainfall intensity and risk assessments (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1.00	3.00	3.00	3.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
<b>► EIA guidelines developed for targeted investment types that affect erosion (road cross drainage, urban water supply and drainage) (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Two draft EIA guidelines have received Bank's initial review pending finalization.			
<b>► National Centers of Excellence in erosion control established, operational and functional (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	2.00	3.00
Date	27-Jun-2018	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Of the three proposed National Centres of Excellence envisioned in project design, good progress has been made with two National Centers of Excellence at the Federal University of Technology, Owerri in Imo State and University of Lagos. However, few activities are pending completion status in University of Lagos.			



► States with improved erosion risk mapping (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	16.00	19.00	19.00
Date	27-Jun-2018	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Two additional risk maps developed in Ondo, Niger and Ekiti States.			
► Community Interest Group collecting municipal solid waste in project intervention areas (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9.00	17.00	50.00
Date	27-Jun-2018	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	17 functional Community Interest Group (CIG) collecting municipal solid waste in project intervention areas exist under the project. An increase of 8 functional CIGs of the 94 waste CIGs have formed across States.			

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	7.00	7.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	The reports on promoting low carbon development 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 (vi) LPG as a Low Carbon alternative to Firewood and Kerosene; and (vii) Greening the economy: Case study Nigeria's Sovereign Green Bond. End target of seven achieved.			
► Climate adaptation /low carbon demonstration projects completed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	13.00	42.00	10.00
Date	08-May-2012	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	In addition to the 13 carbon demonstration projects earlier implemented, 29 climate change demonstration projects were implemented. This target has exceeded the end target of 10.			
► Development and Issuing of Green Bond Phases (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	2.00	2.00	1.00
Date	27-Jun-2018	21-Dec-2020	28-May-2021	30-Jun-2021
Comments:	Two tranches of Green Bonds issuance supported by the project. The Green Bonds will support the country's NDC.			

### Performance-Based Conditions

### Data on Financial Performance

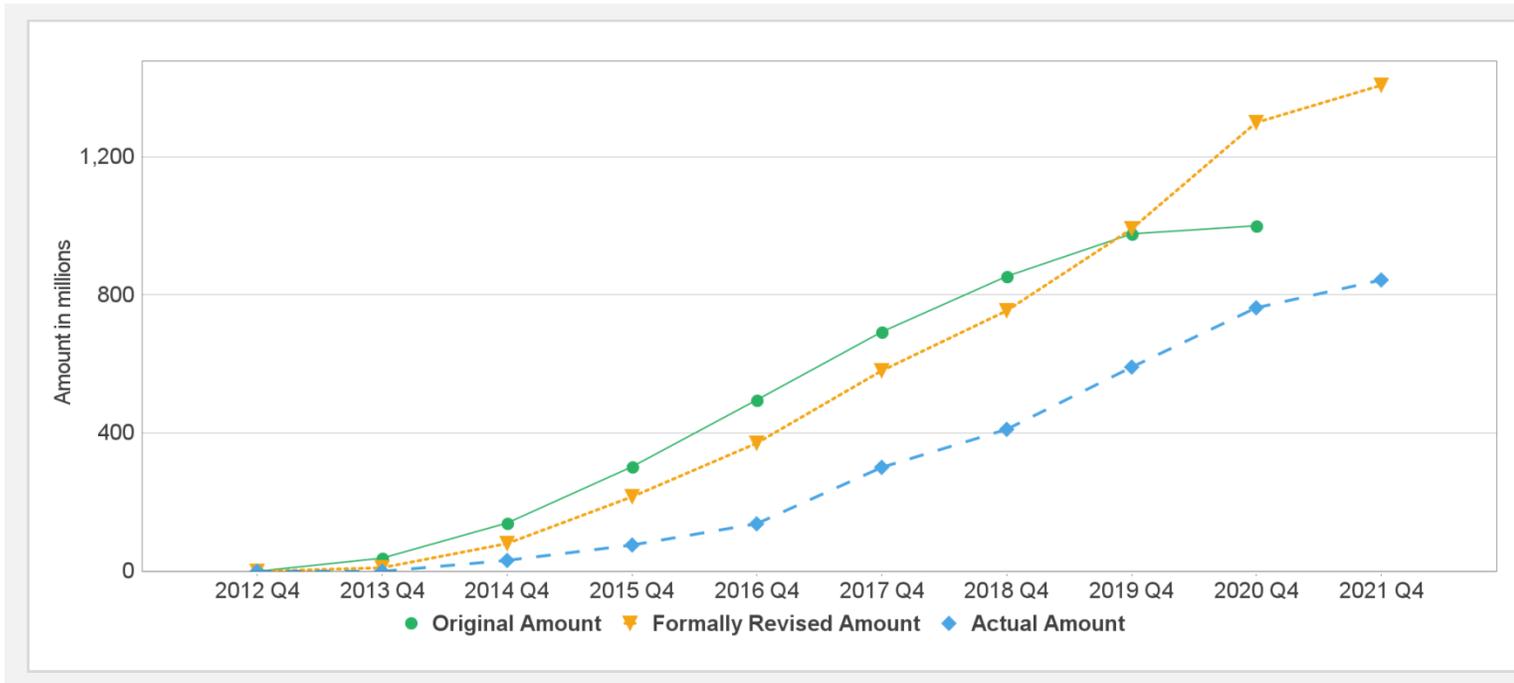
#### Disbursements (by loan)

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	Effective	USD	300.00	300.00	0.00	288.12	0.00	100%
P124905	IDA-62780	Effective	USD	100.00	100.00	0.00	97.17	2.83	97%
P126549	TF-12434	Closed	USD	3.96	3.68	0.28	3.68	0.00	100%
P126549	TF-12435	Closed	USD	4.63	4.56	0.07	4.56	0.00	100%

#### 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-2021
P124905	IDA-62770	Effective	27-Jun-2018	12-Feb-2019	27-May-2019	30-Jun-2021	30-Jun-2021
P124905	IDA-62780	Effective	27-Jun-2018	12-Feb-2019	27-May-2019	30-Jun-2021	30-Jun-2021
P126549	TF-12434	Closed	16-Apr-2013	16-Apr-2013	16-Apr-2013	30-Jun-2020	30-Jun-2020
P126549	TF-12435	Closed	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