



Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 01-May-2018 | Report No: PIDISDSA23445



BASIC INFORMATION

A. Basic Project Data

Country Nigeria	Project ID P164082	Project Name Nigeria Erosion and Watershed Management Project (NEWMAP) - Additional Financing	Parent Project ID (if any) P124905
Parent Project Name Nigeria Erosion and Watershed Management Project	Region AFRICA	Estimated Appraisal Date 23-Apr-2018	Estimated Board Date 21-Jun-2018
Practice Area (Lead) Environment & Natural Resources	Financing Instrument Investment Project Financing	Borrower(s) Federal Ministry of Finance	Implementing Agency

Proposed Development Objective(s) Parent

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

Components

- Component 1: Erosion and Watershed Management Infrastructure Investments
- Component 2: Erosion and Watershed Management Institutions and Information Services
- Component 3: Climate Change Response
- Component 4: Project Management

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	400.00
Total Financing	400.00
of which IBRD/IDA	400.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	400.00
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IDA Credit	400.00
Environmental Assessment Category	
Full Assessment (A)	
Decision	
The review did authorize the team to appraise and negotiate	

Other Decision (as needed)

B. Introduction and Context

Country Context

Nigeria experienced sustained overall economic growth of about 5 to 8 percent in the last decade. Gross domestic product (GDP) has been driven by the expansion of domestic demand concentrated primarily in trade, agriculture, and telecommunications complementing the predominantly oil-based economy. These three sectors alone accounted for roughly 80 percent of GDP growth during 2009–2012.

Recent major global economic transitions have had a significant negative impact on the Nigerian economy. The slowdown and rebalancing of the global economy, lower commodity and oil prices, tightening financial conditions, and risk aversion of international investors have been major contributors. Due to a sharp decline in oil prices, revenues dropped from 10.5 percent of GDP in 2014 to 7.8 percent in 2016. Inflation also accelerated and reached about 16.5 percent in June 2016 (year-on-year). In this context, GDP growth fell from 6.3 percent in 2014 to 2.7 percent in 2015, and further into negative territory in 2016. The economy has since recovered from recession.

These challenging economic conditions have been coupled with a deteriorating security situation. The conflict in northeast Nigeria has taken more than 20,000 lives, displaced about 2 million people, and has negatively affected the livelihoods of 6 million more. In parallel, the pastoralist-agriculturalist conflicts have intensified across the country due to increased desertification in the Sahel; and the Boko Haram impeding grazing and trading routes. Other security challenges include crime especially kidnapping, particularly in urban areas, attacks on oil and gas infrastructure, and threats of renewed militancy in the Niger Delta. At the root of the security challenges are faulty governance mechanisms, high levels of poverty and inequality, high unemployment rates—particularly among youth, as well as natural resource degradation and climate change induced stresses.

The Government launched the National Economic Recovery and Growth Plan (ERGP) for the period 2017-2020 in March 2017. The ERGP sets out to restore macroeconomic stability in the short-term and to undertake structural reforms, infrastructure investments and social sector programs to diversify the economy and set it on a path of sustained inclusive growth over the medium- to long-term. The priority areas of action under the ERGP are: stabilizing the macroeconomic environment; achieving agriculture and food security; ensuring energy sufficiency in power and petroleum products; improving



transportation infrastructure; and driving industrialization through focus on small- and medium-scale enterprises. The ERGP has the ambitious target of 7 percent real GDP growth by 2020, initially driven by the oil sector and then increasingly by strong non-oil sector growth. To increase growth above the baseline of 2 percent will require effective implementation of the structural reforms in the ERGP and a strengthened macroeconomic framework.

Nigeria has experienced poverty reduction in recent years, but this varies considerably across geographic areas and demographic groups due to entrenched inequalities. After 2004, the poverty rate in Nigeria fell by almost half in urban areas, but barely declined in rural areas, where 50 percent of the population is currently living below the poverty line. Moreover, while the total number of poor in the south declined by almost 6 million, it increased by almost 7 million in the north.

Sectoral and Institutional Context

Up to 6,000 square kilometers -- almost 6% of Nigeria's land mass -- are severely degraded at a time when population is increasing at over 2% per year and numerous sectors depend on the integrity of land resources to deliver on key sector objectives.

Gully erosion is accelerating in the southeast. Southern Nigeria is affected by massive and expanding gully erosion, an advanced form of land degradation. There are an estimated 3,000 gullies, which can be up to 10 km long with multiple fingers spreading through the rural or urban landscape. In southeastern states, gullies and areas exposed to erosion tripled; the total area affected by rill, sheet or gully erosion increased from about 1.33% (1,021 km²) in 1976 to about 3.7% (2,820 km²) in 2006. Damage to infrastructure includes severed roads, highways, and pipelines, collapsed houses and buildings, and silted waterways, reservoirs and the Calabar port. Losses to natural assets include loss of productive farmland and forest. Forest and farmland degradation also compromise watershed functions. This process exacerbates erosion downstream and siltation, compromises biodiversity important for livelihoods, and weakens natural buffers against climate and erosion risk. Many of the region's land degradation hotspots are also the most densely populated areas. Previous and ongoing attempts by states and federal institutions to stabilize or prevent gullies are at best partially or temporarily effective, for complex reasons.

The root causes of gully erosion are complex. The soils in southeastern Nigeria are highly susceptible to water erosion. Once a gully starts, it expands rapidly and is difficult to control. The causes of gully formation differ by site, but are largely human, including: (a) improper road design and construction, particularly inadequate drainage; (b) poor solid waste management in urban and peri-urban areas that chokes the already inadequate drainage meant to prevent erosion; and (c) destructive and unsustainable land-use practices that remove protective vegetation cover including protective biodiversity and carbon rich areas, or disturb the fragile soil, such as overgrazing, deforestation, cultivation of marginal lands, and uncontrolled mining for building material, and which are linked to poverty.

Climate change amplifies the challenges. The Nigerian Meteorological Service shows that the country is already experiencing climate variability in the form of droughts, floods, shifts in rainy season onset and completion, and increasing rainfall intensity. Climate-related disasters already affect Nigeria's economy and society, as evidenced by the 2010 floods which displaced over two million people. Climate risks also are a significant factor in erosion in southern Nigeria, especially because of the very high rainfall intensity. Recent regional climate modeling suggests rainfall will become more intense in the southern basins, by as



much as 80% by 2060. Each unit increase in rainfall intensity results in up to twice the historical rate of erosion and greater vulnerability to landslide risk.

Climate variability already affects agriculture, and uncertainty about the future confounds planning among land users. Farmers are aware of more variable weather patterns such as an unpredictable and compressed growing season, which makes planting decisions more problematic and can reduce yield. The projected rise in temperature by 2050 (an estimated 0.5 degrees in the south, 3.5 degrees in the north) will reduce yields according to new models. For example, under business-as-usual the Anambra-Imo basin will likely show yield reductions of 5- 10% for the south's important cassava, maize, and rice crops by 2020 and double that by 2050. The models also show that heat stress on northern livestock is rising as gross primary productivity of grazing land is declining; these factors will produce higher livestock mortality in the coming decades. Research and extension services are not advising on these issues at scale.

Throughout the country, water resources management is critical to address climate variability and erosion while contributing to key sub-sectors such as hydropower, irrigation, floodplain agriculture, and bulk water supply. Water resources are threatened by sedimentation from soil erosion, over-extraction, loss of vegetation cover and other forms of land degradation, as well as from climate variability. Some of Nigeria's water storage potential has been tapped for use in irrigation and hydropower, but this potential remains small compared to the additional investment that is being considered for the future. Integrated watershed management can help address these challenges but is not yet carried out although there are some recent positive developments in this regard being undertaken by the federal government. This approach is critical to help manage land use options and trade-offs in the landscape, including both built and natural assets. In particular, sub-watersheds need to be better managed to slow erosion and reduce its severity – which requires mobilizing local, state and federal stakeholders to act in concert to implement shared visions for basins, watersheds and sub-watersheds.

Land degradation and environmental insecurity are accelerating in the north, where an intersection of hotspots leads to increasingly tenuous livelihoods. High levels of population growth and poverty rates, resource depletion, rainfall variability, recurrent droughts and floods, soil infertility and erosion, and deforestation compromise the efforts of the 80% of northern Nigerians who depend on land and water resources for their economic and physical security. Yet these natural resources are being depleted by a growing human footprint coupled with inefficient resource management and reservoir maintenance. This depletion is occurring precisely at a moment when temperatures have risen one degree and will rise another degree in the next decade, accompanied by more variable rainfall and uncertain response mechanisms. This situation has upset the region's ecological balance and therefore the ability of its ecosystems to provide services such as food and fiber production, freshwater provision, and flood regulation. Nigeria's woody savannah systems are under stress from clearing and reduced rainfall. Firewood depletion outstrips replenishment, and bush burning is commonplace. Key tree species can reduce livestock heat stress, help replenish water tables, generate raw materials for marketing, provide medicines, strengthen soil structure to resist wind and water erosion, and naturally fix nitrogen to cheaply fertilize crops. Good tree cover also attracts and retains biodiversity, in Preliminary finding from on-going World Bank economic and sector work (2012): Climate Change Assessment: draft report on climate risk management in agriculture and water resources. Vegetation cover is also necessary to store carbon in biomass and soils. While the carbon potential for drylands are not as impressive as those for humid systems, they are nonetheless valuable, as carbon trends are also an indicator of overall ecosystem health



and with it, basic land productivity and soil health. Across the border from Sokoto, large-scale natural regeneration of trees has taken root in Maradi, Niger.

Investment responses to address erosion are fragmented and inadequate. State and local governments and their constituencies are overwhelmed by the scale and complexity of the gully erosion problem. Attempts at all tiers of government to prevent or rehabilitate gullies have been generally unsuccessful for the following reasons: (a) Unclear and overlapping mandates of federal and state institutions responsible for erosion prevention and management and watershed management; (b) insufficient technical capacity in these institutions; (c) poor, incomplete or inadequate scale of response (such as an over-emphasis on inflexible civil engineering interventions without addressing water flows in the sub-watershed or building upon a strong evidence base); (d) absent or weak land-use planning; (e) weak regulatory compliance and enforcement; (f) weak community involvement in prevention and restoration activities; (g) insufficient attention to alternative livelihood issues; and (h) insufficient attention to transparent governance, corruption, and local participation. The different challenges are interwoven and require integrated solutions. However, institutions, information, and incentives are fragmented, weakening the ability of state and federal ministries, departments and agencies (MDAs) or the communities that they serve to address the issues in a strategic and integrated manner.

The Nigeria Erosion and Watershed Management Project (NEWMAP) helps address these gaps by: (a) investing in the public environmental goods; (b) improving institutional performance, governance and multi-sector coordination, and information access; and (c) by establishing replicable investment models and institutional solutions that can be scaled up inside and outside the project. An impact evaluation will help quantify success factors for interventions by examining sites funded by NEWMAP and sites outside the project.

C. Proposed Development Objective(s)

Original PDO

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

Key Results

The project is performing well and has made substantial progress in delivering results. The Project Development Objective (PDO) remains valid and achievable. Progress against the PDO, as measured through activity implementation and quality, has picked up significantly and both the PDO and Implementation Progress (IP) ratings are satisfactory in the last ISR. Disbursements under the IDA credit are accelerating and despite the project's effectiveness delay at the outset, are approaching the original planned profile.

NEWMAP is making significant and measurable progress in tackling land degradation and gully erosion in Nigeria and has succeeded where other initiatives have failed, by adopting innovative, integrated approaches based on community participation. For the first time in Nigeria, NEWMAP introduces a holistic watershed management approach to addresses the interlinked challenges of poverty alleviation, maintaining sustainable ecosystems which bring benefits to communities, addressing climate change, saving lives and livelihoods with better disaster risk management, preserving biodiversity, and building institutional capacity and improving governance. New practices introduced under watershed



management include participatory planning and implementation based on community involvement and application of geo-spatial tools for improved baseline information. NEWMAP has brought strong community ownership and transparency. Subsequent construction of site-specific social and water conservation works include rain water harvesting, construction of stone bunds, bench terraces, check dams, and use of bio-remediation techniques such as vetiver grass and trees on treated slopes to protect against soil erosion. Blending physical and vegetative technologies has significantly reduced soil erosion, saved lives, improved surface water availability over a longer time period, and allowed for better percolation of rainwater into the soil to replenish groundwater and base flows. The project's alternative livelihood approach has further endeared it to participating communities and helping policy makers see the value of an integrated approach.

NEWMAP has already achieved outstanding results towards the achievement of its PDO. As a result, the Federal Ministry of Environment recently signaled its willingness to adopt NEWMAP's approach as the gold standard in addressing land degradation issues in the country.

D. Project Description

NEWMAP is an 8-year multi-sectoral and multi-scale program that on the one hand originally focused on seven tier 1 southeastern states with acute gully erosion (Abia, Anambra, Cross River, Ebonyi, Edo, Enugu and Imo), while laying the foundation for scaling out to additional southern and northern states. It also focuses on improving livelihoods through sustainable management of natural resources and small-scale development activities. Additional 12 tier 2 states (Akwa Ibom, Delta, Kogi, Sokoto, Plateau, Gombe, Kano, Borno, Katsina, Nassarawa, Niger and Ondo states) have now been included in the project and are advancing their investment preparations. NEWMAP is structured so that state's phase in first to technical assistance activities when they are ready, and then second, they phase into investment activities when the state is ready to implement site interventions with high quality designs to international standards.

The project's strategic approach to tier 1 states is to: (i) start with "damage control" to slow the expansion of a targeted set of existing aggressive gullies, thereby reducing the loss to property and infrastructure and helping cultivate community ownership; (ii) leverage the gully intervention to support integrated watershed management and move towards greater adoption of sustainable land and water management practices by local people in the sub-watershed where the gully is located; (iii) improve or protect rural livelihoods in the sub-watershed and carefully implement local Resettlement Action Plans; (iv) strengthen disaster risk reduction and preparedness at state, local, and community levels; (v) underpin these efforts by strengthening relevant institutions and information services, including urban storm water drainage planning and management, planning for Imo-Anambra and Benin-Owena basins, building a better knowledge base, enhancing readiness for climate action; and, (vi) contribute to improved governance. The size of the sub-watersheds varies from approximately 100 hectares (ha) to several thousand ha or more, depending on the gully system targeted.

The project's strategic approach to tier 2 states located in the north is somewhat different to tier 1 and 2 states in the south where investments hinges upon gully rehabilitation. The northern states have very dissimilar watershed management issues and different intervention requirements than those addressed by the parent project, due to the different climatic zones, soil characteristics, land use, topography, and precipitation. Therefore, no physical investment is occurring in northern states, with funding being used for engineering designs, studies and technical assistance only.

The four-original project components are as followed.



Component 1: Erosion and Watershed Management Infrastructure Investments (Original US\$ 405.98 million equivalent IDA, GEF and SCCF). This component supports on-the-ground interventions to reduce vulnerability to land degradation. The primary focus during early implementation has been on addressing gully erosion in tier 1 states while tier 2 states develop their site intervention approaches and designs.

Component 2: Erosion and Watershed Management Institutions and Information Services (Original US\$ 39.70 million equivalent IDA and SCCF). The objective is to strengthen the enabling environment and investment planning and readiness for effective implementation of erosion and watershed management. The component supports all three tiers of government and the private sector, but with a special focus on states, with the federal level serving primarily as facilitator, regulator, monitor, bench marker, information broker, and aggregator.

Component 3: Climate Change Response (Original US\$ 30.00 million equivalent IDA). The objective of this component is to strengthen Nigeria's capacity to promote low carbon, climate resilient development. Outcomes focus on providing tools and approaches for government to become better equipped to respond to climate change; and on supporting demonstration projects on the ground to test the viability and scaling-up potential of low-carbon development options.

Component 4: Project Management (Original US\$ 32.92 million equivalent IDA). The component supports: (a) project management and coordination at federal and state levels, including procurement and financial management; (b) social and environmental safeguards management and oversight; (c) strategic project communication and documentation; (d) project M&E, including two Mid-Term Reviews; and (e) impact evaluation.

These components finance, among others: (i) the design and implementation of gully site interventions prioritized by states, as well as adoption of sustainable land, forest and water management practices in associated sub-watersheds; (ii) improvement or protection of livelihoods of people affected by erosion; (iii) effective communication and community mobilization; (iv) improved storm water and watershed planning, and other improved climate resilient development planning; (v) improved meteorological, hydrological, and land management information systems and monitoring, and (vi) technical assistance to improve the regulatory environment.

There is huge demand by the federal and state governments for the scaling up of NEWMAP, as indicated in the official letter from the government requesting the Additional Financing from IDA. The opportunity for scaling up exists along two dimensions. First, gully remediation and watershed management interventions undertaken by tier 1 states in NEWMAP have demonstrated proof of concept, which has spurred state-level technical preparation for additional sites and requests for additional finance. Technical designs for an additional 55 sites had received World Bank no-objection as of December 2017 and are proceeding to procurement. A preliminary inventory conducted under NEWMAP returned 6,000 sites with land degradation, including both gully erosion and landscape contexts of dry lands, a number far beyond what single-project resources could address. Second, the demand for NEWMAP intervention comes from a broader geographical area. Whereas tier 1 states were mostly in the southeast part of the country, tier 2 states cover a broader geographical spread.



The AF will be used to continue to finance investments in gully rapid action and slope stabilization, integrated watershed management, and livelihoods. Activities that strengthen technical and coordination capacities of relevant federal, state, and local government agencies involved in planning, management, assessment, enforcement, and monitoring of watershed and erosion-related activities and disaster risk management will also continue to be supported. The AF will also continue to provide tools and approaches for government to become better equipped to adapt to climate change with a secondary focus on mitigation activities such as demonstration projects to test the viability and scaling-up potential of low-carbon development options. The AF will help scale the establishment and operation of state PMUs that are subsequently coming on board, beyond the tier 1 states. It will also explore ways to supplement and support the capacities of the state and federal PMUs. Part of the AF will be used to explore the capacity building and investment needs related to sites/states that have different watershed and natural resource management issues than those tackled under the parent project (which focused on gully erosion and watershed remediation). For example, such needs could relate to flooding, dam rehabilitation and environmental degradation in dry and semi-arid lands in northern Nigeria.

Component 1: Erosion and Watershed Management Infrastructure Investments. Approximately 76 percent (US\$304 million) of the AF would be allocated to this component. Activities would be scaled up in the three existing areas of gully rapid action and slope stabilization, integrated watershed management, and livelihoods. The AF will only focus on investments in sites with similar watershed management issues (erosion and flooding-related risks) to the parent project, as approaches to these types of risks have been proven through the parent project to date.

Component 2: Erosion and Watershed Management Institutions and Information Services. Approximately 10 percent (US\$40 million) of the AF would be allocated to this component. The AF will continue to strengthen the technical and coordination capacities of ministries, departments and agencies (MDA) affiliated with NEWMAP. It will also finance new activities including support for national centers of excellence in erosion control, landscape management and environmental assessment; erosion risk mapping; enhancing climate readiness work and environmental impact assessment capacities; facilitating completion of guidelines for road construction to reduce gully erosion; and addressing solid waste management in restored gullies, to ensure the investments are functioning to their design capacity and to prevent new gullies from forming as a result. Details concerning each of these activities are presented below:

The component would support the development of improved erosion risk mapping for Nigeria to support more detailed planning at a sub-state level. The financing will allow the development of a new decision support tool using GIS to help government and states identify risks for future gully formation. An erosion map of Nigeria using satellite data will be created. This erosion map can be very helpful for future planning of erosion control and other infrastructure projects, as well as in urban planning.

Further, the component would build on the work completed under the Climate Investment Readiness Partnership for Africa (CIRPA) trust fund, which closed in December 2017. The trust fund supported a multisector investment framework which includes mapping vulnerable households in northern Nigeria. This component will support the utilization of the framework by relevant agencies in a bid to develop an action plan for northern Nigeria, which will allow them to better identify priority investment needs and to seek funds to implement actions to address those needs.



Investment to strengthen the EIA review functions of the government would also be provided within this component through training of MDA technical departments responsible for such reviews and the enhancement of quality control of such reviews through the mobilization of specialized technical expertise. The strengthening of EIA review capacity would be undertaken with the leadership of the Federal Ministry of Environment.

If road cuts and fill slopes are not revegetated after road construction, gullies may form on both sides of the road. Inadequate drainage systems for roads (small number of culverts, insufficient capacity of road ditches, etc.) are also major cause of gullying (FAO, 1986)¹. This component will also include analysis, recommendations and piloting of measures to reduce road related gully erosions in Nigeria. The outputs of this work will be: (i) a diagnostic of key climate related vulnerabilities caused by roads in Nigeria, explicitly identifying the different vulnerabilities faced between the north and southern regions of the country, (ii) the formulation of a guidance note to increase climate resilience through improved road design, construction, operation and maintenance practices. This guidance note will complement and update existing road standards in Nigeria; (iii) a simple modelling and development of a decision support tool to help sub-national governments identify urban and peri-urban areas that are at risk of gully formation from road service runoff; (iv) identification of solutions and potential investments that will reduce road related gully erosions and (v) identification of priority areas for intervention, based on activities. The work will be conducted in close collaboration with colleagues from the Transport and ICT Global Practice and the Ministry of Works at federal and state levels. This component will enable the Ministry of Works to pilot and then gradually scale up measures that will reduce road related gully erosions.

Further, the component will look to address the ongoing problem of solid waste that has major implications on the sustainability of civil works due to clogging of drainage channels. Many of the project sites are in heavily urbanized, rapidly growing areas or towns where poorly managed volumes of solid waste are increasingly generated. Whilst NEWMAP is not a solid waste management project, the issue of poor solid waste management needs to be addressed as it has a direct impact on the sustainability of project investments. The AF will build on the results of the initial project Impact Evaluation completed in November 2017 that identified current improper solid waste management behaviors in NEWMAP host communities. The component will build on these results to design and implement behavior change and social marketing campaigns to reduce the issue of improper solid waste management in areas of intervention. The AF will not support physical interventions (construction of disposal, reuse, or recycling infrastructure).

In addition, a new sub-component (2E) would extend the capacity-building focus to activities involving national centers of excellence to provide training and other human resource development in the areas of erosion control, landscape management, and environmental impact assessment. Specific support from two to three national institutions such as universities or research agencies would be mobilized, building on the existing agreements between NEWMAP and the Federal University of Technology Owerri, in addition to cooperation with research institutions in Nigeria² and other technical universities which have extensively studied and written about soil erosion and gully formation in the country. This subcomponent will develop and foster collaboration with and between centers of excellence in Nigeria that will support

¹ FAO, 1986 Watershed Management Field Manual: Gully Control.

² Such as: Alo-Terra Development Initiative in Imo State and Azikiwe University, and others.



environmental and social safeguards.³ Further institutional strengthening will link to activities already underway outside of the project with the Africa Centers of Excellence Regional Program and the South-South Knowledge Exchange Program involving Nigeria, China, and India.

Component 3: Climate Change Response. Approximately 6 percent (US\$24 million) of the AF would be allocated to this component to provide tools and approaches for government to become better equipped to adapt to climate change. A secondary focus will be on mitigation activities such as demonstration projects to test the viability and scaling-up potential of low-carbon development options. The AF will enable the component to expand support for technical assistance to advance preparation and initiation of activities identified under Nigeria's Nationally Determined Contribution (NDC) to the Paris Agreement on climate change and for the issuance, deployment, and monitoring of green bonds.⁴

Subsequent activities that the AF would support would include: institutional capacity strengthening for management of the allocation of the financial resources mobilized to investment projects consistent with the NDC; technical assistance on definition of eligibility criteria for project finance; establishment of a project selection process; reporting on projects supported, including the positive climate impact; and technical assistance on eligible project preparation.

Component 4: Project Management. Approximately 8 percent (US\$32 million) of the AF would be allocated to this component. Activities would essentially continue as at present but with some modifications. There needs to be substantial scale-up with the establishment and operation of state PMUs beyond the initial seven states to the additional 12. Project management capacity would be expanded to supplement and support the capacities of the state and federal PMUs.

The parent project focuses on gully erosion and watershed remediation in the tier 1 states and some of the tier 2 states. Many of the northern state's present sites that have dissimilar watershed management issues and intervention requirements to those met by the parent project, due to the different climatic zones, soil characteristics, land use, topography, and precipitation. Even with the AF, the NEWMAP will not have sufficient time or resources to fully prepare and finance major landscape and watershed-level restoration programs that address different issues to those being addressed in the parent project. Instead, the AF will finance a major technical and socioeconomic analysis to better define appropriate investment activities for these alternative sites/states for future lending support.

Institutional and Implementation Arrangements

A review of project safeguards implementation performance indicates that it has a medium to high risk profile; has a Safeguards Management System in place that is commensurate to the risk profile and the compliance rating on social safeguards is Satisfactory while it is Moderately Satisfactory for the Environmental Safeguards. According to the normal supervision and mid-term reports, the project activities are being carried out taking into account the disclosed safeguards requirements, adhering to policy principles/procedures, and responsibility for social and environmental screening and due diligence, including proper internal reporting, monitoring and documentation of environmental and social aspects of project risks.

³ Such as: (i) University of Lagos, (ii) University of Ibadan, (iii) Ahmadu-Bello University and other technical universities which have extensively studied and written about EIA, SESA, GIS, RS, Involuntary Resettlement, and land issues in Nigeria.

⁴ The project already supported the launch of Nigeria's first green bond in 2017.



Qualified environmental and social specialists have been recruited, trained and are responsible for environmental and social risk management of the project activities and have demonstrated commitment to incorporating environmental and social issues into overall project implementation. Nigeria has a relatively sophisticated framework of laws and regulations governing labor and working conditions and project documents are published or disclosed at the local and federal levels and at the Bank's website.

It is also recognized that the 12 new participating states will need additional evidence based capacity building assistance in assessing and managing environment and social risks, particularly on safeguards training on issues of labor and working standards. Therefore, this project will develop procedures and guidance for screening, assessing, and managing safeguards risks based on lessons learned from the parent project.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The project will be implemented in 19 states including the seven (7) tier 1 states of Anambra, Abia, Cross River, Edo, Enugu, Ebonyi, and Imo and 12 tier 2 states (Akwa Ibom, Delta, Kogi, Sokoto, Plateau, Gombe, Kano, Borno, Katsina, Nassarawa, Niger and Ondo states), located in the so called 6 geopolitical zone of Nigeria with different ecological features and characterized by steep slopes and terrains/soils that are susceptible to the forces of water erosion and formation of gullies caused by run off of rain water; once a gully starts, it expands rapidly and is difficult to tame. The causes for gully formation differ from site to site, but are largely human, including: (a) improper road design and construction, particularly inadequate drainage; (b) poor solid waste management in urban and peri-urban areas that chokes the already inadequate drainage meant to prevent erosion; and (c) destructive and unsustainable land-use practices that remove protective vegetation cover including protective biodiversity and carbon rich areas, or disturb the fragile soil, such as overgrazing, deforestation, cultivation of marginal lands, and uncontrolled mining for building material, and which are linked to poverty and these areas could easily be degraded, particularly in the southern part of Nigeria. In the northern part of the country, land degradation and environmental insecurity are accelerating and tenuously impacting livelihoods, and this is intensified by high levels of population growth and poverty rates, resource depletion, rainfall variability, recurrent droughts and floods, soil infertility and erosion, and deforestation. Integrated watershed management can help address these challenges but is not yet carried out although there are some recent positive developments in this regard being undertaken by the federal government of Nigeria through the intervention of the first project. Though the specific sites for project implementation in new states are not yet known, the sub-projects will involve land acquisition, and any impact on land take and restriction of access, the Resettlement Action Plan as used under the ongoing project will be prepared, consulted upon and cleared by the WB to the specificity of each subject project site(s).



G. Environmental and Social Safeguards Specialists on the Team

Nneka Okereke, Social Safeguards Specialist
Emmanuel Ngollo, Environmental Safeguards Specialist
Chukwudi H. Okafor, Social Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>In component 1, the project will finance the rehabilitation of existing gullies through interventions such as structural land management measures, civil works and vegetative land management measures in pursuance of its project development objective. A longlist of possible site locations has been prepared. The final selection of intervention sites will be made during implementation. As such, the exact scope and nature of the interventions are not known. The approach followed for managing environmental and social risks is therefore a combination of an updated ESMF-AF and ESIA's for a number of the known intervention sites.</p> <p>The ongoing project has functioning Environmental and Social management framework (ESMF) screening process that pays special attention to any subprojects with set of features to identify any site-specific potential impacts that might warrant an ESMP and the appropriateness of the mitigation measure is reviewed during rigorous safeguards monitoring system.</p> <p>So far, the project has successfully implemented ESMF in precluding safeguards risks and ESMPs in managing potential adverse impacts on the environment from project funded activities. Therefore, the existing Environmental and Social Management Framework (ESMF) has been updated, consulted upon and re-disclosed in country on</p>



November 30, 2017 and in the Bank website on February 20, 2018 prior to Appraisal.

Performance Standards for Private Sector Activities OP/BP 4.03

Natural Habitats OP/BP 4.04	No	Project’s activities will not be undertaken in natural habitats and or will the project finance any activities that would impact natural and sensitive habitats (including forests). The project approved ESMF-AF has screening criteria to be used when selecting sites so that natural habitats are completely avoided.
Forests OP/BP 4.36	No	Project’s activities will not be undertaken in forest areas or involve afforestation or will the project finance any activities that would impact forest. The project approved ESMF-AF has screening criteria to be used when selecting sites so that forests are completely avoided.
Pest Management OP 4.09	No	The project is not an agricultural project and is not involving the use of pesticides or purchase of pesticide-related equipment to trigger this policy.
Physical Cultural Resources OP/BP 4.11	No	Some of the intervention activities may lead to the discovery of cultural artifacts. Therefore, a set of procedures for ensuring that PCRs are considered in the designing process of sub-projects and included in the ESMF.
Indigenous Peoples OP/BP 4.10	No	This policy is not triggered as there are no qualified indigenous in Nigeria.
Involuntary Resettlement OP/BP 4.12	Yes	The project’s interventions may involve acquisition of land and /or restriction of access to private or communal property. Therefore, the existing Resettlement Policy Framework (RPF) has been updated, consulted upon and re-disclosed in country on November 30, 2017 and in the Bank website on February 20, 2018 prior to Appraisal. This is to ensure that appropriate measures are in place to address any issues which might arise from any land acquisition and or restriction of access to private or communal land under the Project and when investment sites are identified as has been done in the ongoing project, RAPs will be prepared, consulted upon and cleared by the World Bank before commencement of any civil works.
Safety of Dams OP/BP 4.37	No	The project at this stage will not support any intervention involving dam safety nor be implemented in dams-related sites, therefore, this policy is not triggered.



Projects on International Waterways OP/BP 7.50	Yes	The project may support drainage activities on international waterways. Project implementation could conceivably alter flow patterns or water quality, most likely in a beneficial fashion. This triggers the international waterways policy (OP 7.50). On December 22, 2011, the FGN sent the riparian notification that OP 7.50 requires to the Government of Cameroon and the Niger Basin Authority. The Vice President for the Bank’s Africa Region issued approval to proceed with project processing on March 13, 2012, in accordance with OP 7.50 provisions that apply when no comments have been received after a reasonable time, as is the case with this project, and the likelihood of any adverse impact to the interests of riparian states is low.
Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered because there will be no project-related activities in the disputed areas.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The parent project has not recorded any non-compliance issues. However, there are normal implementation challenges which the task team usual addresses as it arises. The following are the achievements recorded in the implementation of the safeguards instruments that have been cleared and disclosed: 49 ESMPs, 47 RAPs; a total of 2018 Project affected persons (PAPs) were compensated as required, with a total compensation package of N865 million (Nigerian currency); more than 4,853 PAPs have benefitted in the Livelihood activities (to sum of more than N610 million); about 40 grievances were recorded and resolved across participating states; 265 Community Interest Groups (CIGs) trained and 14 Catchment Plans have been developed.

However, the key environmental and social safeguards concerns of the ongoing project that might be relevant to the NEWMAP-AF include: (i) possible soil and water contamination, air contamination, loss of vegetation, dust and noise nuisance, vibration, traffic congestion due to the planned construction and rehabilitation activities; and (ii) potential adverse social impacts that might result from the need for land acquisition and/or the loss of access to economic assets and livelihoods due to planned rehabilitation and investment activities as well as GBV related issues. The client has updated the ESMF and RPF and outlined steps which will be followed in preparing site specific safeguards instruments (ESIA, ESMP, EMP, RAP) when the locations of the project activities are determined during implementation, including mechanism for anticipating, recording GBV related risks and escalating, when necessary.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: One potential adverse environmental impact are landslides or mudflows and flooding and resulting landscape and



property damage and injury or loss of life that could result from failure of an erosion management structure installed under Component 1. A second, longer-term impact could be replacement of native plant species by invasive species if incorrect choices are made for revegetation. The greatest environmental risks would probably arise during construction caused by dust, noise, vibration, drainage problems, safety issues, improper use of pesticides, improper disposal of lubricants, poor management of borrow pits and disposal sites. These can be avoided by sound design (e.g. adherence to the engineering design standards in the Good Practice Guidance Note prepared for the project, as well as the reference documents of FAO), good construction practice, effective maintenance, and prompt repair of defects, reinforced by adequate supervision during construction and inspection and enforcement during operation. Other potential adverse impacts are typical of construction projects involving earthmoving, heavy equipment operation, materials transport, interruptions of vehicle traffic, and the presence of outside workers in the affected area. The ESMF requires screening for the presence of physical cultural property at proposed investment sites and includes a chance-finds procedure. Some livelihood activities to be supported under Component 1 could also have adverse impacts, for example from improper waste or effluent disposal, excessive fertilizer use in nurseries or on fields or orchards, improper pesticide use, or soil erosion caused by poor tillage practices; these could affect surface or groundwater quality, public health, and landscape appearance. None of these is experienced in the ongoing project, and all can be mitigated through application of the measures presented in the ESMF and implementation of ESMPs, including labor influx standards and codes of practice as well as counter measures indicated in the ESMF to preclude and manage any project related risk of gender based violence and sexual exploitation of women and children.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Each site intervention planned for implementation will follow strict screening protocol under the RPF for possible triggering of OP 4.12 (Involuntary Resettlement) and ESMF for environmental and social assessment and management. Civil works for erosion prevention or land rehabilitation could result in land acquisition or the displacement of families or businesses on a temporary or permanent basis. Works such as drainage canals could also result in loss of access to land even when agricultural plots themselves are not affected. Modifications of drainage in the upper watershed or immediate catchment of gullies and gully-systems could lead to the creation of zones where restrictions on building construction, pavement, and on agricultural activities could be imposed. Screening will be done early in the planning process by trained State PMU staff in consultation with engineers and others who carry out the site design. Alternatives will be considered to minimize the amount of displacement and the justification for the alternative selected will be set out in the RAP. Consultations with affected people and the participation of affected people and possible host communities are mandatory and the concerns and aspirations of community members shall be taken into consideration in the planning and implementation process.

Each site approved for support by the project can be eligible for financing only when an Environmental Management Plan (ESMP) and RAP (if required) satisfactory to the Bank have been completed and disclosed.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Client has demonstrated its commitment to mitigating adverse social and environmental impacts in the implementation of the project. There are adequate instruments prepared (ESMF, IPMP and, RPF) to ensure compliance with World Bank safeguards policies. These instruments have been consulted upon, reviewed and cleared by the Bank, disclosed and will be implemented by the client. Land acquisition for project works or to accommodate resettled families would continue to trigger the policy even when people are not displaced. Screening will be done early in the planning process by trained State PMU staff in consultation with engineers and others who carry out the site design. Alternatives will continue to be considered to minimize the amount of displacement and the justification for the alternative selected will be set out in the RAP. Consultations with affected people and the participation of



affected people and possible host communities are mandatory and the concerns and aspirations of community members have been taken into consideration in the planning process during the parent project, and this trend will continue during the implementation of the current AF.

Each site approved for support by the project will be eligible for financing only when an Environmental Management Plan (ESMP) and RAP (if required) satisfactory to the Bank have been completed and disclosed. During the Parent project, 49 ESMPs and 47 RAPs have been developed for the sites approved in a manner that is satisfactory to the Bank and also consistent with the ESMF and RPF that were prepared and disclosed in 2012 prior to Board Presentation of NEWMAP. The implementation of the ESMPs and RAPs during the parent project were rated moderately satisfactory but the aim is to bring the implementation of both instruments to a satisfactory rating during the AF project.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders are the Federal Ministry of Environment, State Ministries of Environment of the participating states that will implement the project, LGAs, NGOs, Donor partners; other relevant institutions and participating communities.

The need for social assessment for each intervention site financed was discussed with the Federal and State Governments. In practice, this would involve preparing a Social Management Plan (SMP) tailored to conditions in each site. The scope of the SMP would be commensurate with the size and population of the site. Large sites affecting large populations (e.g. more than 200 people), would require more intensive investigation and dialogue with the affected community, while simpler, small-scale sites would require only short-term investigations to identify the particular characteristics of the affected community (-ies) and to tailor the SMP to the needs and characteristics of that community.

The Federal Government of Nigeria sent the riparian notification required by OP 7.50 in letters dated December 22, 2011 to the Government of Cameroon and the Niger Basin Authority. The Vice President for Africa Region issued approval to proceed with project processing on March 13, 2012, in accordance with the provisions of OP 7.50 that apply when no comments have been received after a reasonable passage of time, as is the case with this project, and the likelihood of any adverse impact to the interests of riparian states is low.

B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
30-Nov-2017	20-Feb-2018	

"In country" Disclosure

Nigeria
30-Nov-2017



Comments

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank

30-Nov-2017

Date of submission for disclosure

20-Feb-2018

"In country" Disclosure

Nigeria

30-Nov-2017

Comments

If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

If in-country disclosure of any of the above documents is not expected, please explain why:

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

Is physical displacement/relocation expected?

TBD



Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)

TBD

OP 7.50 - Projects on International Waterways

Have the other riparians been notified of the project?

NA

If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?

NA

Has the RVP approved such an exception?

NA

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

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APPROVAL

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01-May-2018

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