



**FEDERAL MINISTRY OF FINANCE:
HOMES FUNDS LIMITED**

FAMILY

**PROJECT: FAMILY HOMES FUNDS AND
INTEGRATED SKILLS DEVELOPMENT PROJECT**

COUNTRY: NIGERIA

**ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK SUMMARY**

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1. INTRODUCTION

Nigeria's rapid population growth and rate of urbanization are key drivers of the pressure on the demand for decent and affordable housing and other social infrastructure. According to the worldometer 's presentation of United Nations data, the country has an estimated total population of about 200 million people with population growth rate of about 2.6%. This is marked by an increasing rate of urbanization estimated at about 4.3% per annum, with the urban population estimated at about 50.3% in 2018. This situation has resulted in a huge housing deficit, with an estimated shortage of about 17 million housing units as at 2019.

In response to this growing social infrastructure deficit, the Federal Government of Nigeria (FGN) has launched a number of initiatives, including Family Homes Funds Limited (FHFL) to help address the housing shortage. FHFL was established in 2016, as a Special Purpose Vehicle (SPV) to act as a catalyst to the delivery of affordable housing nationwide. The overall mission of FHFL is to provide 500,000 affordable homes and to create 1.5 million jobs through the housing value chain. The Federal Government has therefore approached the African Development Bank to seek funding of up to USD 100million to support middle- and low-income families acquire their own homes through "help to buy" mortgage products. In parallel, FHFL is working with State Governments and private developers across the country to facilitate the construction of affordable homes for offtake with the help to buy mortgage products. It is estimated that there will be construction works in all 36 states of the country, including the Federal Capital Territory. As required by the African Development Bank (AfDB) and other Development Financial Institutions (DFIs), this Environmental and Social Management Framework (ESMF) will guide the environmental and social (E&S) risk management process once sites have been identified for the construction of the housing estates and associated infrastructure.

1.2. Project Justification

As of 2019, Nigeria was estimated to have a housing deficit to the tune of 17 Million units. In addition to the housing supply deficit, effective demand has been constrained by low household incomes, limited range of available and affordable mortgage products, high costs of borrowing and the general difficulty in accessing credit. Inadequate access to housing finance is thus as a result of a combination of high interest rates; unavailability of long-term loans and large deposit requirements by most lenders, albeit informal renting which utilizes a large percentage of household incomes. This inevitably limits the contribution of the housing and mortgage finance sector to Nigeria's economic growth. As of 2018, the share of mortgage debt to GDP ratio was very limited and estimated to be below 1%, provided through 36 mortgage finance institutions, making mortgage market expansion and access to affordable housing finance a top priority for the country.

1.3 Objectives of the ESMF

The objectives of this ESMF are to:

- Establish clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of subprojects to be financed under the FHFL estate development component.
- Specify appropriate roles and responsibilities and outline the necessary reporting procedures for managing and monitoring environmental and social risks related to subprojects.
- Determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF.
- Establish the project funding required to implement the ESMF requirements.
- Provide lessons learned for application to future social housing programs.

2. INSTITUTIONAL AND LEGAL FRAMEWORKS

The development of housing estates for or on behalf of FHFL will be underpinned by a suite of standards, policies, laws, regulations and best practices collectively referred to as institutional and legal frameworks.

2.1 Institutional Framework

The institutional arrangements for E&S risk management involves government departments and agencies in charge of environmental protection and regulation across different business sectors. These include:

- **Federal Ministry of Environment**

The Federal Ministry of Environment (FMEnv) in 1999 replaced Federal Environmental Protection Agency (FEPA) established through Decree No. 58 of 1988 as amended by Decree No. 59 of 1992. The Ministry is the competent authority with the mandate to coordinate environmental protection and natural resource conservation for sustainable development in Nigeria. The ministry oversees the implementation of legislation such as the EIA Act of 1992, which covers the risk assessment of projects as well as categorization and disclosure of E&S instruments. The ministry will be responsible for approving the categorizations and location-specific E&S documents of the FHFL once the construction sites have been identified. It will also issue certificates of compliance to E&S studies that meet the requirements of the Federal Republic of Nigeria.

- **National Environmental Standards and Regulations Enforcement Agency (NESREA)**

NESREA was established by the NESREA Act of 30th July 2007 as an Agency of the FMEnv. NESREA is charged with the responsibility of enforcing all environmental laws, guidelines, policies, standards and regulations in Nigeria.

It also has the responsibility to enforce compliance with provisions of international agreements, protocols, conventions and treaties on the environment to which Nigeria is a party. All legal provisions that pertain to environmental protection in Nigeria as well as the international conventions and protocols are enforced by NESREA. The implementation of ESMPs and auditing of subprojects within the FHFL transactions shall be coordinated by NESREA.

- **Federal Ministry of Works and Housing (FMW&H)**

The mandate of the Federal Ministry of Works and Housing (FMW&H) is primarily to formulate and implement the policy of the federal Government of Nigeria with respect to: Provision of infrastructure; Road transport, highways construction and rehabilitation; Highways planning and design; Monitoring and maintenance of federal Roads & Bridges nationwide; Survey & Mapping of the nation's internal and international boundaries (Works) as well as Provision of Habitat and affordable housing for Nigerians (Housing). The role of FMW&H on this project may include provision of expert advice to FHFL with regards to the design and construction of the building to ensure it conforms to relevant building codes and standards.

2.2. Legal Framework

The legal framework for E&S risk management in Nigeria consist of national legislation, International Conventions, Policies and standards of Development Financial Institutions (DFIs) and International Best Practice.

Nigeria's legal framework on E&S risk management encompasses a set of laws and regulations that govern environmental protection and ecosystems sustainability. These laws and regulations border on the risks of sector activities and thematic areas. For the estate development and associated facilities, the applicable laws and regulations include:

- **EIA Act Cap E12 LFN 2004:** This Act requires every major development in Nigeria to be subjected to an Environmental Impact Assessment Process which will cover environmental and social risks. Housing construction is one of the listed developments in the EIA Act with a specific E&S categorization and ESIA process.
- **National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations, 1991:** Schedule 12 and 13 of the Regulations provide a comprehensive list of wastes deemed to be hazardous and dangerous. Construction of housing units and ancillary facilities will in no doubt generate solid and hazardous waste which falls within the categories listed in schedule 12 and 13. The management of these waste streams will require the application of this regulation.
- **National Environmental (Sanitation and Wastes Control) Regulations, 2009:** To complement the 1991 regulations, this regulation covers sanitation and waste control. Part 3 of the Regulations requires owners

or occupiers of premises to provide waste receptacles for storage before collection by licensed waste managers. The construction and operational phases of subprojects will generate waste streams which will require proper management by licensed contractor.

- **National Environmental (Noise Standards and Control) Regulations, 2009:** The Regulations prescribe the maximum permissible noise levels on a facility or activity to which a person may be exposed and provide for the control of noise and for mitigating measures for the reduction of noise. Construction of housing units and ancillary facilities have activities with the potential to increase the ambient noise level within the immediate environment of subprojects.
- **National Environmental (Surface & Groundwater Quality Control) Regulations 2011:** The Regulations also include amongst others, the application and general provisions of water quality standards for various uses such as agriculture, industrial, aquatic life and recreation. Development of subprojects will require water use either from surface or underground sources. This usage must comply with the regulations while disposal of sewage from subprojects must also comply with the regulations to ensure that sewage disposals are not done indiscriminately into surface water bodies or any underground sources that could result in groundwater contamination.
- **National Environmental (Construction Sector) Regulations, 2011. (S.I No. 19):** is the regulation that covers environmental considerations in the construction sector. Part II of the regulation discusses specific provisions for site waste management plans, storm water discharge, lighting activities, control of dust and fugitive emission, noise control, avoiding nuisance, hazardous substances, use of asbestos, spent oil, prevention and control of explosion hazards, radiation, polluter-pays-principle, community relations and close-out. This, like other acts and regulations, cover activities and risks that all subprojects will have to consider in their project designs.
- **National Building Code 2006:** The National Building Codes is a set of rules, and principles put in place to guide professionals in the Nigerian Construction Industry. The code applies to and controls all matters concerning the design and specification, costing, construction, alteration, addition to, moving, demolition, location, repair and use of any building or structure, for existing or proposed building works within the Federal Republic of Nigeria. Several provisions of this code applies to the subprojects of the FHFL.
- **Land Use Act CAP L5 LFN 2004:** The law establishes the legal framework for government expropriation of land from individuals and communities, when it is required for “overriding public interest/good”. It prescribes the circumstances under which the State can revoke rights of occupancy to the land and the compensation provisions that are required. Land acquisition for subprojects across the country will be governed by specific provisions within this act.

- **Employee's Compensation Act, 2010:** The Act provides compensation to employees who suffer from occupational diseases or sustain injuries arising from accidents at workplace or in the course of employment. Payment of compensation (to the worker or to his dependents in case of death) by the employer is rooted in the accepted principle that the employer has a duty of care to protect the health, welfare and safety of workers at work. Developers of subprojects will have contractors and sub-contractors who will have established workforce. Occupational accidents and injuries arising from subproject developments will be handled using the employee's compensation Act.

There are a number of International Conventions, Best Practices and DFI policies that are mirrored in Nigeria's E&S legislation. These requirements are benchmarked against one another to reduce the burden of compliance on the borrower. For the purpose of this document, the AfDB Integrated Safeguards System (ISS) and Operational Safeguards (OS) have been used to inform the proponent of the requirements of potential lenders as well as best practice. The objectives of the OSs and triggers are outlined in **Table A** below.

Table A: The ISS, OSs and triggers

OS	Description and trigger
<p>OS 1: Environmental and social assessment</p>	<p>This overarching safeguard governs the process of determining a project's environmental and social category and the resulting environmental and social assessment requirements.</p> <p>This OS is triggered through the mandatory Environmental and Social Screening Process through which the project is assigned a Category based upon its potential environmental and social risks and impacts in its area of influence. The potential risks and impacts of the FHFL activities include physical, biological, socio-economic, health, safety, cultural property, transboundary impacts and global impacts including Greenhouse Gas (GHG) emissions and vulnerability to climate change effects.</p>
<p>OS 2: Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation</p>	<p>This safeguard consolidates the policy commitments and requirements set out in the Bank's policy on involuntary resettlement and incorporates a few refinements designed to improve the operational effectiveness of those requirements. It includes comprehensive notions of livelihood and assets, accounting for their social, cultural, and economic dimensions. It also adopts a definition of community and common property that emphasizes the need to maintain social cohesion, community structures, and the social interlinkages that common property provides. It furthermore stresses the importance of improving living conditions for PAPs through a Livelihood Restoration programme.</p> <p>This OS is triggered due to the fact that the FHFL subprojects require the involuntary acquisition of land, involuntary acquisition of other assets or restrictions on land use and on access to local natural resources which result in:</p>

	<ul style="list-style-type: none"> • Relocation or loss of shelter by the people residing in the project area of influence; • Loss of assets or restriction of access to assets including national parks, protected areas or natural resources; or • Loss of income sources or means of livelihood as a result of the project, whether or not the PAPs are required to move.
OS 3: Biodiversity and Ecosystem Services	<p>This safeguard aims to conserve biological diversity and promote the sustainable use of natural resources. It also translates the commitments in the Bank's policy on integrated water resources management into operational requirements.</p> <p>This OS is triggered due to the possibility that any of the FHFL subproject could be located in a habitat where there may be potential biodiversity impacts or in areas providing ecosystem services upon which potentially affected stakeholders are dependent for survival, sustenance, livelihood or primary income, or which are used for sustaining the project. It is also triggered if the project is designed to extract natural resources as a main purpose (e.g. plantation forestry, commercial harvesting, agriculture, livestock, fisheries and aquaculture).</p>
OS 4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency	<p>This safeguard covers the range of key impacts of pollution, waste, and hazardous materials for which there are agreed international conventions, as well as comprehensive industry-specific and regional standards, including greenhouse gas accounting, that other multilateral development banks follow.</p> <p>This OS is triggered due to the likelihood of the FHFL subprojects causing adverse environmental or social impacts owing to the emission of pollutants, waste or hazardous materials covered by national legislation, international conventions or internationally recognized standards or by unsustainable resource use. It is also triggered by potentially significant levels of GHG emissions.</p>
OS 5: Labour Conditions, Health and Safety	<p>This safeguard establishes the Bank's requirements for its borrowers or clients concerning workers' conditions, rights and protection from abuse or exploitation. It also ensures greater harmonization with most other multilateral development banks.</p> <p>This OS is triggered as the subprojects will establish a temporary or permanent workforce.</p>

3. PROJECT OVERVIEW AND DESCRIPTION

Component 1: *Provision of mortgage finance to support the help to buy scheme*

Component 2: Construction of affordable homes

Component 3: Creation of employment to meet the requisite industry labour demand.

The project components and associated facilities are presented in **Table B** below. Of the three, only the construction component is likely to impact on the environment, society and cultural heritage.

Table B: Construction of affordable homes - project phase, activities and E&S instruments.

Components	
<p>Development of housing estates</p> <ul style="list-style-type: none"> • Building apartment blocks, bungalows and associated facilities, e.g. courthouses: main buildings, as well as additional structures e.g. offices, accommodation, storage buildings and open areas, car parks, etc. • Drainage and erosion control structures. • Safety and security measures (e.g. barriers, fencing). • Other elements (e.g. water and power supply, signage, lighting). 	<p>Associated facilities</p> <ul style="list-style-type: none"> • Temporary construction facilities (e.g. workshops, laydown areas, workers' accommodation, borrow pits). • Security posts and infrastructure. • Access roads within and between temporary facilities and the construction sites, permanent access roads and other transport links. • Landscaping features, etc.
<p>Activity (1)</p>	
<p>Design – Site Selection and Planning (pre-construction)</p>	<p><i>Screening , Scoping and ESIA</i> <i>Preparation of ESMP</i></p>
<p>Site-specific planning (detailed design), taking account of environmental and social sensitivities and consultation with communities, drawing upon the following environmental and socio-economic documentation, all of which should comply with national regulations and international good practice:</p> <p>Environmental and Social Impact Assessment (ESIA). Environmental and Social Management Plan (ESMP). Stakeholder Engagement Plan (SEP). Resettlement Action Plan (RAP).</p>	
<p>Activity (2)</p>	
<p>Construction</p>	<p><i>Monitoring of ESMP performance</i> <i>Monitoring of compliance with loan covenants</i> <i>Monitoring of sub-contractor contract provisions</i></p>
<p>Construction activities will include:</p> <ul style="list-style-type: none"> • Establishing temporary access to work and ancillary areas, demarcating clearance zones, establishing access control. • Clearance and levelling of the project footprint, and major earthworks where required. 	

- Construction of buildings and associated facilities.
- Location and development of borrow pits and possibly quarries, import of materials, e.g. aggregate/ballast/sand/cement/metal rods etc.
- Sourcing and establishing a water supply from surface and/or groundwater.
- Improvement of existing drainage and introduction of new drainage, including culverts if required.
- Establishment or improvement of safety arrangements e.g. barriers, lighting.
- Landscaping, as required.

The equipment required will include heavy mobile plant (e.g. graders, bulldozers, excavators) and temporary fixed plant such as concrete batching plant and power generators.

Operation and Maintenance

Project implementation: Compliance Monitoring

During operation, estates will be used to house families as well as enable access to health services or education; regular use by small to large numbers of individuals will be associated with:

- Increased flow of traffic at the project site and in the surrounding area;
- loading, unloading and storage of equipment and goods, which may include hazardous materials;
- provision of water and energy supply;
- sewerage treatment and disposal etc.

These activities may contribute to direct and indirect impacts described in *Table E below*.

Maintenance will entail many of the activities described above for the construction phase, although in general will be smaller in scale and spatial extent.

Decommissioning (Closure)

Project Completion: Compliance Report

Where temporary roads and facilities used in construction are no longer required (if, for example, they are not required for maintenance) they should be decommissioned and rehabilitated in accordance with a site-specific closure plan developed in line with national legislation and international good practice. The decommissioning process will include:

- site clearance;
- removal of all equipment;
- appropriate disposal of waste materials;
- soil ripping and re-grading where necessary.

The housing estates are intended to remain in place and to operate for a prolonged period, and so it would not be appropriate for closure or decommissioning plans to be prepared until a few years prior to this occurring.

4 ENVIRONMENTAL AND SOCIAL SETTINGS

Based on discussions between FHFL and some states and developers across the country, it is obvious that subprojects will be developed across the country. Therefore, the environmental and social settings of the entire country are presented.

4.1 Climate

Nigeria has a tropical climate with variable rainy and dry seasons, depending on location. It is hot and wet for most of the year in the South East but dry in the South West and farther inland. A savanna climate, with marked wet and dry seasons, prevails in the North and West, while a steppe climate with little precipitation is found in the far North. In general, the length of the rainy season decreases from south to North. In the South, the rainy season lasts from March to November, whereas in the far North it lasts only from mid-May to September. A marked interruption in the rains occur during August in the south, resulting in a short dry season often referred to as the "August break." Precipitation is heavier in the South, especially in the South East, which receives more than 120 inches (3,000 mm) of rain a year, compared to about 70 inches (1,800 mm) in the South West. Rainfall decreases progressively away from the coast; the far North receives no more than 20 inches (500 mm) a year.

4.2 Geology

The geology of Nigeria is characterized by three major rock formations - igneous, metamorphic and sedimentary. Igneous and metamorphic rocks constitute the Precambrian basement complex which is the oldest, crystalline, solid physical foundation of the country. Sedimentary rocks fill up the basins which are vast depressions between basement landmasses. The basement complex and the sedimentary basins are equally dispersed in Nigeria, especially in the North of the country; but less so in the South-Western part of the country; and least along the Eastern margin. The sedimentary basins occupy the central x-shaped area in the country; they underlie all of Southern Nigeria; and are also found in the North West in Sokoto, in Borno and the entire Lake Chad in the North East. Igneous and volcanic rocks occur mainly on the Jos Plateau, where they are the sources of mineral deposits such as tin, columbite, tantalite, wolframite, monazite and gemstones. Gold, molybdenite, and non-metallic minerals such as marble, feldspars and talc are among the mineral deposits in the basement complex.

4.3 Hydrology and Drainage

The hydrology of Nigeria is dominated by two great river systems - the Niger-Benue and the Chad systems. With the exception of a few rivers that drain directly into the Atlantic Ocean (Cross River, Ogun, Oshun, Imo, Qua Iboe and a few others), all other flowing waters ultimately find their way into the Chad Basin or down the lower Niger to the sea. The two river systems (Niger-

Benue and Chad) are separated by a primary watershed extending North East and North West from the Bauchi Plateau which is the main source of their principal tributaries. North West of the plateau lies the elevated, drift-covered plains of Central Hausaland which is drained by numerous streams all flowing outwards to join the major tributaries. The rivers flowing into Lake Chad originate both from the central highland and from the high plateau and converge to form the Yobe River just before draining into Lake Chad. Some rivers flowing into the lake originate from the Cameroon mountains. Only a small part of Lake Chad lies within Nigeria. Along the Nigerian border, the lake is a little more than a vast swamp. A few passages are cut through the reeds and tall grasses for movement of canoes to open water.

4.4 Biological Environment

Nigeria is covered by three types of vegetation: forests (where there is significant tree cover), savannahs (insignificant tree cover, with grasses and flowers located between trees), and montane land. (The latter is the least common and is mainly found in the mountains near the Cameroon border.) Both the forest zone and the savannah zone are divided into three parts. Some of the forest zone's most southerly portion, especially around the Niger River, Cross River and Delta consist of mangrove swamps. North of this zone is the fresh water swamps, containing different vegetation from the salt water mangrove swamps to the rainforest. The savannah zone's three categories are divided into Guinean forest-savannah mosaic, made up of plains of tall grass which are interrupted by trees, the most common across the country; Sudan savannah, similar but with shorter grasses and shorter trees; and Sahel savannah patches of grass and sand, found in the North East. The biologically diverse environment consists of sensitive ecosystems with critically endangered flora and fauna, both of which are protected under national and international law. A select list of these species is illuminated in **Table C** below.

Table C: Some critically endangered species in Nigeria

Subgroup	Species and geographic locations	Comments
Flora	<ul style="list-style-type: none"> • Abura (<i>Hallea ledermannii</i>). Found mostly in the Niger Delta. • Iroko (<i>Millettia excelsia</i>). Found in some parts of the South West and the Niger Delta. • Obeche (<i>Triplochiton scleroxylon</i>). Occurs in some parts of the East, South South and the West of the country. • Mahogany (<i>Swietenia spp</i>) skirmishes in parts of Cross River and Ondo States. • Baobab (<i>Adansonia digitata</i>) found in parts of North and the Middle Belt. 	All timber species can be classified endangered owing to rate of deforestation, urbanization and population explosion as against afforestation.
Fauna	<ul style="list-style-type: none"> • African elephants (<i>Loxodonta Africans</i>) are found in parts of Cross River and the Osun-Ondo range. • Chimpanzee (<i>Pan troglodytes</i>). Found mostly in Cross River State. • Guenon (<i>Cercopithecus erythrogaster</i>) 	Most primates, rodents, reptilians and avians are endangered and are protected under international conventions and national legislation.

	<p>Found mostly in Okomu in Edo State.</p> <ul style="list-style-type: none"> • Gorilla (<i>Gorilla gorilla</i>) found mostly in Cross River State • Drills (<i>Mandrillus leucophaeus</i>). Found around Cross River State. • Pangolin (<i>Manis</i> species). Found in parts of the South and the West of the country. 	
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It is expected that as part of the site specific ESIA/ESMPs for the subprojects, a detailed assessment will be undertaken to identify specific floral and faunal species which are endangered or critically endangered to ensure appropriate measures proffered in the management and action plans.

4.4.1 Protected Areas

Across Nigeria, there are at least 23,608.34km² (or 2,360,800 hectares) of land that are designated by national authorities as scientific reserves with limited public access. These include national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use. Some of the protected areas which have to be considered in subproject locations are presented in **Error! Reference source not found.** below.

Table D: Some Protected Areas in Nigeria

Name	State	Area
Falgore (Kogin Kano)	Kano	920 km ²
Gashaka-Gumti National park	Adamawa	6,402km ²
Kamuku National Park	Kaduna	1,120 km ²
Ukpe-Sobo Forest Reserve	Delta	-
Hadejia-Nguru wetlands	Yobe	28,000km ²
Zugurma Games Reserve	Niger	138,500Ha
Borgu Game reserve	Niger	397,002Ha
Yankari National Park	Bauchi	2,244km ²
Kainji National Park	Niger	5,341km ²
Omo Forest Reserve	Ogun	130,500Ha
Doma Forest Reserve	Nasarawa	86,374.40Ha
Chad Basin National Park	Borno	2,258km ²

Source: Desktop collation 2020

4.5 Socio-cultural Settings

Nigeria is one of the most densely populated country in Africa and the seventh largest in terms of population worldwide. Approximately 50% of Nigerians are urban dwellers, with the rate of urbanization being estimated at 4.3% per annum. The country is home to over 250 ethnic groups; over 500 languages; a variety of customs and traditions. This heterogeneity and diversity enhance the socio-cultural value of the country from North to South. The three largest ethnic groups are the Hausa/Fulani in the North, the Yoruba in the South West and the Igbo in the South East. The Efik, Ibibio, Annang, and Ijaw constitute another subgroup in the South, while the Urhobo-Isoko, the Edo and Itsekiri constitute Nigerian's Midwest.

5 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

Investment in social housing and associated facilities contribute to improved economic development, social security and enhanced quality of life. However, the construction, rehabilitation and maintenance of housing estates and associated infrastructure can result in direct and indirect impacts on the environment, including disruption or contamination of ground and surface waters, soil destabilization, habitat destruction, and loss or disturbance of fauna and flora. Such developments may also be a source of adverse impacts on the human environment, particularly the displacement and resettlement of affected families and businesses, and the health and safety of workers.

Table E summarizes the activities of estate development and associated infrastructure that lead to typical impacts, the receptors and resources they affect, and options for mitigation. This Framework Environmental and Social Management Plan (ESMP) considers impacts on the physical, biological and socio-economic environment. The mitigation measures described takes into consideration higher level design and site planning measures that will be implemented.

Table E: Potential Impacts and Mitigation Measures

	<i>Impacts</i>	<i>Mitigation</i>
PHYSICAL	1. Geology/Hydrogeology <ul style="list-style-type: none"> • Interruption of surface and groundwater flows from excavation, ground clearance and construction. • Land degradation resulting from poor management of burrow pits 	<ul style="list-style-type: none"> • Site selection to take account of local hydrological conditions (e.g. avoid watercourses, springs, shallow water table). • Limit sealed or compacted areas as much as possible, to maintain natural recharge of the water table. • Avoid removing material below the water table. • Ensure that all burrow pits are carefully rehabilitated after use to an extent that the land will be useful for other purposes.
	2. Soils, Run-off and Flooding <ul style="list-style-type: none"> • Loss, damage or disruption of soil/sediments during excavation, ground clearance and construction. 	<ul style="list-style-type: none"> • Minimisation of cleared areas and soil disturbance, with revegetation as soon as feasible, with native species. • Early installation and regular maintenance of drainage and diversion structures, silt traps, etc; drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible. • Avoidance of areas liable to flooding, slope instability, and water crossings where possible.
	<ul style="list-style-type: none"> • Introduction of sediments to 	

	Impacts	Mitigation
	<p>watercourses or interruption of drainage patterns, as a result of ground clearance, earthworks and the introduction of drainage structures.</p>	<ul style="list-style-type: none"> • Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable. • Careful design: e.g. site selection, minimal diversion, timing of works (overall duration and seasonality).
	<p>3. Pollution of Soils and Water</p> <ul style="list-style-type: none"> • Pollution of surface and ground water from sewage effluent discharged during construction (workforce) and operation (staff, patients, students, visitors etc.). 	<ul style="list-style-type: none"> • Implementation of standard good wastewater management procedures. • Installation of sewage treatment to meet required standards. • Hygiene training for workforce and operational staff.
	<ul style="list-style-type: none"> • Release of hazardous substances during construction or operation (e.g. runoff during maintenance, accidental spills/leaks, medical waste) leading to soil, surface or groundwater contamination. 	<ul style="list-style-type: none"> • Materials handling, control and disposal procedures, especially for vehicle/equipment repairs, site medical waste etc. • Control of construction vehicle movements and prohibition of vehicle washing in watercourses, and similar practices. • Development of emergency response plans during construction (contractors and local authorities) and operation (local authorities) to manage major incidents if they should occur.
	<p>4. Air Quality</p> <ul style="list-style-type: none"> • Dust from construction activities and maintenance could affect human health, vegetation and wildlife. 	<ul style="list-style-type: none"> • Sensitive site selection and siting of construction facilities. • Dust control and suppression measures, such as use of dampening. • Use of modern equipment meeting appropriate emissions standards, and regular preventative maintenance. • Encourage increased fuel efficiency in project vehicles (e.g. selection of fuel in order to minimise harmful emissions).
	<ul style="list-style-type: none"> • Emissions from construction and maintenance activities and exhausts from increased traffic levels, affecting sensitive receptors (human, flora, fauna). 	<ul style="list-style-type: none"> • No use of ozone depleting substances during construction.

	Impacts	Mitigation
	<p>5. Noise and Vibration</p> <ul style="list-style-type: none"> Noise and vibration from construction, operational and maintenance, traffic and activities, may disturb sensitive noise receptors (human, fauna). 	<ul style="list-style-type: none"> Sensitive local access route selection, and siting of project facilities, accompanied where necessary by noise attenuation measures. Use of noise barriers to screen receptors, e.g. with berms or bunds. Use of modern, well maintained equipment fitted with abatement devices (e.g. mufflers, noise enclosures). Strict controls of timing of activities e.g. blasting and other high noise emissions; prohibition on night working if possible. Observance of seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time.
	<p>6. Resources and Waste</p> <ul style="list-style-type: none"> Construction, operation and maintenance will require supply of water (surface or groundwater), which could affect existing supply for human communities and ecosystems. 	<ul style="list-style-type: none"> Water study prior to any abstraction, to inform a Sustainable Water Management Plan. No abstraction without prior approval of relevant authorities at all locations. Promotion of water efficiency (including leak detection, preventative maintenance of equipment) and water recycling.
	<ul style="list-style-type: none"> Inefficient waste management during construction, operation and maintenance leading to excess consumption of materials, generation of wastes/emissions, pollution of soils and water. 	<ul style="list-style-type: none"> Preparation of Waste Management Plan following the waste hierarchy, supported by staff training. Earthworks to be designed to achieve a balance between cut and fill wherever possible. Use of authorised contractors for hazardous and any other wastes which the project cannot dispose of safely.
BIOLOGICAL	<p>7. Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways</p> <ul style="list-style-type: none"> Land clearance during construction and maintenance causing loss or fragmentation of protected or ecologically sensitive areas and other areas of conservation interest (including migration routes, 	<ul style="list-style-type: none"> Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists. Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimisation of activity within these zones. Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring programme and corrective actions as necessary. Observance of seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce impacts at

	Impacts	Mitigation
	<p>feeding/breeding areas), and degradation following poorly managed rehabilitation.</p> <ul style="list-style-type: none"> Impacts on habitats and species from habitat alteration and degradation (e.g. changes in drainage, soil erosion, pollution of water, soils or air, introduction of invasive species). 	<p>that time.</p> <p>Where development in sensitive areas cannot be avoided, mitigation may include:</p> <ul style="list-style-type: none"> Minimisation of area impacted, clear demarcation of remaining intact areas of habitat, and prohibition of activity into those areas for any purpose; maintenance of wildlife corridors between fragmented areas wherever possible. No ground clearance upstream of sensitive areas unless appropriately engineered drainage installed. Habitat rehabilitation and ecosystem restoration of areas no longer required after construction, as soon as possible. If loss of Critical Habitat is inevitable, development/implementation of an Offsets Programme. <p>See relevant sections under control of impacts relating to <i>hydrology, pollution, invasive species, and induced access.</i></p>
	<p>8. Impacts from Induced Access</p> <ul style="list-style-type: none"> Development of social infrastructure in more remote areas will encourage access, and may lead further development, and increased disturbance and pressure on natural resources through bushmeat hunting, logging, fire, etc. 	<ul style="list-style-type: none"> Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists to avoid remote and previously inaccessible areas where possible. Development of a construction camp siting strategy to avoid attracting people towards more remote areas, where possible. Restrictions on access to all temporary access roads, and their removal after construction.
	<p>9. Bushmeat Hunting</p> <ul style="list-style-type: none"> Construction activities and development in remote areas could lead to greater demand for bushmeat (from workforce and wider community), stimulate the wildlife trade and facilitate access to hunting areas. 	<ul style="list-style-type: none"> Bushmeat Hunting and Wildlife Trade Management Plan, agreed with government authorities and implemented jointly. Prohibition on workforce hunting, selling, or purchasing bushmeat, and training to support this requirement. Prohibition on workforce (except security personnel) having guns in work areas or accommodation. Sensitisation and public awareness campaigns against hunting and bushmeat trade amongst local communities.
	<p>10. Direct Impacts on Flora and Fauna</p> <ul style="list-style-type: none"> Clearance of vegetation may lead to loss of plant species and habitat of 	<ul style="list-style-type: none"> Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists. Careful planning of phasing and timing of construction activities. Demarcation and avoidance of areas of conservation

	Impacts	Mitigation
	<p>conservation interest.</p> <ul style="list-style-type: none"> Development of housing estates could displace animals and disturb their habitats, by direct disturbance during construction and operation (e.g. from noise, light disturbance at night, general human presence). 	<p>interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, and wildlife rescue and translocation where appropriate, under expert supervision.</p> <ul style="list-style-type: none"> Implementation of observation and avoidance procedures for sensitive flying species. <p>Also see measures under <i>Hydrology, Soils, Run-off and Flooding, Pollution of Soils and Water, and Induced Access</i> above, and <i>Invasive Species</i> below</p>
	<p>11. Invasive Species</p> <ul style="list-style-type: none"> Movement of plant and workforce into areas could introduce invasive species which adversely impact fauna, flora, ecosystems, and crops. 	<ul style="list-style-type: none"> Invasive Species Management Plan, which should be developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species. Staff training and awareness raising in communities. No introduction of exotic species (e.g. for site rehabilitation) without specialist vetting and government approval.
SOCIO-ECONOMIC	<p>12. Physical and Economic Displacement of People, Property, Assets and Resources</p> <ul style="list-style-type: none"> Development of housing estates and associated infrastructure may physically displace people, or lead to the loss of assets (e.g. agricultural land). 	<ul style="list-style-type: none"> Careful site selection and siting of all project components, and avoid occupation of areas which are inhabited or regarded as of high value by communities (e.g. horticulture, community orchards) where possible. Early development and sensitive implementation of resettlement planning, in accordance with national regulations and international good practice to compensate for any losses (both physical and economic).
	<p>13. Economic and Development and Employment</p> <ul style="list-style-type: none"> Direct employment of local population in workforce, and stimulation of local economy through demand for goods and services will enhance livelihoods and economic activity in local communities, but potentially adverse effects if expectations not met and 	<ul style="list-style-type: none"> Development of an Employment Plan, with clear employment requirements and procedures for the construction and operational/maintenance workforce. Transparent and culturally appropriate communication with communities regarding employment opportunities. Fair and transparent hiring and staff management procedures. Employment requirements and vocational training plan to be agreed with local institutions, so that local people can be trained to meet the project's needs in a timely fashion. Development of measures to manage the transition after construction is complete, including SME development, ongoing opportunities for the workforce in provision/support of health/education services, reskilling and alternative

	Impacts	Mitigation
	community relations are not well managed.	employment.
	<p>14. Cultural Heritage</p> <ul style="list-style-type: none"> Displacement or damage to cultural heritage sites by construction activities, harm to the setting, amenity value, etc. of the site due to construction or operation. Change to intangible cultural heritage due to increased access, and interaction with workforce. 	<ul style="list-style-type: none"> Careful site selection and siting of all project components, taking account of community consultation/specialist surveys. Development of a Cultural Heritage Management Plan covering tangible and intangible (e.g. local traditions and practices) cultural heritage. Implementation of a "Chance Finds" procedure during construction.
	<p>15. Community Health, Safety and Security</p> <ul style="list-style-type: none"> Poor construction management practices may lead to adverse effects on safety, human health and wellbeing. 	<ul style="list-style-type: none"> Good construction site "housekeeping" and management procedures (including site access, disease control measures). Risk assessments and emergency response planning to consider impacts on local communities.
	<ul style="list-style-type: none"> Interaction between workforce and local communities may increase occurrence of communicable diseases, including HIV/AIDS and sexually transmitted diseases (STDs). 	<ul style="list-style-type: none"> Implementation of a health management system for the construction workforce, to ensure it is fit for work and that it will not introduce disease into local communities. Training and awareness training for workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases including malaria; health awareness raising campaigns for communities on similar topics.
	<p>16. Workforce-Community Interactions</p> <ul style="list-style-type: none"> Real or perceived disruption to normal community life, through the physical presence of a workforce. 	<ul style="list-style-type: none"> Adoption of a Stakeholder Engagement Plan, as a framework for early and ongoing community consultation. Implementation of a Grievance Procedure. Works procedures, defining a Code of Appropriate Conduct for all workers. Training for all staff in acceptable behaviour with respect to community interactions.
	<p>17. Labour and Working Conditions</p> <ul style="list-style-type: none"> Poor management of occupational health and safety leading to accidents, injuries and 	<ul style="list-style-type: none"> Employment practices and working conditions should conform to International Labour Organisation (ILO) Standards and national regulations. Rest and recreational facilities and time should be provided, and rules on alcohol and drugs defined and

	Impacts	Mitigation
	<p>illnesses among workers; mental health issues due to remote or enclosed living.</p> <ul style="list-style-type: none"> Differences in culture, ethnicity, religion, etc. may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentments. 	<p>clearly communicated to workers.</p> <ul style="list-style-type: none"> The basis for differences in the standard of accommodation should be non-discriminatory; it should be documented and communicated transparently to the workforce. Clear and comprehensive health and safety reporting and grievance procedure system should be established, and be freely available to all of the workforce.

This framework ESMP shall guide the site-specific ESMPs once the locations are known by FHFL and the estate developers.

6 GRIEVANCE REDRESS MECHANISM (GRM)

As part of this ESMF, FHFL shall develop a mechanism for grievance redress (GRM) at the corporate and subproject levels. The GRM shall be informed by national legislation as well as DFI requirements. The FHFL GRM process shall be guided by the AfDB GRM process as outlined below.

Some of the FHFL operations may inevitably have the potential to impact on the local population's well-being. The aim of the GRM is therefore to enable people fearing or suffering adverse impacts to be able to be heard and assisted. People potentially or actually affected by the FHFL subprojects need a trusted way to voice and resolve project related concerns and the project needs an effective way to address affected people's concerns. The GRM shall be structured and managed in a way that allows the concerns of Project Affected Persons (PAPs) to be heard and addressed, including by the management staff of FHFL and the developers. The process by which the GRM shall be designed will be integrated into the overall approach of the subproject preparation. It will be embedded in ESMPs of subprojects, especially in locations where there is the risk of mismanagement of compensation/resettlement funds or the presence of particularly vulnerable groups in the project's area of influence.

The GRM committee at the subproject level shall constitute among other members, an officer from the Local Government Authority, Village or Community Heads, project engineer, a member from a recognized Non-Government Organization and a community representative. The committee shall have the right to request the project technical staff, and officers from relevant state or non-state institutions to attend the meetings and provide information. Complainants shall have the right to appear in person, to be accompanied by a community member, and/or to request to be represented by a community elder. GRM committees shall be established for every subproject to assure accessibility for all PAPs. The channels for presenting complaints shall comprise of: the presentation of complaints via third parties (e.g., village elites/traditional leaders, community-based organizations, lawyers, non-government organizations [NGOs], etc.); face-to-face meetings; facsimile, telephone, and email communications; written complaints; etc.

7 CONSULTATIONS

To ensure that the main issues associated with FHFL subprojects are covered, consultations were held with the FHFL as well as the Federal Ministry of Environment. The dates and objectives of the consultation are shown in **Table F**.

Table F: Stakeholders consulted during ESMF preparation

	Stakeholder	Objective of Consultation	Highlight of Consultation	Dates Consultation Undertaken
1	Family Homes Funds Limited	<ul style="list-style-type: none"> Define scope and scale of the ESMF; Assess FHFL's institutional capacity for E&S risk management; Review FHFL's policy and corporate strategy for E&S risk management. Discuss budgeting for the ESMF and location-specific E&S studies. 	<ul style="list-style-type: none"> Criteria for site selection; Initiation of the ESMF; Introduction to field teams and estate developers; Planning of field visits; Identification of internal and external stakeholders. 	February 28-March 5, 2020
2	Federal Ministry of Environment	<ul style="list-style-type: none"> Introduction of the project; Proposing an E&S category; Confirmation of the E&S instruments relevant for the project; Consultation and disclosure requirements. 	<ul style="list-style-type: none"> Confirmation of the project as Category 2; Identification of potential Environmental, social and climate change principles to embed in the ESMF; Identification of E&S instruments applicable to subprojects; Confirmation of 	March 12, 2020

	Stakeholder	Objective of Consultation	Highlight of Consultation	Dates Consultation Undertaken
			timelines for the disclosure and panel review of the ESIA/ESMPs of subprojects.	

8 ROLES AND RESPONSIBILITIES FOR MANAGING E&S ACTIONS

To ensure the efficacy of mitigation measures to manage identified impacts, different actors have specific roles and responsibilities which must be performed synergistically. These roles have been illuminated in **Table G** below.

Table G: Roles and Responsibilities for managing E& S actions

No	Steps/Activities	Responsible	Collaboration	Implementation
1.	Identification and/or siting sub-project	FHFL, State governments or developers partnering with FHFL	Relevant MDAs in subproject state like Ministry of Lands and Ministry Environment.	FHFL
2.	Screening, categorization and identification of the required instrument (use the national EIA procedure) for sub projects	Project Management Team of FHFL using the ESMS, Env. safeguards specialist (ESS)	<ul style="list-style-type: none"> Federal Ministry of Environment, State Ministry of Environment in subproject states AfDB 	
3.	Approval of the classification and the selected instrument by the Public EA Agency	Project Coordinator, FHFL		<ul style="list-style-type: none"> FMEEnv
4.	Preparation of the safeguard document/instrument (ESIA/ESMP) in accordance with the national legislation/procedure (considering the DFIs policies' requirements)			
	Preparation and approval of the ToRs	FHFL with support from AfDB		
	Preparation of the report			Independent E&S Consultant
	Report validation and issuance of the permit (when required)			<ul style="list-style-type: none"> FMEEnv AfDB
	Disclosure of the document		FHFL	<ul style="list-style-type: none"> Media; FHFL FMEEnv AfDB
5.	<ul style="list-style-type: none"> Integrating the construction phase mitigation measures and E&S clauses in the bidding 	Technical staff in charge of the sub-project	FHFL	<ul style="list-style-type: none"> FMEEnv

	document prior they're advertised; <ul style="list-style-type: none"> Ensuring that the constructor prepares his ESMP (C-ESMP), gets it approved and integrates the relevant measures in the works breakdown structure (WBS) or execution plan. 			
6.	Implementation of the other safeguards measures, including environmental monitoring (when relevant) and sensitization activities	FHFL	Independent E&S Consultant	
7.	Oversight of safeguards implementation (internal)	FHFL	HSE of sub project developer	
	Reporting on project safeguards performance and disclosure	FHFL	HSE of sub project developer	
	External oversight of the project safeguards compliance/performance	AfDB	FMEnv State ministry of Environment	AfDB
8.	Building stakeholders' capacity in safeguards management towards the implementation of the ESMF	AfDB		AfDB through consultant
9.	Independent evaluation of the safeguards performance (Audit)	AfDB	NESREA	• Consultant

9 ESMF BUDGET

The project implementation will no doubt require some costs for preparation of applicable E & S studies like ESIA/ESMPs and/or ARAPs/RAPs where required. The cost of these shall be determined by variables such as the location of subprojects, the E&S baseline, size of land to be acquired for subprojects and associated facilities etc. The budget stated in this ESMF covers capacity building only. The cost of preparing ESIA and ESMPs/RAPs at the subproject level will be embedded in contracts with the developers. The budget covering capacity building is presented in **Table H**:

Table H: Budget for capacity building.

Training Description	Training Costs USD
AfDB's Integrated Safeguard System. Training on Operational Safeguards Policies triggered.	30,000
Environment and Social Assessment: E & S Process, E & S Considerations in sub-project activities, Environmental components affected during construction and	

Training Description	Training Costs USD
operation stages; Environmental management and Best practice; Stakeholder participation Project Screening & Scoping Physical Cultural Resources, SESA, HIA etc.	
Gender Considerations (Equity, Environmental, Social and other project specific issues of concern affecting Women, Children and other Vulnerable groups)	10,000
Environmental due diligence: ESMF/ESIA/ESMP Implementation, Monitoring, Evaluation and Reporting during construction of sub-projects,	10,000
Total	50,000

10 CONCLUSION

This ESMF has been prepared to provide a unified and structured guidance on the environmental and social (E&S) risk management process that will be established by FHFL. It will inform and guide the E&S risk assessment and management process once sites have been identified for the construction of the housing estates and associated infrastructure by the FHFL and its subcontractors.

CONTACTS

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