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PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

AB1642

Project Name	Second National Fadama Development - Critical Ecosystems Management Project
Region	AFRICA
Sector	General agriculture, fishing and forestry sector (100%)
Project ID	P073686
GEF Focal Area	Land Degradation
Borrower(s)	FEDERAL GOVERNMENT OF NIGERIA
Implementing Agency	Federal Ministry of Agriculture and Rural Development (PCU)
	Federal Government of Nigeria Nigeria
Environment Category	[ ] A [X] B [ ] C [ ] FI [ ] TBD (to be determined)
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1. Country and Sector Background

Country Issues

1. Because of a long political instability in the country, Nigeria has experienced weak institutions and governance issues. These issues are particularly severe in environmental and natural resources management areas. Poverty is pervasive: 75 million people live in the rural areas, of which 60 percent are considered to be living in absolute poverty. The majority of the rural population is directly (or indirectly) dependent on the non-oil natural resource base for their livelihoods. To address rural poverty, the Government of Nigeria has established an ambitious plan to achieve a growth rate of greater than 5 percent in the non-oil economy.

2. The majority of the poorest people in Nigeria depend directly on natural resources for their livelihood. In addition, the society and the national economy also depend on services provided by natural resources. These services are the foundation of Nigeria's economy - agriculture, livestock, water supply, forests, fisheries, and non-renewable energy. Ecological processes support Nigerian rural life and the local economy through maintaining soil productivity and protection, the recycling of nutrients, the cleansing of air and water, and maintenance of climatic cycles. At the genetic level, diversity found in natural life forms support the breeding programs necessary for the improvement of cultivated plants and domesticated animals to enhance food supply and security. Wild flora forms the basis of a very significant pharmacological industry and the traditional use of medicine for human and livestock needs, as well as other non-timber forest products critical to local communities.

3. However, unsustainable land-use practices, over-exploitation of natural resources and weak protected area management, including buffer zones, all pose a serious threat to the

maintenance of ecosystem and habitats. In Nigeria, the links between poverty and natural resource management are very clear. Large-scale land clearing results in serious erosion and soil loss into rivers, which in turn causes mass-scale river siltation and flooding. Soil loss threatens the agricultural productivity base of communities, while floods destroy fields and homes, leaving many rural poor vulnerable.

Sector Issues

4. Nigeria occupies 923,773 Km^2 with a coastline that extends about 960 Km along the Atlantic Ocean. It is endowed with abundance of natural resources and ecological diversity. Natural vegetation reflects the topographic and climatic diversity. Rainfall gradient, the minimum relative humidity, and the length of the dry season are the predominant influences on vegetation types. Principal vegetation types range from dense mangrove forests of the Niger Delta and rain forests of the south, to dry grassland of the north, and montane grasslands on the Jos and Mambila Plateau. Soils are largely of the ferruginous tropical type, with alluvial deposits along the major rivers - Niger and Benue.

5. ***Global Environment Issues.*** The nation is rich in biological diversity, many of which are of global significance, including 24 species of primates. In addition, 274 mammalian species, 831 species of birds, 19 species of amphibians and 166 species of fresh water fish are also found in the country. Existing inventories identify 7,895 plant species, 484 of which are endangered. Many of these plant species include wild relatives of important domestic species, medicinal plants, and other plants of economic value. The use of medicinal plants has also been endorsed by government in its Health Strategy and Action Plan. As a signatory to the Convention on Biological Diversity and the United Nations Convention to Combat Desertification, the government has committed to sustainable natural resource management and use (land, water, air, minerals, forests, fisheries, and wild flora and fauna) to produce ecosystem services that underpin the existence and welfare of human life. The National Action Program to combat Desertification which was produced by the government in 2001, has reported that between 50 percent and 75 percent of Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe, and Zamfara States in Nigeria are being affected by desertification, whereas 10 percent - 15 percent of the lands in Federal Capital Territory, Plateau, Adamawa, Taraba, Niger, Kwara and Kaduna states are threatened by desertification. In these areas, population pressure resulting in over-grazing and over-exploitation of marginal lands has aggravated desertification and drought. Entire villages and major access roads have been buried under sand dunes in the extreme northern parts of Katsina, Sokoto, Jigawa, Borno, and Yobe States. Besides the natural phenomenon, poor land management practices and population pressure on marginal lands are identified as major factors disrupting the ecological system. More specifically, four primary causes have been reported, notably over-exploitation, poor irrigation practices, over-grazing and deforestation.

6. ***The Cost of Environmental Neglect.*** Sector work carried out as part of the preparation of the 1990 World Bank report, Towards the Development of an Environmental Action Plan for Nigeria (IBRD Report No. 9002-UNI, 1990), noted that land degradation is the country's most serious environmental problem. Three aspects to the problem were identified: soil degradation, affecting 50 million people with an annual impact in excess of US$3 billion; water contamination, affecting 40 million people and costing more than US$l

billion to correct; and deforestation, affecting 50 million people with a loss of sustainable production from forest resources worth US$750 million annually. In aggregate, the annual costs of these sources of environmental degradation were estimated to be as high as US$5 billion (at 1990 prices). Since the country has identified the non-oil sector as the primary focus of its development priorities, the emphasis on integrated rural development through farming and non-farming activities is now a key pillar of the government's poverty reduction strategy. With the increased emphasis on agriculture and rural livelihoods, fadama resources have become a major focus of government policy and programs, as well as donor support, including two IDA Credits (Report No. 26133 UNI; 24507; 9655-UNI; 8646-UNI). (See Annex 1 for details).

Fadama Lands

7. ***Fadama Ecosystems***. Fadamas are low-lying floodplain areas underlined by shallow aquifers. They are found along Nigeria's major river systems including Niger and Benue rivers, and wetland systems, such as, Hadejia-Nguru. They play an important role in the recharge of the shallow groundwater system through infiltration. Prior to their conversion to cultivation, the fadama lands supported highly productive natural vegetation consisting of dense acacia scrubland, open grassland and seasonally or permanently flooded open bodies of water supporting dense emergent vegetation including rushes, sedges and reeds. It provided source of water and forage for pastoral livestock during dry season. It also supported large and diverse resident or transient wildlife, including herbivores, carnivores and migratory birds.

8. Fadamas are remarkably different from adjacent uplands in terms of their ecology and micro-climate. Since they are low-lying flood prone, slow-draining areas, they generally possess finer texture and less acid soils. With an increasing pressure from farmers, pastoralists and fishers, effect on ecology has been dramatic. Furthermore, lack of vegetation cover, extensive agriculture practices, construction of dams, management of reservoir, and competing land uses, including haphazard use of land for brick making cottage industry, land degradation has emerged as one of the major natural resource management issues in fadama lands.

9. Therefore, to preserve the productive capacity of fadama lands and to make the fadama resources equitably accessible to different user groups, a long term sustainable land and water resource management regime is critical. The Second National Fadama Development Project financed by the World Bank and Global Environment Facility contributes to the sustainable management of productive capacity of fadama lands through the Community-Driven Development approach (for further information, check Bank approved PAD under IDA funding).

10. ***Poverty.*** Because of a long period of political instability, Nigeria has experienced weak institutions and governance. These issues have been particularly severe in the area of environmental and natural resources management. With 60 percent of the 75 million rural population living in absolute poverty, overall poverty is pervasive and deep. The majority of the rural population is directly (or indirectly) dependent on the non-oil natural resource base for their livelihoods, while incomes and productivity in the rural areas are low and stagnant.

To address rural poverty, the Government of Nigeria has developed an ambitious medium-term plan to achieve a growth rate of greater than 5 percent in the non-oil economy, through a National Economic Empowerment and Development Strategy (NEEDS), expected to be implemented over the period 2004-2009.

11. The services provided by Nigeria's natural resource base constitute the only safety net for the rural poor, and serve as the foundation of the country's economy, including agriculture, livestock, water supply, forests, fisheries, and non-renewable energy. Ecological resources and processes support the Nigerian rural life and the local economy through maintaining of soil productivity and protection, recycling of nutrients, cleansing of air and water, and maintenance of climatic cycles. However, unsustainable land-use practices, over-exploitation of natural resources and weak protected area management, including buffer zones, all pose a serious threat to the maintenance of ecosystem and habitats as well as rural livelihoods. Over time, deforestation, large-scale land clearing and floodplain encroachment, mainly for agricultural production, have resulted in severe erosion, leading to the loss of valuable top soil and significant siltation of water bodies and flooding, directly impacting the sustainability of both the Niger and Benue river systems, and the larger ecosystems and other riparian countries they support. Soil loss threatens the agricultural productivity base of communities, while floods destroy fields and homes, leaving many rural poor vulnerable (see Annex 1 of the Project Document (PAD) for details).

12. With an increasing pressure from farmers, pastoralists and fishermen, the impact on the ecology of fadama areas over the years has been dramatic. The main constraints to sustainable fadama land management include: (i) the policy of conversion and open access to fadama resources without coherent land use and land management plans at the productive landscape level; (ii) the lack of awareness of local communities, and the weak capacity of extension advisors (through Agricultural Development Projects (ADPs)) whose training and mandate do not incorporate sustainability considerations; (iii) the lack of adequate coordination and integration of Natural Resource Management policy and strategy at all levels of government, and the gaps in technical planning at the state and local government levels, particularly in terms of the wider watershed management issues where fadama lands are situated; (iv) the institutional barriers, driven by limited capacity of human, technical, and financial resources, and (v) fundamentally, the lack of overall understanding of the interdependence between land use and water management, both within and outside of fadama areas, and the impact of land degradation on ecosystem integrity throughout the larger productive landscape--made up of land, water, vegetative cover—upon which the rural poor depend. *Thus, the incremental or catalytic funding channeled through the proposed GEF project will assist primarily in removing constraints that will result in a coherent strategy and strengthened institutional arrangements to arrest degradation patterns in fadama areas and restore or maintain their ecosystem services, thereby contributing to the sustainability of the Niger and Benue river basisns, and beyond.*

2. Objectives

(a) Higher-Level Objectives to which the Project Contributes

13. The proposed GEF Project is consistent with the Country Partnership Strategy which supports: (a) improved service delivery for human development (empowering people and building a social contract; (b) improved environment and services for non oil growths (promoting private enterprise to foster growths of the non-oil sector); and (c) enhanced transparency and accountability, or better governance (changing the way the government works). The Second National Fadama Development Project will help stimulate poverty-reducing growth in the non-oil economy by: (i) financing investments in human and physical capital; (ii) building capacity of community organizations and government at all levels to deliver services; (iii) improving capacity of the rural poor to raise their incomes through targeted activities; and (iv) promoting socially-harmonious and environmentally-sustainable management of natural resources. Furthermore, FADAMA II will directly contribute to empowering local communities through its community-driven development (CDD) approach. Also, consistent with the on-going reforms/harmonization of the World Bank-assisted CDD projects in the country, the project is fully mainstreamed into the main NFDP II (also known as FADAMA II) – which is being taken as the vanguard for close-ended CDD projects in the country relating to productive investments, especially in the agricultural sector. This differentiates it from the LEEMP and CPRP, which are within the purview of open-ended restorative and social fund CDD projects in Nigeria.

14. The proposed GEF project is consistent with the country's commitment to global environment conventions, including the Convention on Biological Diversity (CBD), the United Nations Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification. Nigeria ratified the UNCCD on July 8, 1997, and CBD and UNFCCC on August 29, 1994. As a part of Nigeria's participation in the UNCCD, a National Action Program to Combat Desertification was prepared by the Government of Nigeria in 2001.

15. ***Global Environmental Objectives to which the Project Contributes:*** The proposed project contributes to the overall operational goal of the GEF focal area on land degradation (i.e., desertification and deforestation) and to the operational program on sustainable land management. Through the partnership between the Government of Nigeria, IBRD, ADB, GEF, other bilateral donors, non-governmental organizations (NGOs) and communities, the FADAMA II Project (both the IDA and GEF co-financed) seeks to sustainably increase the income of fadama users – those who depend directly, or indirectly, on fadama resources (farmers, pastoralists, fishers, hunters, gatherers, and service providers) – and to enhance the productivity of fadama areas and the livelihood systems they support. The GEF support, in particular, addresses the fadama productivity through sustainable land management practices that enhance fadama ecosystem integrity by restoring watershed functions, stabilizing soil loss, riverbank protections, reducing resource use conflicts and protecting biological diversity.

16. The objective of the Operational Program (OP) on Sustainable Land Management (SLM) (OP#15) is to mitigate the causes and negative impacts of land degradation on the

structure and functional integrity of ecosystems through sustainable land management practices as a contribution to improving people's livelihoods and economic well-being. Furthermore, the proposed project contributes to both GEF Strategic Priorities under OP 15 – targeted capacity building for sustainable land management at the local, state and national level; and implementation of innovative and indigenous sustainable land management practices, in particular, sustainable agriculture and forest and woodland management. The activities being co-financed by IDA, GEF and the government under this Project will contribute towards the achievement of the goals of OP 15 and the GEF Strategic Priorities for Land Degradation, in particular, capacity building activities, such as, institutional strengthening for integrated watershed management and capacity building at community level for watershed management, integrated ecosystem management practices, such as, protection of critical watersheds and improved water management, and community sustainable land management initiatives.

(b) Project Development and Global Environment Objectives and Key Indicators

17. ***Project Beneficiaries***. While IDA-funded FADAMA II, as a whole, is aimed at improving the incomes of about 2.3 million rural households whose livelihood depend directly, or indirectly, on fadama resources in 18 of Nigeria's 36 states, the GEF intervention would finance the incremental costs of six of the 18 states participating in the IDA-funded FADAMA II, and would target 15 percent - 20 percent of the IDA project target beneficiaries (or about 400,000 beneficiaries). Project states (and sites) include: (i) Imo (Oguta Lake); (ii) Kebbi (Jega and Dimbegu); (iii) Kwara (Ajasse-Ipo); (iv) Kogi (Lokoja – Koton Karfe); (v) Ogun (Eriti); and (vi) Bauchi (Andiwa Lake). Thus, in the areas of intervention of the GEF project, the beneficiaries will be the same as those for the IDA-funded FADAMA II Project. In addition, the needs of the communities will be expressed using the same local development plans as in the IDA-funded FADAMA II Project. The local facilitators will the same as those facilitating in the case of IDA-funded FADAMA II. Finally, it is worth noting that the implementing agency of the IDA-funded FADAMA II Project (the National Fadama Development Office (NFDO)) will be the same for the FADAMA II GEF Project. Thus, clearly, FADAMA II GEF and IDA-funded FADAMA II projects are intimately linked.

18. While the development objective of IDA-funded FADAMA II is to sustainably increase the incomes of fadama users – those who depend directly or indirectly on fadama resources (farmers, pastoralists, fishers, hunters, gatherers, and service providers) through empowering communities to take charge of their own development agenda, and by reducing conflict between fadama users, the global objective of the proposed project is to enhance the productivity of fadama areas and the livelihood systems they support through sustainable land use and water management. This will be achieved through: (a) capacity development for sustainable fadama natural resource management at national, state, local government, and community levels, including strengthening institutional capacity for integrated watershed management, and strengthening community capacity for resource development planning; (b) integrated ecosystem management in selected watersheds, through sustainable management of key forest areas, buffer zones, and wetlands, and improved water management; and (c) community sustainable land use management, through support for alternative land and/or water use activities, and adoption of indigenous sustainable land management practices.

19. ***Performance Indicators.*** The performance indicators, which are directly relevant to the GEF co-financed project and which will be monitored to assess the achievement of Global Environment objectives, are listed below. These indicators are further detailed in Technical Annex 3 of the PAD:

(a) By project end, sustainable watershed management coordination capacity established in at least 60 percent of the participating states;

(b) By project end, sustainable land and water management practices are mainstreamed in local development plans in at least 35 percent of the participating communities; and

(c) By project end, the area under sustainable land and water management practices at the three pilot sites will have increased by at least 80 percent.

Rationale for Bank Involvement

20. Alignment with the Country Partnership Strategy (CPS) focus on poverty reduction. The World Bank's strategic focus for assistance to Nigeria identifies three priority areas where the Bank can contribute to good governance, poverty reduction, and community empowerment and social inclusion. Poverty in Nigeria is widespread and pervasive. While the contribution of the oil and gas sector to the national economy is quite significant, the benefits are not perceived as being equitably shared with the majority of the population, and in particular, the rural poor. Agriculture remains a key vehicle with which to achieve the government's goals of reducing poverty in rural areas.

21. To address the rural poverty problem, the Government of Nigeria has adopted a strategy for raising rural productivity and incomes. The strategy rests on five pillars: (a) increasing yields; (b) producing higher-value crops and livestock; (c) reducing losses of crops, livestock, fish and other fadama products and reducing costs of producer inputs; (d) strengthening the forward and backward linkages in the rural economy that stimulate investment, employment, and incomes in rural non-farm enterprises; and (e) reducing conflict between various fadama user groups. To achieve these goals, the government will focus on several key activities: investing in infrastructure, reforming agricultural and rural research and advisory services, enhancing access to rural financial services, and improving mechanisms to avoid and resolve conflicts among resource users. The World Bank is supporting the implementation of this five-pillar strategy through the Second National Fadama Development Project (FADAMA II), which includes support from the Global Environment Facility (GEF) to address land degradation issues in the Fadama ecosystems, with implications and potential benefits both within Nigeria, regionally, and beyond.

22. This request for support also takes cognizance of an already existing GEF support for the Local Empowerment and Environmental Management Programme (LEEMP). While the GEF Component of the LEEMP strictly addresses intervention in four protected areas and their support zones in the country (Yankari National Park, Lame Bura Game Reserve, Mala Dumba Lake and Forest Reserve in Bauchi state and Kainji Lake National Park mostly in Niger and partly in Kwara states), the NFDP II GEF support is to address the continual

provision of ecological services for improved fadama production in the six states of Bauchi, Kebbi, Kogi, Kwara, Imo and Ogun. As a means of ensuring complimentarity of World Bank support, the intervention site for the only overlap state (Bauchi) is far removed from communities in which the LEEMP-GEF is providing support.

23. Alignment with Bank and GEF global commitments. Program activities supported by the GEF will focus on policy and institutional strengthening, investments and other interventions to address land and water management issues, including loss of biodiversity and critical ecosystems. The proposed GEF project will support: (i) strengthening institutional capacity at national, local, and community levels for fadama–related sustainable watershed/river basin management; (ii) piloting a fadama ecosystem approach in at least two watersheds; and (iii) supporting (using a payment for ecological services approach) the adoption of livelihood activities that restore or maintain ecosystem functions as well as promoting the adoption of indigenous sustainable land management practices (as part of fadama users' local development plans) that enhance the sustainability of fadama productivity.

24. Thus, while IDA-funded FADAMA II is aimed at poverty reduction, GEF assistance will be instrumental in enabling Nigeria to maintain the productivity and ecological health of the fadama resource base, with potential significant impact on the regional and global environment, including enhanced capacity for managing fadama resources within a river basin and watershed planning context; monitoring, and evaluation; information exchange; improved skills to identify and manage ecologically threatened areas; and support for community investments in ecological services. While the country and fadama users will no doubt benefit from an enhanced resource base, in the absence of GEF support, the land and water resources and biological diversity of regional and global signification will not be addressed strategically and coherently, and, therefore, opportunity to have significant global and regional benefits from an incremental investment would be lost.

3. Description

(a) Lending Instrument

25. Full size GEF grant ($10.03 million), fully integrated with the IDA supported FADAMA II (already approved as part a US $100 million credit for FADAMA II – Credit 3838-UNI, of which $38.67 million is integrated with the GEF grant), $6.91 million co-financing from the African Development Bank (ADB) and $1.42 million government financed, for a total project cost of US$57.03 million.

(b) Project Components

26. The Fadama II Project (including the GEF component) is expected to provide a framework for addressing both poverty reduction objectives and the sustainable management of fadama ecosystems which are vulnerable to unsustainable land use changes and agricultural practices. The US$ 10.03 million GEF contribution (corresponding to 18 percent of total project cost) will finance the incremental cost of regional and global benefits through

the following components (summarized in the Table given below under Financing, and detailed in Annex 4 of the PAD).

Component 1: Capacity Building ($21.7 million, of which $1.42 million financed by GEF)

27. The aim of this component is to build the capacity of fadama users and other key stakeholders. While IDA financing (78 percent of the component cost) supports building the capacity of Fadama User Associations (FUAs) in order to enable them to access project advisory services and to invest in productivity and income enhancement activities, the aim of the GEF financing (7 percent of the component cost) is to enhance the capacity of different stakeholder groups--including relevant federal, state and local government, NGOs, community based organizations, and fadama users in the six targeted states (Imo, Kebbi, Kwara, Kogi, Ogun, and Bauchi)-- for sustainable land and watershed management.

28. The GEF support is designed to use a coordinated approach in providing specific awareness raising programs, workshops, and technical training to stakeholders. A set of technical and socio-economic tool kits for integrated sustainable land management at the watershed and fadama levels will be developed, including: planning and analytical tools (e.g., Geographic Information System (GIS) for watershed planning and information sharing for government officials in key Natural Resource Management (NRM) agencies); sustainable agricultural practices (e.g., tillage, crop mix/rotations, nutrient management, soil and water conservation techniques, river bank protection, for farmers); and sustainable harvest techniques for forest and non-timber forest products and fishing for community members. In addition, given the highly fragmented institutional framework for watershed management at all levels in Nigeria, this component includes a review of federal and state policies and regulations, and support for the development of a framework for state level coordination and monitoring & evaluation of watershed management activities among key state agencies (environment, agriculture, forestry, natural resources). Finally, the component includes support for a review of policies and legislations related to watershed management at the federal level and also a detailed ecological assessment of the GEF intervention (see Annex 4 of the PAD).

Component 2: Integrated Ecosystem Management at Watershed level ($4.76 million, of which $4.11 million financed by GEF)

29. This component addresses the technical, social and location specific activities to improve the management of critical watersheds that ensure fadama productivity and sustainability, in a few (pilot) areas with high potential for upscaling and replicability. Major activities include strengthening existing watershed planning and coordination mechanisms among the relevant state agencies (to complement activities under component 1); sustainable management of forest resources for the protection of fadama areas (especially supporting the establishment of community forest reserves in highly degraded and conflict ridden rain forest and savannah areas); developing a lake management plan for a proposed RAMSAR site; and a study and monitoring activities to understand the impact of upstream reservoir management and river flow regime on fadama areas. Furthermore, a monitoring plan will be devised to improve the management of ground water and shallow aquifers in selected fadama areas.

This plan complements the IDA credit support which focuses on on-site water quality monitoring (related mainly to agro-chemical use).

Component 3: Community Sustainable Land Management ($14.05 million, of which $3.96 million financed by GEF)

30. This component supports a range of advisory services, training, information sharing, awareness programs, and adoption of land use practices that will enable fadama users to adopt productivity-enhancing techniques and more profitable marketing, and at the same time ensure the sustainability of the fadama resource base. While IDA financing (60 percent of the component cost) finances traditional advisory services, including environmentally friendly practices (particularly, the promotion of Integrated Pest Management, and irrigation efficiency), the aim of GEF financing (28 percent of the component cost) is to support fadama users, through Fadama Community Associations (FCAs), community groups, and NGOs, to adopt sustainable land use and agricultural practices that enhance the structural and functional integrity of fadama ecosystems, and improve rural livelihoods.

31. GEF support will be in the form of grant co-financing, using a demand-driven approach for two types of alternative land use practices: (i) land use changes in critical areas, such as river banks, flood prone or ground water recharge areas, and forest or natural habitats of significant biodiversity values; and (ii) sustainable agricultural practices in fadama areas added to IDA-supported Local Development Plans (LDPs). In most cases, interventions in these areas require management plans across larger landscapes (that may even cross State boundaries), and therefore the need to get these plans agreed and adopted at a community level, and incorporated into the watershed planning process which the project will help develop at the Sate level through components 1 and 2.

32. Specific sets of criteria would be developed for communities to access grant support for activities that promote sustainable land and watershed management. The grants will be disbursed through FCAs, community groups and NGOs. **The size of the grant ceiling will be calibrated with the IDA grant (for advisory services) and finalized at appraisal.** Potential activities that would be supported under this component include: (i) fadama biodiversity conservation; (ii) alternative livelihoods in highly degraded critical fadama areas; (iii) energy efficient use of solid fuels for watershed protection and carbon sequestration; (iv) community woodlots on riverbanks and other degraded areas, and (v) sustainable indigenous farming practices (such as, reduced tillage methods, nutrient management, soil and water conservation techniques, efficient pasture and rangeland management, etc.).

Component 4: Project Management and M&E ($16.52 million, of which $0.54 million financed by GEF)

33. This component focuses on project management mechanism, including monitoring and evaluation (M&E) plans to implement FADAMA II. While 81 percent of financing for this component is through the IDA Credit, GEF financing (3 percent) will support the full integration of GEF-funded activities into the two main FADAMA II subcomponents under

this component, while keeping track of the specific inputs, outputs, and impacts of the GEF activities:

(i) Project Management Subcomponent supports strengthening the effectiveness and quality of project operations: (a) at the federal level, the National Fadama Development Office (NFDO)--attached to the Projects Coordinating Unit (PCU) of the Federal Ministry of Agriculture and Rural Development (FMARD)—and responsible for overall project coordination, will include a GEF desk manned by a GEF project officer; and (b) the State Fadama Development Office (SFDO) housed at the Agricultural Development Project will include Environmental Officers tasked with the coordination of the GEF program at the state, local government, and community levels.

(ii) Monitoring and Evaluation Subcomponent will measure performance at various project milestones, and includes three main elements: (a) Management Information System (MIS) integrating NFDS and SFDO levels with data generated by FCAs; (b) impact evaluations and beneficiary assessments to enhance project implementation performance; (c) monitoring of the project's environmental management plan (EMP), which includes mitigation measures related to agricultural production, processing, and marketing, to be incorporated in LDPs, and institutional capacity strengthening in Environmental Impact Assessment (EIA) and Integrated Pest Management (IPM); and (d) monitoring the performance of the GEF activities.

4. Financing

Table 1: Co-financing by Component and Percentages

(USD million)

Component	Indicative Costs	% of Total	IDA Financing	% of Total	ADB Financing	% of Total	Govt. & Benef. Financing	% of Total	GEF Financing	% of Total
A. Capacity Building	21.7	**38%**	17.0	78%	3.09	14%	0.19	1%	1.42	7%
B. Integrated Ecosystem Management at the Watershed Level	4.76	**.8%**	0	0%	0.00	0%	0.65	14%	4.11	86%
C. Community Sustainable Land Management	14.05	**25%**	8.35	60%	1.30	9%	0.44	3%	3.96	28%
D. Project Management, M&E	16.52	**29%**	13.32	81%	2.53	15%	0.13	1%	0.54	3%
Total PROJECT COSTS	57.03	100%	38.67	68%	6.91	12%	1.42	2%	10.03	18%

5. Implementation

(a) Partnership Arrangements

34. The FADAMA II Project is a partially blended (IDA/ADB-GEF) project involving a partnership between the Project Coordinating Unit of FMARD, the Federal Ministry of Environment (FMEnv), the National Fadama Development Office, State Fadama Development Offices, other government agencies – federal and state – involved in watershed management, Fadama Communities Associations and other community members. Therefore, the GEF-supported activities will be implemented in close collaboration with relevant stakeholders that play a key role in the management of fadama-related watershed resources at the state level, including fadama users and government agencies, and would focus on creating a coordination mechanism for strengthening this partnership.

(b) Institutional and Implementation Arrangement

35. The Project will be implemented over six years and implementation arrangements were guided by the following considerations: (i) the need to mainstream GEF activities on the ground with the IDA/ADB financed activities, and empower local communities; (ii) the need to fully integrate project management and M&E within FADAMA II; (iii) the need to take into account the role of the Federal Ministry of Environment in overall coordination, quality assurance and oversight; (iv) the need to take into account other environmental projects under implementation; and (v) the need to strengthen project ownership through a workable partnership between the two main ministries involved in the implementation, FMARD and FMEnv.

36. Based on the current institutional framework in the sector, and the lessons learned from implementation of the National Fadama Development Project and the Local Empowerment and Environment Management Project (LEEMP), the proposed institutional framework for implementation (summarized in a schematic form in Technical Annex 6 of the PAD) is as follows:

- ***Federal Ministry of Environment.*** The responsibility of FMEnv with regard to program implementation is to play a coordinating, and supervisory role, while the actual implementation will be done through the FADAMA II implementation arrangements already in place, but adequately strengthened to take into account the specific nature of GEF funded activities, as well as its fiduciary and reporting requirements. Therefore, FMEnv will play a role at two levels: (i) provide technical implementation support by seconding a high level, competitively selected, technical officer (*GEF Fadama Desk Officer*) to the National Fadama Development Office; and (ii) strengthen the mainstreaming and implementation of the GEF component through the added participation of the Director, Planning, Research and Statistics of the Federal Ministry of Environment, who is also the GEF Operational Focal Point for Nigeria, in the National Fadama Technical Committee (NFTC). This will also result in expanding NFTC's role to include approval of the Annual Work Programme and Budget, provide policy guidance

for the implementation of the GEF-financed component (especially the capacity building component), and ensure effective inter-ministerial coordination through the proposed mechanism for integrated watershed management at the National and state levels. At the state level the State Fadama Technical Committee (SFTC) would provide oversight functions through the State Watershed Subcommittee (SWS).

- ***National Fadama Development Office***. As part of its overall project coordination activities, NFDO will also house and coordinate GEF supported activities through the GEF-Fadama Desk Officer (who will be assisted by an M&E Officer, GIS/Operations Analyst and Accounts Supervisor) and will report to the National Program Coordinator of FADAMA II. In addition, the GEF-Fadama Desk Officer will manage and coordinate all project activities at the National level, as well as provide guidance (to) and ensure coordination with Environmental Officers in the State Fadama Development Offices..

- ***State Fadama Development Office.*** The mainstreaming of the GEF component into the FADAMA II will be most important at the State level, where all community-based and on the ground GEF interventions and pilot activities will be implemented, in complement of IDA/ADB support programs. Thus, the role of the Environmental Officers (EOs), who are already recruited by SFDOs for implementing IDA/ADB-financed activities—including, environmental screening and appraisal of community LDPs, and implementation of EMPs-- will be augmented and strengthened in order to carry out the added responsibility for GEF implementation at the state level. The state fadama EOs would also be responsible for monitoring GEF activity implementation at state level, and coordinating with the state agency responsible for leading the development of a *state fadama watershed coordination mechanism.*

- ***State Watershed Subcommittee.*** The capacity building and piloting of an integrated approach to fadama natural resource management within a watershed ecosystem context will be done through a State Watershed Subcommittee, to be established through a Memorandum of Understanding (MOU) among key state natural resource management agencies (agriculture, water, forestry, environment). The SWS of SFDO will serve as the main tool for implementing GEF activities aimed at facilitating the integration of priorities of different state agencies in charge of land, vegetative cover, and water management**.**

- ***Local Fadama Development Committee.*** Similar to FADAMA II, decision making on sub-project proposals emanating from communities will be delegated to the Local Fadama Development Committees (LFDCs) whose membership includes members of FCAs, representatives of civil society, and local government authorities. The recommendations of LFDCs will be reviewed at the state level (i) by SFDOs, for consistency with FADAMA II objectives and activities, and (ii) by EOs in coordination with the State Watershed Subcommittee.

- ***Fadama Communities.*** Through the Capacity Building and Integrated Ecosystem Management at Watershed Level components, the proposed project will support fadama users to adopt livelihood enhancing sustainable land use and agricultural management practices, which cumulatively would enhance the sustainability of fadama ecosystems at watershed level. Therefore, fadama users will play an important role in project implementation through FCAs (to be formed under FADAMA II) and other community groups, and NGOs. A facilitated demand-driven process—using a positive list, and integrated within that of FADAMA II--will be established to select sub-projects for GEF financing and focused on the rehabilitation and protection of ecologically degraded sensitive areas.

- ***Procurement, Financial Management, and Disbursement.*** The already established financial management (FM) capacity at NFDO for financial management, procurement, and disbursement, strengthened as needed, will be used to implement the GEF program. The Finance Section (FS) of NFDO will be responsible for managing the financial affairs of the Project. It will, amongst other things, be responsible for ensuring compliance with the financial management requirements of the Bank and the government, including forwarding the quarterly Financial Monitoring Reports (FMRs) and audited annual financial statements to IDA. Regarding flow of funds and banking arrangements, GEF will disburse the grant through a Special Account maintained by NFDO using the traditional disbursement method. In order to be eligible for GEF financing, Fadama Users Associations, Local Government Areas (LGAs), and other communities will need to establish separate accounts for IDA and GEF funding. The Internal Audit Section in NFDO will perform modern internal audit functions for the Project. The external audit of the GEF will be included in annual audit of the project by NFDO and will be submitted to the Bank within six months after year-end. Relevant qualified external auditors have been appointed based on Terms of Reference acceptable to the Bank to perform these audits.

6. Sustainability

37. The sustainability of project benefits will depend on several factors. The watershed coordination mechanism that will be established at the state level will provide the institutional basis for sustaining project outcomes. Similarly, the establishment of Local Development Plans under FADAMA II (using facilitators and NGOs to mobilize communities as FCAs or other user groupings) will ensure that community needs, perspectives, and ownership are internalized in LDPs. Moreover, the provision of resources to strengthen LDPs and adopt sustainable agriculture and land use practices would ensure the availability of livelihood options that are conducive to the conservation of critical fadama ecosystems. Therefore, it is anticipated that with the firm commitment by the government to establish a watershed coordinating mechanism, to provide adequate support for the GIS/RS facilities, and to support alternative livelihood activities by community members, project benefits will be sustained.

38. ***Recipient Commitment and Ownership.*** Alternative livelihood activities under the project are designed to be demand driven, and included in a community development plan. In addition to IDA community financing (in the form of capacity building, advisory services, and investment in productive assets), access to GEF grant financing will be based on eligibility criteria to ensure contribution to the global objective of the project as well as evidence of interest in the activity and ability to sustain the project outcomes after the close of project.

39. ***Financial Sustainability.*** The project design addresses the issues of financial sustainability through support of demand driven activities, systematic capacity building activities, awareness raising programs and the mainstreaming the activities with FADAMA II, which includes cost sharing by both government and communities. Furthermore, it is anticipated that the success achieved as project implementation gets under way, will catalyze communities adherence to project objectives and adoption of activities that sustain project outcomes.

40. ***Replicability.*** Considering that this approach is new in addressing watershed ecosystem management in the country, a replication plan will be prepared at mid-term and reviewed by both the project oversight and technical committees. This plan will identify the main lessons learned and requirements to ensure that the outputs and outcomes of the project will be taken up at national, state and community levels. In addition, valuable lessons on institutional arrangements for SLM at watershed level as well as successful agriculture and land use practices at community level that emerge from the project will be disseminated nationally, regionally, and worldwide through FADAMA II communication and outreach activities.

7. Lessons Learned from Past Operations in the Country/Sector

Lessons Learned and Reflected in the Project Design

41. The key lessons learned from other GEF co-financed projects and other relevant non-GEF projects (listed in Annex 2), and which are taken into consideration in the design of the proposed project, include:

- *Country and Stakeholder Ownership:* The commitment of the country is exemplified by the readiness with which the two major implementing ministries (Agriculture and Rural Development and Environment) reached an agreement on the institutional arrangement for the project, as well as the competitive recruitment and deployment of the Fadama-GEF Focal Officer from the Federal Ministry of Environment to the Federal Ministry of Agriculture and Rural Development., which is implementing the FADAMA II Project. Similarly, the readiness to sign a Memorandum of Understanding (MOU) between these two ministries attests to the fact that the country is committed to the success of this project. In the same vein, the broad country-wide stakeholder consultation process adopted, the emphasis on communities' driving the implementation process of the FADAMA II through the formulation of LDPs – with assistance by facilitators, and the participation of a broad spectrum of stakeholders (communities, Local, State and Federal

Government and the Private Sector – especially NGOs) at various levels of implementation has resulted in the FADAMA II (National Fadama Development Project II (NFDP II)) being a National Movement. The willing contribution of a grant of N1 million by Beneficiary Local Government Authorities attests to this high level of commitment at the lowest tier of governance.

- *Sustainability and Participation:* The credible, transparent and inclusive processes of assessing project resources which entails grassroots (communities) identifying their needs, prioritizing them, requesting for support through a Local Fadama Desk Office and responsible for the management of approved interventions contained in a Local Development Plan had stimulated local ownership. This involvement of communities (beneficiaries) in the design, implementation and evaluation of project activities as well as the involvement of the lowest tier of governance ensures cost-effectiveness and guarantees sustainability. In addition the stakeholder ownership through financial contribution of the beneficiary local government will ensure the project is well managed and sustainable.

- *Partnerships:* Building broad partnerships is essential for a coordinated process to support the long-term sustainability of fadama ecosystems. A concerted effort was made to identify the institutional and component synergies between the GEF and the IDA funded activities and optimize human and financial resources.

- *Institutional Capacity:* Land and watershed management require both technical capacity for spatial and resource planning, and strong institutional coordination involving several government institutions at federal, state and local levels. To ensure sustainability and achievement of project impact, the project design has specifically addressed institutional fragmentation among Nigeria NRM agencies, through mechanisms for coordination and cooperation among the stakeholders, and capacity building activities covering both technical and institutional strengthening aspects.

- *Institutional Arrangement:* Based on lessons learned from the institutional arrangement for the GEF component of the LEEMP, this project adopted an institutional arrangement that would eliminate the bottlenecks associated therein. The GEF component of the LEEMP is being coordinated by the National Parks Service, with only quality assurance responsibility undertaken by the Federal Programme Support Unit (FPSU) of the LEEMP. Although within the same ministry, coordination is not as effective as if the GEF component is fully blended into operations of the FPSU. The FADAMA GEF Project uses the same institutional arrangement as the IDA-funded FADAMA II Project, thus facilitating project implementation.

- *Project Design:* Project outcomes, planning, schedules, and assumptions must be realistic, and take into account beneficiaries' needs. National, state, local and community capacity strengthening must form a key part of the project design process for sustainable land and watershed management. FADAMA II has made extensive use of these lessons. The project has learned lessons from the LEEMP Project. One implementation problem of the LEEMP Project was due to delayed implementation of activities, especially due to

delays in approval processes, and slow disbursement. The FADAMA II GEF Project will use the same institutional arrangement as the IDA-funded FADAMA II Project which has demonstrated good practice in disbursement. He also explained that this is how most projects in the country, except one, started.

- *Monitoring and Evaluation:* The Project has a very well financed and strong monitoring and evaluation component, including collection of baseline data, regular monitoring of primary indicators, special evaluation studies, beneficiary assessments, and capacity building for data collection and analysis, and in GIS and Remote Sensing.

- *Demonstration of Good Practices for Integrated Land and Water Management and Alternative Livelihoods.* Addressing land degradation to achieve long-term global environmental benefits not only requires an integrated approach to land and water management at the watershed level (since a number of natural resources management processes are inter-related both ecologically and spatially), but also a demonstration of its social and economic viability. Using an integrated ecosystem based approach to conservation of natural resources, the GEF contribution to FADAMA II is designed to promote sustainable land management in fadama areas through a combination of: (i) capacity building activities aimed at providing technical training and analytical capacity, awareness raising, and community participatory development planning; (ii) institutional strengthening, aimed at introducing a framework for integrated watershed management at state level where critical fadama ecosystems are located; and (iii) support for alternative livelihoods for on-the-ground changes in land use activities, aimed at protecting areas of critical ecological importance, and adopting sustainable agricultural practices.

8. Safeguard Policies (including public consultation)

Are any of the following safeguard policies triggered by the project?

Table 5: Safeguard Policies

Policy	**Applicability**		
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	● Yes	○ No	○ TBD
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	○ Yes	● No	○ TBD
Forestry (OP 4.36, GP 4.36)	• Yes	○No	○ BD
Pest Management (OP 4.09)	○ Yes	● No	○ TBD
Cultural Property (OPN 11.03)	○ Yes	● No	○ TBD
Indigenous Peoples (OD 4.20)	○ Yes	● No	○ TBD
Involuntary Resettlement (OD 4.12)	○ Yes	● No	○ TBD
Safety of Dams (OP 4.37, BP 4.37)	○ Yes	● No	○ TBD
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	○ Yes	● No	○ TBD
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)	○ Yes	● No	○ TBD

Describe provisions made by the project to ensure compliance with applicable safeguard policies.

42. Under the IDA-funded FADAMA II Project, an existing ESMF has been prepared. This will be adopted for the proposed GEF project, and complemented with an environmental and social checklist. In addition, the proposed project components will not lead to involuntary resettlement.

9. List of Factual Technical Documents

Project Implementation Plan

1. Project Implementation Manual
2. Project Implementation Plan

Bank Documents

1. Project Concept Document
2. Project Information Data Sheet (PCD Stage)
3. Integrated Safeguards Data Sheet (PCD Stage)
4. Minutes of PCD Review Meeting
5. Minutes of Decision Meeting
6. Project Appraisal Document
7. Project Information Data Sheet (PAD Stage)
8. Integrated Safeguards Data Sheet (PAD Stage)
9. Minutes of Negotiations
10. Environmental and Social Management Framework (ESMF)

Project Studies and Reports

1. Identification and Prioritization of Critical Fadama Ecosystem – Geomatics Nigeria, March 2005

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