New Partnership for
Africa's Development (NEPAD)

Comprehensive Africa Agriculture
Development Programme (CAADP)

Food and Agriculture Organization
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GOVERNMENT OF THE FEDERAL REPUBLIC OF NIGERIA

SUPPORT TO NEPAD–CAADP IMPLEMENTATION

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Volume I of IV

NATIONAL MEDIUM TERM INVESTMENT PROGRAMME (NMTIP)

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NIGERIA: Support to NEPAD–CAADP Implementation

Volume I: National Medium–Term Investment Programme (NMTIP)

Bankable Investment Project Profiles (BIPPs)

Volume II: Rural Access and Mobility Project (RAMP)

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NIGERIA:

NEPAD–CAADP National Medium–Term Investment Programme (NMTIP)

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Currency Equivalents

(June 2005)

Local Currency	=	Naira (₦)
US$1.00	=	₦132.50
₦1,000	=	US$7.60

Abbreviations

ADB	African Development Bank
ADPs	Agricultural Development Programmes
AFAN	Apex Farmers Association of Nigeria
AIFFP	Aquaculture and Integrated Fish Farming Project
ALR	Agricultural Land Resources
AMSS	Agricultural Marketing Support Services
ARAC	African Regional Aquaculture Centre
AVPVDM	Animal Vaccine Production and Veterinary Drug Manufacture
BICOT	Biological Control of Trypanosomiasis
BIPPs	Bankable Investment Project Profiles
CAADP	Comprehensive African Agricultural Development Programme
CAS	Country Assistance Strategy
CBMP	Cattle Breeding and Multiplication Project
CBN	Central Bank of Nigeria
CBO	Community Based Organisations
CDD	Community Driven Development
CFC	Common Wealth Finance Corporation
CFN	Co–operative Federation of Nigeria
CIDA	Canadian International Development Agency
CPI	Consumer Price Index
CPPEP	Cassava Production Processing and Export Programme
CSMP	Community Seed Development Project
DAS	Department of Agricultural Sciences
DES	Dietary Energy Supplies
DFID	Department for International Development
DFRRI	Directorate of Food, Roads and Rural Infrastructure
DRD	Department of Rural Development
DVS	Department of Veterinary Services
EC	European Community
EDF	European Development Fund
EEZ	Exclusive Economic Zone
ECOWAS	Economic Community of West African States
EPVP	Export Promotion Village Project
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FCT	Federal Capital Territory
FDRD	Federal Department of Rural Development
FEAP	Family Economic Advancement Programme
FEC	Federal Executive Council
FGN	Federal Government of Nigeria
FDA	Federal Department of Agriculture

FDF	Federal Department of Fisheries
FDL & PCS	Federal Department of Livestock and Pest Control Services
FFD	Federal Fertilizer Department
FMARD	Federal Ministry of Agriculture and Rural Development
FME	Federal Ministry of Environment
FMWR	Federal Ministry of Water Resources
FPO	Focal Point Officer
FPV	Fowl Pox Vaccine
FTDP	Fisheries Terminal Development Project
FOS	Federal Office of Statistics
FSIDP	Fish Seed Industry Development
FSMP	Foundation Seed Multiplication Project
FY	Financial Year
GCC	Government Cost Component
GDP	Gross Domestic Product
GEF	Global Environment Fund
GMO	Genetically Modified Organism
GON	Government of Nigeria
GPV	Goat Pox Vaccine
IAEA	International Atomic Energy Agency
IBVD	Infectious Bursal Disease Vaccine
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
IPM	Integrated Pest Management
JCF	Jimmy Carter Foundation
JICA	Japanese International Cooperation Agency
JIS	Joint Interim Strategy
L&PCS	Livestock and Pest Control Services
LG	Local Government
LGAs	Local Government Areas
LSDV	Lumpy Skin Disease Vaccine
MDG	Millennium Development Goals
MDV	Marek Disease Vaccine
MIGA	Multi–lateral Investment Guarantee Agency
MIS	Market Information System
NACB	Nigerian Agricultural and Cooperation Bank
NACMO	National Agricultural Co–operative Marketing Organisation
NACRDB	Nigeria Agricultural, Cooperative and Rural Development Bank
NADF	National Agriculture Development Fund
NAFDAC	National Food and Drug Administration and Control
NAIC	Nigerian Agricultural Insurance Corporation
NALDA	National Agricultural Land Development Authority
NAPRI	National Animal Production Research Institute
NBCI	Nigerian Bank for Commerce and Industry
NCA	National Council on Agriculture
NDV	Newcastle Disease Vaccine
NCRWA	Nigeria Committee for Rural Women Advancement
NDDC	Niger Delta Development Commission

NDE	National Directorate of Employment
NEEDS	National Economic Empowerment Development Strategy
NEPAD	New Partnership for Africa's Development
NEPC	Nigerian Export Promotion Council
NERFUND	National Economic Reconstruction Fund
NFDP	National Fadama Development Programme
NFED	Nigeria Foundation for Environmental Development
NGOs	Non–Governmental Organisations
NIDB	Nigerian Industrial Development Bank
NIPRANET	Nigeria Participatory Rural Appraisal Network
NITR	Nigerian Institute for Trypanosomiasis Research
NMTIP	National Medium Term Investment Programme
NPC	National Planning Commission
NSPFS	National Special Programme for Food Security
NTB	Non–Tariff Barrier
NVRI	National Veterinary Research Institute
OFRSP	On–Farm / Rural Storage Project
PACE	Pan African Control of Epizootics
PBN	Peoples Bank of Nigeria
PCU	Projects Coordinating Unit
PRSP	Poverty Reduction Strategy Programme
PMCMD	Pre–emptive Management Cassava Disease
RBDA	River Basin Development Authority
REFILS	Research Extension Farmer Input Linkage System
RPPEP	Rice Production Processing and Export Programme
RSHP	Rural Slaughter House Project
RTEP	Root and Tuber Expansion Programme
SAP	Structural Adjustment Programme
SRBMP	Small Ruminant Breeding and Multiplication Project
SEEDS	State Economy Empowerment Development Strategy
SMEs	Small and Medium Scale Enterprises
SMEDAN	Small and Medium Enterprises Development Agency of Nigeria
SMIDA	Small and Medium Industries Development Agency
SON	Standards Organisation of Nigeria
SPS	Sanitary and Phyto–Sanitary
SPV	Sheep Pox Vaccine
TBT	Technical Barriers to Trade
TCP	Technical Cooperation Project
UK	United Kingdom
UNDP	United Nations Development Programme
UNHDI	United Nations Human Development Index
UNICEF	United Nations Children Education Fund
VOPPMP	Vegetable Oil Production Processing and Marketing Programme
WB	World Bank
WTO	World Trade Organisation

Preface

In an effort to halt and reverse the decline of the agricultural sector in the continent, the African ministers for agriculture unanimously adopted, at the 22nd FAO Regional Conference for Africa, held on 8 February 2002 in Cairo, a resolution laying down key steps to be taken in relation to agriculture in the framework of the ***New Partnership for Africa's Development (NEPAD)****. As a follow–up to this resolution, they endorsed, on 9 June, 2002, the NEPAD* ***Comprehensive Africa Agriculture Development Programme (CAADP).*** *The* ***Declaration on Agriculture and Food Security in Africa****, ratified by the African Union Assembly of Heads of State and Government during its Second Ordinary Session, held in Maputo between 10 and 11 July 2003, provided strong political support to the CAADP. During this session, the Heads of State and Government agreed to adopt sound policies for agricultural and rural development, and committed themselves to allocating at least 10 percent of national budgetary resources for their implementation within five years.*

The CAADP provides an integrated framework of development priorities aimed at restoring agricultural growth, rural development and food security in the African region. In its very essence, it seeks to implement the key recommendations on food security, poverty reduction and sustainable use of natural resources, made at recent global conferences. The CAADP comprises ***five pillars****:*

1. *Expansion of the area under sustainable* ***land management*** *and reliable* ***water control systems****.*
2. *Improvement of* ***rural infrastructure*** *and* ***trade–related capacities*** *for improved* ***market access****.*
3. *Enhancement of* ***food supply*** *and* ***reduction of hunger****.*
4. *Development of* ***agricultural research, technological dissemination and adoption*** *to sustain long–term productivity growth.*
5. *Sustainable development of* ***livestock, fisheries and forestry*** *resources*[1]*.*

As an immediate follow–up to the Maputo Declaration, representatives of 18 African ministries for agriculture from member countries of the NEPAD Implementation Committee, the NEPAD Steering Committee, the African Development Bank, the World Bank, the International Fund for Agricultural Development, the World Food Programme, FAO and civil society, participated in a meeting held in Rome on 17 September 2003, in order to discuss the implementation of the CAADP, and more specifically:

- *the methodology for the review/update of the* ***national long–term food security and agricultural development strategies****;*
- *the preparation of* ***National Medium–Term Investment Programmes (NMTIPs)****;*
- *the formulation of the related* ***"Bankable Investment Project Profiles"(BIPPs)****.*

It is within this context that the Federal Government of Nigeria, in an effort to reinforce its interventions aimed at fighting poverty and food insecurity, has requested FAO to assist in preparing a ***National–Medium–Term Investment Programme (NMTIP)*** *and a* ***Portfolio of Bankable Investment Project Profiles***[2] ***(BIPPs), with the aim to****:*

- *create an environment favourable to improved competitiveness of the agricultural and rural sector;*

[1] Pillar 5 was initially not part of CAADP, but has been added in recognition of the importance of the sub–sectors.
[2] *"Bankable Investment Project Profiles"* are defined as documents elaborated in a format and with the information that could make them favourably considered by the financial institutions, donors and private investors foreseen in the Maputo Declaration. These documents should enable partners to make preliminary indications of interest, and of approximate level of funding commitment. Further feasibility analysis and subsequent processing through the concerned partner(s) regular project formulation systems would follow to obtain an investment project/programme proposal elaborated to the feasibility study level.

- *achieve quantitative objectives and mobilize resources to the extent needed for the associated investment in agriculture;*
- *achieve the targeted allocation of national budgetary resources to this area, reflecting the commitment made in the Maputo Declaration; and*
- *create a framework for coordinated bilateral and multilateral financing of the sector.*

The NMTIP was prepared by a team of consultants[3]*, under the overall supervision of the National Project Coordinator*[4] *and in close collaboration with the NMTIP Core Team from the Federal Ministry of Agriculture and Rural Development (FMARD)*[5]*, and* ***the National Committee on the Implementation of the NEPAD Rural Development Programme***[6] *as well as the NEPAD Nigeria Office. The team was assisted by the FAO Representation in Nigeria and the FAO Investment Centre Division*[7]*. In the process of preparing this document, the major stakeholders from government, development partners, private sector and civil society were involved as much as possible. In order to obtain the views from a wider section of stakeholders from State and Local Government level, as well as from NGOs, CSOs and the private sector, a zonal workshop was organized in each of the six geopolitical zones of Nigeria*[8]*. Key to the finalization of the NMTIP was the analysis of the findings of these workshops followed by a national stakeholder workshop which was held on 27 and 28 January 2005, during which the NMTIP was discussed and validated.*

The document starts with a brief description and analysis of Nigeria's agricultural sector in the context of the country's economy and poverty and food security situation. This is followed by a review of national and development partners' strategies and programmes, lessons learned, and an analysis of the principal constraints to, as well as opportunities for, the development of the sector. Based on this analysis and taking into account existing government strategies and the five pillars of CAADP, priority areas for investment have been proposed and a preliminary list of projects prepared. During the national stakeholder workshop, the project ideas were further elaborated and prioritized, taking into account the recommendations from the zonal workshops and based on agreed–upon selection criteria. The validated NMTIP was presented to the National Council on Agriculture (NCA), the highest policy advisory body to government on agriculture, at its annual meeting in March 2005. The Council endorsed the NMTIP and the preparation of the following three BIPPs under the TCP agreement with FAO: (i) Rural Access and Mobility Project; (ii) National Programme for Food Security; and (iii) Cassava Production, Processing and Marketing Project. The three BIPPs are presented in Volumes II, III and IV respectively.

The NCA recommended that the Federal Government of Nigeria should fund the preparation of the following three additional BIPPs: (i) Production, Processing and Export of Rice Project; (ii) Integrated Aquaculture Development Project; and (iii) Increased Poultry Production Project. The workshop outcomes and the NCA recommendations are summarized in Annex 4.

Finally, an attempt is made to estimate the financing gap in terms of additional resources that would be required to meet the target of allocating 10 percent of the national budget to the sector by 2009, and a proposal put forward for Monitoring and Evaluation of the NMTIP.

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6 Chairperson: Eng. (Ms) E.O. Okeke, Director, FDRD/FMARD.
Chairperson Sub–committee on Agriculture, Trade and Market Access: Mr T. Banta, Dep. Director FDRD/FMARD.

7 Mr Thomas Muenzel, Agricultural Economist (TCIW).

8 Six Zonal Workshops were held on 2 September 2004 in the following locations: North West Zone (Kaduna), North East Zone (Bauchi), North Central Zone (Minna), South East Zone (Enugu), South South Zone (Port–Harcourt), South West Zone (Ibadan).

I. INTRODUCTION

A. The Economy

I.1. The Federal Republic of Nigeria, located in the tropical zone of West Africa, covers approximately an area of 924,000 km^2. Its population is estimated at 125.8 million (2003), and has been growing at an annual rate of 2.8 percent since 1991. About 70 percent of the population lives in rural areas. The current estimate indicates that nearly 70 percent of the population is below the poverty line[9]. The country is heavily indebted, with external debt of US$29.79bn and internal debt equivalent to US$9.68bn (2002). The per capita Gross Domestic Product (GDP) in 2003 was US$387. As per the UN Human Development Index (HDI), Nigeria ranks very low: 148 out of 174 countries and 22 out of 45 African countries.

I.2. Between 1984 and 1987, the Nigerian economy grew at 3.7 percent per year. The annual growth rate increased to 5.9 percent during the Structural Adjustment Programme (SAP) period of 1986 to 1988 and was 2.9 percent from 1993 to 2000. The GDP growth was 4.6 percent in 2001, dropped to 3.5 percent in 2002 and jumped to 10.2 percent in 2003. The improved performance of the economy in 2003 was attributable to improvements in agriculture with a growth rate of 7.0 percent while the oil sector grew at 23.9 percent. The fluctuations in growth over the 1999 to 2003 period derived mainly from fluctuations in production of crude oil and its prices in the international market. In 2003, the agricultural sector comprising crop, livestock, forestry and fisheries contributed 34.6 percent to the GDP while the industrial sector consisting of crude petroleum, mining and quarrying, and manufacturing, contributed 38.2 percent. The share of the services sector was 12.5 percent, while general commerce and building/construction sectors contributed 12.7 percent and 2.1 percent, respectively.[10] (See Annex 1, Table 3).

I.3. Although in recent years, attempts have been made to adopt some liberal and market–oriented economic policies, government has not been able to meet most of the economic performance targets agreed upon with the International Monetary Fund (IMF) and other donors. This led to suspension of the stand–by credit facility with IMF in October 2001. As a result of the wide–scale structural reforms in all sectors of the economy being implemented by the present administration, the suspension has been lifted and IMF has played a prominent role in the 60 percent debt relief recently granted to the country by the Paris Club of Creditors. The economy has been characterized by a cycle of low savings, low investments (about 16 percent of GDP) and low growth.

I.4. The economic circumstances of the citizenry have not shown any noticeable improvement as the poor are getting poorer. The 10.2 percent growth recorded in 2003 was largely from the increased income from high price and quantum of crude oil exports. The inflation rate has fluctuated around 10 percent in recent years. According to the data published by the Federal Office of Statistics, the inflation rate (12 month average) tended to increase within the first 6 months of 2004 to 15 percent in January. The rate climbed to 17.8 percent in March and further rose to 19.4 percent in May and June. The hike in prices of petroleum products engendered the increase in prices of food items which accounted for the inflation rate in the period. The external debt burden which has hovered around US$30bn mark over the years was US$32.92bn in 2003 amounting to 61 percent of the nation's GDP. The situation has worsened as the debt has risen to US$34bn in September 2004. Despite the efforts by the Central Bank of Nigeria (CBN), the Naira has depreciated from ₦122 to US$1 in 2002, ₦129 to US$1 in 2003 and ₦132 to US$1 in May 2004. However, a positive sign is that the parallel market rate in 2003 was only 4 percent above the official market rate, as compared to 17 percent in 2002.

9 Less than US$1.00 per person per day at the current purchasing power parity. Source: FOS.
10 FOS. National Accounts of Nigeria, 2003.

Efforts are underway to reduce the inflation rate to 10 percent by the end of 2004, 9.5 percent in 2005 and 2006, and to 9 percent in 2007. High external and internal debt burden and high budget deficit have motivated a shift of thrust by government in the management of the economy.

I.5. At independence in 1960, agriculture was the principal sector contributing substantially to the employment and income of the rural people and 56 percent to the GDP. With the discovery of oil, and the diversion of the attention of the government to the oil sector that almost entirely covered the government revenue, agriculture suffered, while the economy grew. At present, the petroleum sector earns 90 percent of the country's foreign exchange and provides 80 percent of the public budgetary resources. Progressive deterioration in the conditions of the rural sector during the 1980s and 1990s has led to two types of deprivation: (i) rural mass deprivation, manifested by limited access to physical, financial and public goods (roads, water supply, health, education); and (ii) individual deprivation, i.e. the inability to afford basic necessities and to meet social and economic needs, physical insecurity, lack of skills, inadequate assets, and the inability to improve this situation. In recent years, a number of policy initiatives have been taken and strategies developed, aimed at achieving higher rates of growth and accelerated poverty reduction through higher levels of investment and efficiency in their utilization. Agricultural and rural development has been identified as the future driver for accelerated growth, employment generation and poverty reduction.

I.6. In recent years, the government has introduced economic reforms aimed at more effective macro–economic management, as well as a better restructured social environment. Some of the reforms introduced include: (i) the establishment of an Anti–corruption Commission; (ii) reform in public procurement practices; (iii) reform in fiscal management; (iv) value for money auditing; (v) regularization of relationship with creditors; (vi) progress in privatization, specifically of the telecom sector; (vii) reform in the higher education system, including licensing of private universities and increasing autonomy of higher institutions; (viii) sectoral policy reforms in agriculture, education, housing, water supply and sanitation; and (ix) streamlining poverty alleviating institutions[11]. A National Economic Empowerment and Development Strategy (NEEDS) was launched by the National Planning Commission (NPC) in June 2004. The NEEDS represents Nigeria's Poverty Reduction Strategy Paper and is aimed at poverty reduction, wealth creation, employment generation and value re–orientation.

I.7. It is expected that satisfactory implementation of the macro–economic, government and institutional reforms proposed in NEEDS would lead to substantial progress in the following areas: (i) macro–economic stability; (ii) developing a fiscally sustainable budget with improved poverty focus; (iii) improving systems for budget formulation and implementation; (iv) overhauling public procurement arrangements; (v) progress on privatization; and (vi) implementation of programmes arising out of NEEDS to tackle pervasive poverty, widespread unemployment, low rate of growth of the non–oil economy, inadequate capacity of government to deliver critical services, limited self–employment and the heavy external debt burden.

B. Poverty and Food Security

I.8. According to the current estimate of poverty in Nigeria, about 70 percent of the people are poor, and 70 percent live in rural areas. The proportion of poverty in the north is substantially higher than this national average. Poverty is also concentrated in the 36–65 years age group, and among the uneducated. A major concern is that poverty is not only expanding but also deepening, as the poor are

[11] The merging of the Family Economic Advancement Programme, the Nigerian Agricultural Cooperative Bank and the People's Bank into the Nigerian Agricultural, Cooperative and Rural Development Bank.

getting poorer. The current distribution of income is highly skewed in favour of the rich: while the top 20 percent receive nearly 56 percent of the total national income, the share of the bottom 20 percent is very meagre at 4.4 percent. The proportion of the core poor has increased from 6.2 percent in 1980 to 29.3 percent in 1996, and is believed to have increased further in recent years[12.]

I.9. Despite implementation of various development programmes in rural areas, 18 out of the 19 states existing from1980–1996 declared that more than 50 percent of their respective populations were poor. Infant mortality had reached 147 and 217 per 1,000 live births overall in rural and urban households respectively (1996). The Federal Ministry of Health statistics indicate that the major causes of death are malaria and dysentery and this mortality could be substantially reduced if poverty is reduced. The adult literacy rate is low at 51 percent; 62 percent for males and as low as 38 percent for females. The life expectancy rate is declining fast, from 54 years in 1990 to under 50 years in 1996. Access to adequate shelter, safe drinking water, and sanitation and communication facilities has been low and is deteriorating. The worsening situation has affected vulnerable groups and specifically women in rural areas the most. In particular, individuals with limited or no formal education, large families, farm communities and groups engaged in informal sector activities are hardest hit by the situation.

I.10. As indicators of the food security situation in Nigeria since 1980, the average daily intake of calories from all food sources increased from 2,032 kcal/capita/day in 1980 to 2,436 kcal/capita/day in 1995, and to 2,938 kcal/capita/day in 2000. Therefore, overall, it appears that the average food security situation has improved over time, although protein intake, which is estimated at 18 grams/capita/day, is well below the recommended 35 grams/capita/day. Food accounts for 69 percent of the total expenditure of an average Nigerian household. Although general food availability over the past years has improved, substantial segments of the population in not easily accessible areas face acute food insecurity in certain periods of the year. High unemployment, underemployment and lack of purchasing power in the hands of the poor, are major factors that limit their access to adequate food and nutrition. The standard of living of wage earners has gone down substantially over the years. In real terms, the Federal wages were 30–40 percent below their 1987 levels, and it is believed that current private sector wages both in agriculture and non–agriculture are below their 1970 levels. Although the number of undernourished has marginally increased from 1.9 million in 1990–92 to 2 million in 1998–2000, the proportion under wasting increased from 7.9 percent to 10 percent during the above period, and the number of under–fives underweight is still high at 27.8 percent at the end of 2000. Although Dietary Energy Supply is about 2,938 kcal/day per person, it is believed that a substantial proportion of the population manages with less than 1,810 kcal per day, the critical food insecurity level.

C. Agricultural and Rural Sector

I.11. ***Contribution to the economy.*** The agriculture sector, comprising the crop, livestock, forestry and fisheries sub–sectors, contributes about 35 percent to GDP and remains the lead sector for providing income and employment to the rural people. It employs 90 percent of the rural poor, nearly 70 percent of the total labour force, and generates 90 percent of non–oil export revenues.

I.12. ***Physical.*** Of the total land area, about 75 percent (68 million ha) has the potential for agricultural activities. The cultivated land area, however, is only 59 percent (40 million ha) of the potential arable land area. Of this, only an estimated 0.5 percent (220,000 ha) is under irrigation. In

[12] Definition of core poor. Source: Nigeria: Rural Sector Study, Vol. 1 – June 2001.

relation to the irrigation potential, estimated to be between 2.0 and 2.5 million ha[13], the irrigated area is only around 10 percent. This shows that agriculture is mainly dependent on rainfall for crop water requirements. In addition to the large arable land resources, with wide–ranging topography and diversity of climate, Nigeria is endowed with high potential for diversified agriculture and related activities. The vegetation varies from mangrove swampland along the coast and tropical rainforest in the south to derived savannah and savannah in the middle belt and the north. The climate is semi–arid and arid in the north. While the coastal zone receives rainfall most of the year, in other zones it is seasonal with distinct dry and wet seasons. The country has eight agro–ecological zones ranging from semi–arid with lowest annual rainfall of about 500 mm, to the flood zone, with annual rainfall of more than 2,000 mm. Other exceptional zones are Plateau, with annual rainfall varying between 1,400–1,500 mm, and Montane with high average annual rainfall of 1,700 mm (see Annex 1, Table 5).

I.13. ***Structure.*** On the basis of their size of holding, farmers in Nigeria can be divided into three groups: small–scale (farm size under 2 ha), medium–scale (farm size between 2 and 10 ha) and large–scale farmers (farm size above 10 ha) (see Annex 1, Table 4). While about 7 million farm families are small–scale (70 percent), 2.5 million are medium–scale (25 percent) and 0.5 million (5 percent) belong to the large–scale category, mainly producing for industrial export. The majority of small–scale farmers hardly produce enough to sustain themselves for eight months. During bad crop years resulting from poor or poorly distributed rainfall and other natural calamities (e.g. floods, bird and insect infestation, outbreak of plant diseases), the small–scale farmers' coping capacity is further reduced and they suffer severe hunger.

I.14. ***Crop production.*** As more than 99 percent of cropped land is rainfed, it can only support crop production for three to six months of the year. Mixed, small–scale farming is the predominant mode of production. More than 90 percent of the total agricultural output is accounted for by households with less than 2 ha under cropping. The major arable crops grown in Nigeria are sorghum (7 million ha), millet (6.1 million ha), cowpea (5.2 million ha), maize (4.5 million ha), rice (3.5 million ha), cassava (3.5 million ha), yam (3 million ha), groundnut (2.8 million ha) and ginger (1.2 million ha). Other main crops include plantain/banana, cocoa, rubber, oil palm, gum Arabic, cashew, mango, citrus, pulses, pineapples and potatoes. Table 6 in Annex 1 presents the main crops, total area cultivated, production and average yields. The share of the farming population engaged in the various activities is as follows: crop farming (94 percent), livestock (68 percent), fisheries (2 percent) and forestry (1 percent). While the northern part of the country produces the basic cereals, such as sorghum and millets under dry conditions, rice, yams and maize dominate the middle belt and the south concentrates on roots and tubers, maize, vegetables and tree crops.

I.15. ***Forestry.*** Approximately 12 percent of the land area in Nigeria (10.9 million ha) is under forest and woodland cover. The rate of deforestation of around 2.6 percent per year is considered one of the highest in Africa and a major cause for concern. As the largest wood producer in Africa, Nigeria harvests annually more than 100 million m^3. It has about 700,000 ha of forest plantation. Forests and trees outside the forest declared areas contribute between 1.3 percent and 3 percent of GDP, and serve as a major source of energy, food and medicinal plants supply. On balance, however, Nigeria is wood deficit and the situation is aggravated due to overgrazing, soil erosion, indiscriminate tree felling, drought and desertification, as well as growing demand for cropland under extensive cultivation.

I.16. The ***livestock sub–sector*** is a major contributor to agricultural GDP, estimated at 20 percent. Livestock is closely linked to the socio–cultural lives of the rural people, and animal ownership plays a crucial role in ensuring rural livelihoods and economic stability, particularly among the rural poor. Although this sector has high potential for rural growth and poverty reduction, hardly any major

[13] Nigeria Irrigation Sub–Sector Study. Report No: 00/076 CP–NIR. FAO. September 2000.

policies and programmes have been implemented in the past across the regions in order to accelerate livestock production to meet domestic and regional demand. There is a current promotion drive on increased milk production, in an attempt to improve the supply of livestock protein in the nation. With improvement in epidemo–surveillance and control of trans–boundary diseases and pests, the increase in private sector poultry production efforts, restocking of breeding animals and provision of supplementary feeds, livestock production recorded some growth. The growth rate of the livestock sub–sector was 4.2 percent in 2002 as compared to the previous year's 2.7 percent.

I.17. ***Fisheries.*** With 500,000 coastal and 200,000 inland primary producers, fisheries provide employment to an estimated three million people. The fishing industry provides employment to 100,000 people in various fields of engineering, vessel operations, distribution, marketing and management. Aquaculture is practiced mostly by private commercial farms. This sector, which has immense potential, is still underdeveloped. Under the National Special Food Security Programme (NSFSP), the government has taken up the issue to involve smallholder farmers in production, processing, marketing and eventual export of inland fish. In recent years, the fisheries sub–sector grew at six percent, although there is potential to grow more than 10 percent per annum with better organization and participation of rural communities[14]. The contribution of the sub–sector to the agricultural GDP is 5.4 percent.

I.18. ***Land tenure.*** Nigeria's land tenure system under the law empowers the governor of state and the chairman of the local authority to hold the land on trust for the people. Before the Land Use Act of 1978, land was owned by inheritance and controlled by the traditional authorities. Despite successive attempts to regulate the land tenure system on a regional or national basis through the introduction of legislation, tenure in rural areas presently continues to be determined by customary law. While communal ownership of land is usually recognized, individual tenural rights and inheritance rules vary considerably among different ethnic groups. For example, Fulani herdsmen remain outside of the landholding systems and generally have no security of land tenure. Those who settle near the sedentary farmers are normally granted temporary user rights, but as cultivated areas expand and encroach on grazing areas, Fulanis are forced to leave and conflicts between pastoralists and settlers increasingly occur. The present leasehold land tenure provides for title deeds for a renewable period of up to a maximum period of 99 years.

I.19. ***Gender.*** With regard to the duties and responsibilities of meeting the household's need for food, water, fuel and shelter, there is marked differentiation between sexes and ages. A large and growing number of, de facto, women–headed households occur due to male labour migration in search of off–farm employment. Socio–cultural and religious restrictions limit women's access to natural resources and financial services, property rights and the decision–making process at household and community levels and also advisory services in most places. Due to the socio–cultural milieu, female child education is not encouraged in some communities, which results in female child marriage and child mothers.

I.20. ***Policy.*** The Nigerian Constitution allows anyone to undertake any agricultural activity without let or hindrance. Therefore, through the New Agricultural Policy (2001), government has attempted to streamline agricultural activities and has assigned roles and responsibilities to all stakeholders. These include the three tiers of government (Federal, State and Local), Governmental and Non–Governmental Organizations (NGOs), both national and international, and the private sector. The policy emphasizes the pre–eminent role of the private sector as the prime mover of the agricultural sector. This has been concretized by the disengagement of the Federal Government from direct agricultural production activities. The New Agricultural Policy and the Integrated Rural

[14] Source: FMARD. Annual Report 2002.

Development Policy (2001) provide the framework for agricultural and rural development, through which the level of technical and economic efficiency in food production and the transformation of the nation's rural life and landscape on a sustainable basis will be achieved. These are to be realized through the introduction and adoption of improved technology, efficient utilization of resources by the farmers, and a broad–based organisation and mobilization of the rural masses so as to enhance their capacity. These policies will be implemented under the NEEDS, which recognize the dominant role of the sector in the effort to tackle the pervasive poverty of the rural dwellers, including the small–scale farmers, the widespread unemployment and limited self–employment, and the weak rural infrastructure.

I.21. ***Institutions.*** The recently conducted Review of Rural and Agricultural Sector Institutions in Nigeria[15], which is a collaborative effort between FGN and Development Partners especially ADB, FAO, IFAD and WB, provided an inventory of public institutions involved in agriculture and rural development along with their mandates and functions, their administrative structures and lines of command, staff by location and physical assets. The study also provided information on capacities and capabilities of each institution, covering sources and magnitude of available financial resources, budget and disbursement processes, financial control, human resources development situation, collaboration and linkage with the private sector and NGOs, and reviewed institutional problems and issues and to provide proposals to address them. The ultimate goal of the study was to provide proposals for institutional reforms and human resource development, and streamlining and delineating responsibilities to provide an institutional framework, which can be adapted nationally as a blue print for agricultural/rural development initiatives, so as to maximize the potential for sustainable and equitable rural development.

I.22. The draft report of this review was submitted to the ***Federal Ministry of Agriculture and Rural Development (FMARD)*** in March 2004, and a workshop held in Abuja, which discussed the findings and recommendations of the study. Due to the ongoing Civil Service and Local Government reforms, the workshop deliberations on the report were restricted to the Federal institutions, while deliberations at the states and local government levels would be undertaken later. The FMARD has consequently prepared a position paper regarding the recommendations of the study. This provided the basis for the preparation of an ADB project aimed at providing institutional support and capacity building to FMARD. The major institutions involved in agriculture and rural development in Nigeria are briefly presented below.

I.23. The FMARD is responsible for national agriculture and rural development policy development, technical support to states for agriculture and rural development, technology generation and dissemination, land use planning, soil management, soil capacity evaluation and soil water resource management, project/programme coordination and rural sector planning, monitoring and research. FMARD has 13 departments with specialized functions. The Project Coordinating Unit (PCU), which is a department created in 2000 through the merger of the Federal Agricultural Coordinating Unit (FACU) and the Agricultural Project Monitoring and Evaluation Unit (APMEU) is responsible for extension delivery service and coordination of projects and programmes supported by international financing institutions such as the Agricultural Development Programmes (ADPs) and the Fadama[16] Development Programme in the states. It also coordinates, monitors and evaluates the current NSPFS with the assistance of FAO.

[15] FGN. Review of Rural and Agricultural Sector Institutions. Draft Study Report. June 2003.
[16] Fadama, the Hausa name for irrigable land, are flood plains and low–lying areas underlined by shallow aquifers, found along Nigeria's river systems.

I.24. The ***Federal Ministry of Water Resources (FMWR)*** has the central objective to develop and conserve Nigeria's surface and underground water resources. Within this objective, the functions of the Ministry include the development and implementation of policies and programmes for sustainable water management and use formulation and implementation of the necessary legal and regulatory frameworks notably the National Water Resources Act; the National Water Resources Master Plan; the development and implementation of dams and other water resources infrastructure for irrigation and domestic water supply; hydrological and hydro–geological data collection, storage, analysis and production of hydro geological maps; development of guiding principles for national dam construction; conducting investigations and research on the nation's ground water and surface water resources potentials, and supporting, monitoring and evaluation of the programmes and performance of the River Basin Development Authority (RBDA) and the National Water Research Institute.

I.25. The ***RBDAs*** are parastatals and the main implementing arms of the FMWR. They are responsible for: (i) development of surface and ground water resources for irrigation, livestock and rural and urban water supply; (ii) controlling erosion and floods, including watershed management; and (iii) construction, operation and maintenance of dams, dykes, polders, wells and boreholes.. They are also engaged in construction of roads and bridges to provide water to institutional users and in the development of an updated water resources master plan.

I.26. The ***Federal Ministry of Environment (FME)*** is responsible for environmental policy development, environmental assessment, monitoring and control. It also has responsibility for environmental conservation, including forestry development, erosion control and desert encroachment control.

I.27. The ***National Planning Commission (NPC)*** is the think–tank of the Federal Government. It husbands the major planning tools for the nation's development planning process. It is the secretariat of the National Council on Development Planning and the Joint Planning Board, and served as the secretariat for the preparation of the NEEDS. The NPC supervises the Federal Office of Statistics, which generates the national social–economic data and statistics and the National Data Bank, which is the repository of key national data for planning purposes.

I.28. ***Agricultural Development Programmes (ADPs)*** are state institutions with a mandate to raise agricultural production and improve the living standards of the rural population. They provide technical support through extension services to smallholder farmers, as a means of promoting the adoption of improved farming techniques. They are also engaged in distribution of inputs (through Farmers Agricultural Inputs Supply Companies [FASCOMS]) and generate critical monitoring and evaluation data for the agricultural sector. With the cessation of World Bank loan funding in the early 1990s, they have experienced severe funding inadequacy, resulting in the shrinking of their roles. Some of the activities that the private sector would normally carry out, such as inputs supply, have now been devolved. Other players involved in the extension delivery services include the state and local governments. NGOs and the private sector are now being encouraged to undertake extension service delivery, and this development will promote capacity building and foster decentralization of services to local levels, a necessary stimulus for technology development and dissemination.

I.29. The ***Nigeria Agricultural, Cooperative and Rural Development Bank (NACRDB)*** is the result of government's strive to improve the quantum of loanable funds to the sector through recapitalization, and to enhance access to credit by the beneficiary farmers, rural dwellers and small–scale entrepreneurs through a concessional interest rate of 8 percent and minimal administrative bureaucracy. NACRDB's specific objectives are: (i) promotion of agricultural production and rural development; (ii) contribution to the improvement of income and quality of life of the rural population; (iii) assisting in the promotion of modern agricultural production methods, creation of employment through provision of credit for production, processing and marketing of agricultural produce; and (iv) contributing to the overall growth and development of the Nigeria economy.

I.30. The ***Nigerian Agricultural Insurance Corporation (NAIC)*** was established to reduce farmers' exposure risk, particularly smallholders, by offering protection for losses from natural disasters. Among the objectives it has pursued are: (i) promoting agricultural production by reducing exposure of operators to investment risks; (ii) enhancing farm family income and income stability by providing financial support in the event of losses arising from natural disasters; (iii) encouraging increased flow of agricultural credit; and (iv) minimizing the need for emergency assistance during periods of agricultural disasters.

I.31. The ***Niger Delta Development Commission (NDDC)*** was established in September 2000, to address socio–economic development of the Niger Delta area's nine oil producing states. Among the many mandates of the commission are: (i) formulating policies and guidelines for the development of the Niger Delta area; and (ii) planning and implementing socio–economic projects and programmes for the sustainable development of the region.

I.32. ***Private Sector and NGOs.*** Under the present agricultural policy, the role of the private sector is to take charge of investment in agriculture especially in the aspects of: (i) agricultural production, storage, processing and marketing; (ii) agricultural input supply and distribution, production of commercial seeds, seedlings, brood stock and fingerlings under government certification; (iii) agricultural mechanization, support for research in all aspects of agriculture; and (iv) provision of enterprise–specific rural infrastructure. NGOs involved in agriculture include Nigeria Participatory Rural Appraisal Network (NIPRANET), which adopts a participatory approach to research and extension, Nigeria Foundation for Environmental Development (NFED), Nigeria Committee for Rural Women Advancement (NCRWA), farmers' organizations, now functioning under an apex body "the Apex Farmers Association of Nigeria (AFAN)", Cooperative Federation of Nigeria, National Agricultural Cooperative Marketing Organisation (NACMO).

I.33. ***Infrastructure.*** The infrastructure that are critical to rural development, include: farm access and feeder roads, water supply in adequate quantity and of good quality, market infrastructures, health and education infrastructures and power supply, especially thermal and hydrosources. Alternatives such as solar, biogas, wind power, are now being explored and exploited. A number of agencies are involved in the provision of rural infrastructure, including the Federal Department of Rural Development (FDRD), the Federal Ministries of Works, Water Resources, Power and Steel, States Ministries of Agriculture and Rural Development, the ADPs and Local Government Councils. The FDRD of FMARD is responsible for rehabilitating rural feeder roads constructed by the defunct Directorate of Food, Roads and Rural Infrastructure (DFRRI), in addition to the construction of farm access and on–farm roads for the rural farming communities. The FDRD also provides farm wells and crop processing and storage facilities to its enclave project farmers. The Federal and State Ministries of Water Resources, Mines and Power have the responsibility of providing water and rural electricity respectively.

I.34. ***Financing.*** The approach to rural and agricultural finance by the government in the past has been to provide targeted subsidized credit through state–owned banks. The two major banks that implemented the schemes at the Federal level were the Nigerian Agricultural and Cooperative Bank (NACB) and the People's Bank of Nigeria (PBN). Their own poor credit management, coupled with inappropriate macro–economic policies, government's control of interest rates and the politicization of agricultural and rural credit, led to poor loan recovery and non–viable institutions. Further, various semi–formal rural finance providers and support schemes have generally had very limited outreach. Many of these institutions are not sustainable in the long run. All rural financial institutions continue to be hampered by existing policies, inadequate funding in relation to their mandates, and severe capacity constraints. To–date, the two main rural financial institutions, the NACRDB, a merger of the erstwhile NACB and PBN, and privately owned Community Banks have only managed to reach about 6 percent of the rural households. Some microfinance institutions such as the Cooperative Bank and Bauchi Cooperative Financing Agency have been providing assistance to the sector at state and local levels, with limited outreach. In order to streamline their activities and promote their effective involvement in the sector with stakeholder participation at base and intermediate levels, the FGN is presently developing a National Microfinance Policy through the involvement of the Central Bank of Nigeria (CBN) and some Development Partners.

D. The Strategic Framework

(i) Government Objectives and Strategies

I.35. Reduction of pervasive poverty, ensuring national food security, attaining of self sufficiency in basic food production, provision of better employment opportunities and achievement of a high growth rate for the economy, are major government objectives, which, among others, are to be achieved through greater emphasis on agriculture and rural development. The New Agricultural Policy and the Policy on Integrated Rural Development issued in 2001, provide the framework within which an accelerated agricultural and rural development would take place and aid in achieving the national objectives. The policy perspectives are developed in the backdrop of successive failures of attempts made during the last three decades to revive the economy with over–dependence of the government on oil revenues, neglect of agriculture and poor implementation of direct government intervention in the agricultural sector. In response to the devastating drought in the early 1970s, the various programmes that the government undertook to directly intervene in the agricultural sector in the 70s and early 80s did not yield satisfactory results, although agricultural production increased under heavy subsidies which were unsustainable.

I.36. A Structural Adjustment Programme (SAP) launched in 1986, leading to deregulation of the economy and government divesting from direct production activities in agriculture, and in turn assuming the role of facilitator, did marginally help the rural and agricultural sectors. Despite the development of an Agricultural Policy in 1988 and related implementation strategies, and the 15–year Perspective Plan (1992–2003), poor implementation of policies and strategies led to poor growth of the rural and agricultural sector. Although Nigeria, to a large extent, met the national self–sufficiency goal in food supply, there continued to be seasonal and location–specific shortages arising from distribution and marketing constraints, weak infrastructure and seasonality of, and fluctuation in, production under rainfed farming. This situation brought to the fore the vulnerability of the nation in food security. The need to change focus and strategies to rapidly increase performance, necessitated the development of a new policy to reposition agriculture, in order for it to maintain its pre–eminence in the economy. Government, therefore, in a renewed commitment to agriculture and rural development, reviewed the 13 year–old erstwhile Agricultural Policy and articulated, in 2001, a New Agricultural Policy (2001) and a National Policy on Integrated Rural Development (2001), together with its National Integrated Rural Development Strategy.

I.37. The overall goal of Nigeria's New Agricultural Policy is the attainment of self–sustaining growth in all sub–sectors of agriculture, the structural transformation necessary for the overall socio–economic development of the country, and the improvement of the quality of life of Nigerians. The Integrated Rural Development Policy aims at creating a macro policy environment conducive to stimulating greater private sector investment and leadership, and the promotion of technologies that enhance production in the rural areas while conserving the environment. The Agricultural and the

Rural Development policies are mutually reinforcing and synergic in addressing the major objectives of government in food security, poverty reduction, improving the economy and raising the standard of living of the Nigerians. While the Agricultural Policy emphasizes the enhancement of growth and development of all aspects of agriculture in a sustainable manner, the Rural Development Policy addresses the improvement in the conduciveness of the macro–environment, to stimulate increased investment in the rural areas. The launching of the policies during the same period (2001), is a reflection of the new Administration's desire to have greater development foci in all key sectors of the economy. Agricultural sub–policies cover issues of: (i) labour, capital and land, the prices of which affect profitability of production systems in crops, fisheries and livestock; (ii) inputs supply; (iii) pest control; (iv) land resources; (v) water resources; (vi) rural infrastructure (vii) fisheries and aqua–culture; (viii) cooperatives (ix) irrigation and drainage; and (x) technology development. The sub–policies are complemented by support service policies in the aspects of research, extension, training and manpower development including the organisation and mobilization of the people, mechanization, storage, processing, marketing, credit, seed development and general incentives in the strive to achieve an enhanced integrated rural development.

I.38. The specific objectives of the New Agricultural Policy are: (i) self–sufficiency in basic food production and attainment of national food security; (ii) production of agricultural raw materials for industry; (iii) production and processing for export; (iv) application of modern production and processing technologies; (v) generation of gainful employment; (vi) enhancement of quality of life of rural dwellers; and (vii) protection of agricultural land from degradation and environmental pollution for sustainable agricultural production. The specific objectives of the Integrated Rural Development Policy are: (i) mobilization and empowerment of rural dwellers to improve quality of life and create wealth; (ii) support to rural institutions to raise rural productivity; (iii) improvement of human resource capacity of rural dwellers through appropriate training; (iv) promotion of the development, and improvement in the management, of community–based social and economic organizations to undertake rural infrastructure development and maintenance; (v) conservation and improvement of the rural physical environment as a basis for sustainable development; and (vi) intensification of support specifically aimed at women and youth.

I.39. Implementation of these policies is seriously hampered by resource and capacity constraints, specifically at the level of states and lower decentralized structures, which do not provide an adequate framework for translating the policies into specific outputs that could aid in achieving the objectives.

I.40. Activities to realise the agricultural policy objectives include: (i) creating a conducive environment by ensuring internal consistency of policy and synchronisation of the macro–policies that affect agriculture with the agricultural policy; (ii) harnessing and conserving natural resources especially land, forest and water resources; (iii) adequately funding the agricultural research system and strengthening the extension system for technology generation, dissemination and adoption; (iv) adequately funding agricultural development and promoting increased investment in agriculture and agro–industry by the private sector; (v) effectively controlling agricultural pests and diseases and minimising post harvest losses; (vi) promoting gender sensitive, appropriate field–tested technologies to reduce the drudgery in agricultural production and processing activities; (vii) promoting the development of an effective and efficient agricultural input supply and output marketing system; (viii) making the rural environment attractive by undertaking rapid development of rural infrastructure, providing microfinance, and promoting profitable agricultural production, especially among small–scale producers; (ix) building capacity; and (x) promoting information and communication technology development and management.

I.41. The strategies through which the Integrated Rural Development Policy are to be implemented among others include: (i) promotion of rural productive activities through provision of rural financial services, agricultural research and extension delivery and promotion of resource–based, small–scale productive activities (agricultural, mineral, metal–based rural industries, arts and crafts) aimed at creating wealth and generating gainful employment in the rural areas; (ii) support to human resources development through community organisation and mobilization, community–based mass literacy, training and skills development, enhancing awareness of rural environmental management, nutrition education and HIV/AIDS awareness in the rural areas and increasing availability, accessibility and affordability of rural technology; (iii) enhancement of enabling rural infrastructure through providing and stimulating sustainable growth and development, such as rural travel and transportation, feeder roads, stock routes and jetties; rural energy including electrification, solar, windmill and biogas; rural water supply and sanitation; rural markets for local goods and postal and telecommunication facilities; and (iv) special programmes for target groups such as women, youth, the elderly, the retired, the physically challenged and victims of emergency natural disasters involving rural dwellers.

I.42. The agricultural and rural development policies and strategies are being pursued within the framework of the NEEDS, which was launched in June 2004 to address Nigeria's economic and social problems of pervasive poverty, widespread unemployment, low rate of growth in the non–oil economy, inadequate capacity of government to effectively deliver critical services, limited self–employment among local communities and heavy external debt burden, among others. NEEDS, which is the Nigerian equivalent of a Poverty Reduction Strategy Programme (PRSP), has been formulated with the objective of reducing poverty, generating employment and creating wealth. It is a reform that aspires to achieve a long–term goal of social and economic transformation of Nigeria into a sustainable, modern, competitive and prosperous economy. Its immediate goals include a redefinition of government's role in the private sector; improving delivery of basic social services; investment in the country's greatest asset — its people — laying the foundation for future improvement in human capital; laying a foundation to alter the incentive system and change the value and culture towards entrepreneurship, efficiency and selfless service. The key development challenges identified in the NEEDS are: (a) poor fiscal and monetary policies, which result in excessive government expenditures and consumption in the economy, volatility of revenue and expenditures, lack of strong fiscal discipline and low levels of coordination of fiscal policy among the tiers of government; (b) weak public institutions and weak human resource capacity; (c) low levels of transparency in government business, with the concomitant high level of corruption; (d) heavy unsustainable external and domestic debt burden; and (e) poor infrastructure, weak basic services provision and the generally poor environment for the private sector.

I.43. With regard to the agricultural sector, the FGN, with the assistance of FAO, is presently engaged in the preparation of a National Food Security and Agricultural Development Horizon 2015 – National Strategy, aimed at ensuring a long–term sustained development and accelerated food and agricultural real GDP growth. The identified strategic priorities and targets are within the framework of the NEEDS and the State Economic Empowerment and Development Strategy (SEEDS). The resource implications to 2015 will be determined, taking into account the estimates made for the NMTIP and the NEEDS and SEEDS.

I.44. The agriculture and rural development policies and strategies, although emplaced in 2001, have not yet been fully operationalized at the Federal Ministries and departments, and States and Local Governments and departments levels. Weak planning, coordination and supervision capacity, budgetary constraints, poor delineation of Federal Government functions and inadequate implementation of government's decentralization policy, seriously constrain development effectiveness and the achievement of the above–stated policy objectives. Although the institutional issues have been addressed by the recent review of rural and agricultural sector institutions, the proposed reforms have still to be agreed upon and implemented. The various policies and strategies recently developed by government, including NAP, PIRD, SEEDS and NEEDS, are consistent with CAADP/NEPAD priorities. They also provide a practical basis for the government's commitment to meet the objectives of the five CAADP pillars. The main policies and strategies in relation to CAADP pillars are presented in Annex 2, Table A.

(ii) Major Strategies of Cooperating Partners

I.45. With the reintegration into the international community following the return to democratic governance in 1999, Nigeria has resumed its collaboration with multilateral agencies. Therefore, Nigeria is now in a position to take advantage of the wealth of experience and best practices these partners have garnered from operations in similar economies, which will help to develop and implement programmes that will optimise Nigeria's economic and resource potentials. The multilateral agencies and the donor community recognise that their contributions to Nigeria development challenges are small compared to the vast resources that can be mobilised from within the country. Their interventions, therefore, are to be seen as synergic and re–enforcing, provided that the present administration reinforces its recent efforts to address the causes of poor accountability, lack of transparency, pervasive corruption and weak economic governance.

I.46. ***The World Bank (WB).*** The WB is of the view that Nigeria has sufficient resources of its own to achieve sustainable development, and that the resources brought by donor communities, including the WB, are always going to be relatively small compared to the resources which Nigeria has available to it. A Joint Interim Strategy for Nigeria (JIS) has been prepared pending the development of a full Country Assistance Strategy (CAS). According to the JIS, the WB's assistance will continue to be based on three pillars: (i) improving governance in the federal government and in selected state governments; (ii) fostering private sector activity in the non–oil economy; and (iii) empowerment, for human development, and to leverage community engagement in service delivery and local infrastructure. The main focus will be on: (a) supporting the reform process, including capacity building; (b) expanding community driven development approaches; and (c) supporting infrastructure, to help ease critical bottlenecks to private sector activity, especially in agriculture. The WB is presently preparing an Agricultural Sector Growth Strategy Review, which is expected to provide the basis for government to prepare a National Sector Growth Strategy.

I.47. ***The African Development Bank (ADB).*** In the ADB's Country Strategy Paper (CSP), the medium–term focus of ADB in Nigeria's development is to assist the national efforts to reverse the current trend of rising poverty and build institutional capacity at the Federal and State Government levels. This is to be achieved through targeted interventions in agriculture and rural development and health. The Bank will also provide support to regional institutions to strengthen their capacities, and finance regional projects that will impact on poverty and governance in the West Africa sub–region. ADB recognises that its contribution to Nigeria's development needs is small, as Nigeria can mobilise substantial resources from within and should, therefore, be less dependent on development partners for concessionary resources if internally generated resources were efficiently managed.

I.48. ***The International Fund for Agriculture Development (IFAD).*** The intervention of IFAD in Nigeria's development derives from the view that, while recognising the relatively greater economic importance of the oil sector, the agricultural and rural sector has the potential to play a vital role in improving food security, substituting imported raw materials, creating productive employment, maximising foreign exchange earnings and protecting the environment. IFAD's new strategy for its interventions, as outlined in its Country Strategic Opportunities Paper (COSOP), focuses on priority areas of government, with a major shift towards broadening the range of implementing partners. The strategy emphasises the complementarity of investments of other donors, NGOs, CBOs and the private sector, with much more attention being given to innovative, cost–effective and replicable programmes aimed at sustainable poverty reduction and rural development, reflecting the expectations of rural poor Nigerians. The major strategic thrusts will be empowerment of the rural poor, particularly women, access to and management of resources, infrastructure and services. The efforts will involve: (a) empowering target smallholder farmers, the landless, rural women, CBOs and civil society organisations, in order to generate sustainable income, from on and off farm activities; (b) supporting pro–poor reforms and local governance in order to expand access to information and communication, village infrastructures and technologies; and (c) improving access of the poor to financial as well as social services. The promotion of regional cooperation for sustainable food crop development and food security will also be given adequate attention.

I.49. ***The European Commission (EC).*** The position of the EC on Nigeria's development, as contained in the Country Support Strategy and Indicative Programme 2001–2007, is to pursue a consistent and coherent approach towards supporting policies relating to political, economic, trade and developmental fields for: (i) consolidating democracy and respect for human rights; (ii) reducing poverty and achieving sustainable institutional reform, social and economic development; and (iii) enhancing the country's capacity to contribute to regional integration, peace, security and development and to integrate into the world economy. Like other partners, the EC recognises that donor funding is not large enough to address Nigeria's above identified challenges, as well as to fight corruption, and improve management of increasing oil money to reinforce poverty–oriented services, notably water, education and health. It, therefore, plans to help Nigeria find ways to do so by supporting Nigeria's programmes rather than establishing separate projects. The EC will be more visible at the decentralised State and Local levels where with the return of democracy, increased resources and greater autonomy are now being provided. Areas of attention will be the improvement of service delivery in water and sanitation, while supporting the reform in capacity building (training, institutional strengthening and technical assistance). Direct budget support to a representative state in each of the geo–political zones will follow, with civil society being given an important role to play to ensure popular participation in setting of priorities and the monitoring of their implementation.

I.50. ***The Food and Agriculture Organization of the United Nations (FAO).*** FAO has been actively involved in the country to provide support in critical areas, such as building capacity for augmenting production, diversifying agriculture, improving value addition, while reaching the vulnerable groups at the same time. In addition, guidance and support for improvement in the quality of data collection, analysis and management is also provided. FAO assists in the implementation of the National Special Programme for Food Security (NSPFS) in 109 sites in 36 states and Abuja Federal Capital Territory, which is aimed at contributing to sustainable improvements in national and household food security through rapid augmentation of productivity and food production. FAO has recently assisted government in the preparation of a draft National Irrigation Policy and Strategy and is also involved in strengthening the national capacity for the establishment, propagation and distribution of high quality planting materials for horticultural, tree and cash crops for higher income generation. Other programmes include strengthening of indigenous capacities for food preservation, processing, storage and marketing, and strengthening of production and quality control of gums and resins, and legumes and cereals.

I.51. ***United Nations Development Programme (UNDP).*** UNDP supports agriculture and rural development in Nigeria through various interventions. In agriculture, it adopts the Songhai model which involves the integration of agricultural production with processing and marketing in such a way that the waste of one process becomes an input into another process resulting in zero waste–zero emission. Youth in Agriculture, an initiative of some State Governments such as Ondo State is also being supported through: (i) providing improved agricultural production technologies, improved crop varieties and rapid multiplication techniques; (ii) introducing processing for value addition; (iii) youth programmes for counselling; and (iv) attracting donor health MDG programmes to the communities. In rural development, support is being given in the area of Renewable Energy Master Plan which holds great promise as a means to enhance energy supply to the rural poor. FME has been assisted to prepare a sanitation policy, guidelines and action plan which will serve as a nucleus for NEPAD activity in sanitation matters. It has already been approved by the National Council on Environment and the Federal Executive Council.

I.52. ***The United Kingdom Department for International Development (DFID).*** Since 1997, the DFID has supported capacity–building of NGOs. In line with DFID's new Country Strategy, which aims at improving governance, the emphasis is on shifting to building the capacity of community–based organisations to advocate for and demand better services. As part of this strategy, DFID aims to support strategy development and service provision in four states. The focus will be mainly on facilitating coordination of existing institutions and on conflict resolution among competing natural resource users — farmers, pastoralists and fishermen in the wetlands. DFID, in conjunction with ADB, IFAD, WB and USAID, is developing a support strategy for rural finance, and has started working with government on a policy and institutional framework to guide assistance to the rural financial sector. DFID, in collaboration with CIDA, USAID and IFPRI is supporting the Agricultural Policy Support Facility (see CIDA below).

I.53. ***The United States Agency for International Development (USAID).*** USAID's vision for its support to Nigeria's political, social and economic development for the years 2004 to 2009 is contained in the USAID/Nigeria Country Strategy Plan (CSP). USAID recognises that Nigeria's development needs are enormous, and the CSP is grounded in USAID's comparative advantage and areas of engagement that provide the best opportunities for maximum results. USAID's current involvement in the agricultural sector in Nigeria includes the development of agricultural inputs marketing under which the project "Developing Agri–input Market in Nigeria (DAIMINA)" is being implemented in Oyo, Katsina and Bauchi States, with the objective of training private sector operators to market fertilizer and other inputs and to advocate for policy reform and quality standards. It is a five–year (2002–2005) project costing US$2.2m. The Agency is also involved in rural sector enhancement programme; delivery and evaluation of disease–resistant plantain technology to smallholder farmers; strengthening NGOs, associations and financial institutions to help farmers and agribusiness to improve productivity and food processing technology improvement. USAID, in collaboration with CIDA, DFID and IFPRI is supporting the Agricultural Policy Support Facility (see CIDA below).

I.54. ***The Canadian International Development Agency (CIDA).*** In 2003, CIDA undertook a needs assessment study of Borno, Bauchi and Cross River States with the aim of providing technical assistance to the States. The Programme for Promoting Sustainable Agriculture in Borno (ProsaB) is already ongoing. CIDA, in collaboration with DFID, USAID and IFPRI is supporting the Agricultural Policy Support Facility (A–PSF), which is being designed as a joint venture between FMARD, NPC, Ministry of Finance and the National Assembly. A–PSF is expected to result in improved national policy analysis, strengthened capacity in carrying out related research, increased and improved linkages and consultation between government and key stakeholders. In addition, CIDA is currently engaged in the Africa Stockpiles Programme and the Canada–Nigeria Environment Programme (CNEP).

I.55. ***Japan International Cooperation Agency (JICA).*** JICA provides special support for accelerating the execution of grant aid targeted to basic human needs which include medical care, public health, domestic water supply, rural and agricultural development and the development of human resources. The major intervention strategy employed by JICA is the use of project formulation surveys and employment of experts in the execution of projects. Other areas of interest of JICA include disaster management, pollution control, protection of urban living environment and conservation of natural environment to improve the health and living standard of the masses and for sustainable development. The major agricultural thrust of JICA in Nigeria is the promotion of new rice for Africa (NERICA). JICA is a member of the African Rice Initiative (ARI), which is a consortium made up of FAO, WB, UNDP and WARDA, and provides technical assistance at the field level for the experimentation and dissemination of NERICA in Nigeria.

I.56. ***Non–Governmental Organizations (NGOs).*** Many NGOs are involved in promoting agriculture and rural development in Nigeria. Their areas of intervention include: farmer education and training; land and water management; rural credit mobilisation and administration; extension delivery; health care; advocacy; awareness creation on the HIV/AIDS pandemic; small–scale rural enterprise development; agro–processing and market access. The NGOs among others, include Sasakawa Global 2000 (SG2000), National Council of Women Societies (NCWS), OXFAM UK, CARE International, World Vision, ACTION AID, Centre for Development and Population Activities (CEDPA).

I.57. A number of multi–national companies, e.g. Shell, AGIP, Nestle Nigeria and UAC Foods Nigeria have made substantial interventions in the sector, aimed at raising productivity through technology development, application and dissemination, resulting in increased agricultural production, empowerment of farmers and rural dwellers and reduced poverty.

I.58. ***Conclusions.*** In many cases, government and external assistance to rural communities is not coordinated. External financing is small in comparison with the high level of funds available to all tiers of government. The challenge to government and its development partners is to maximise synergy and impact by building consensus at all levels on the basic principles that should guide development expenditure and the implementation support framework. The number of development partners in Nigeria is large, most of whom have only recently resumed after a break during the military rule. A high level of donor coordination is evolving in almost every sector of the economy, be it in economic management, community development, education, health (HIV/AIDS) or agriculture. There is a strong commitment by donors to ensure complementarities in their activities especially in working with government to develop policies and programmes that would help re–position Nigeria to the path of rural sector growth and the sustainable development of agriculture.

(iii) Major Ongoing and Pipeline Projects and Programmes

I.59. Table B, Annex 2, lists the major ongoing and pipeline programmes/projects being implemented in the country summarising the main objectives, duration, location and relating them to the five CAADP pillars. It needs to be mentioned that many of the pipeline programmes/projects presented here are not entirely new ideas, but have become a regular feature in any initiative because of lack of, or inadequate and irregular, funding. Some of these programmes/projects thrived under external funding support, but activities and benefits discontinued when such funding ceased because sustainability was not given appropriate attention. The main projects/programmes are briefly presented below.

Food Security, Productivity Improvement and Community Development

I.60. ***The National Special Programme for Food Security (NSPFS) Pilot Phase [2002–2005; US$42.5m] and Expansion Phase [2006–2010; approx. US$250m].*** This is an ongoing programme which aims at raising agricultural productivity and production to eliminate rural poverty and attain food security. It commenced with a nationwide pilot phase implemented under a Unilateral Trust Fund arrangement with the FAO. The main programme components are: (i) Food Security; (ii) Aquaculture and Inland Fisheries; (iii) Animal Disease and Trans–boundary Pest Control; (iv) Soil Fertility Improvement; and (v) Marketing of Agricultural Commodity and Food–stock Management. The programme focuses on: (a) assisting farmers to achieve their potentials for increasing productivity and output and consequently their incomes on sustainable basis; (b) strengthening the effectiveness of research and extension services in bringing technology and new farming practices to farmers; and (c) promoting simple technologies for self–sufficiency and surplus production in small–scale, rain–fed and irrigated farming. An Expansion Phase has been prepared to cover a wider area nationwide, which is presented as a BIPP in Volume III.

I.61. ***National Fadama Development Project II (NFDP–II) [2004–2009; US$125.37m].*** The National Fadama Development Project II is a follow up on the NFDP–I, and is being implemented with loan funding from World Bank, ADB and GEF, to increase the income of Fadama users through empowering them and reducing conflict among them. The project is implemented in 18 states over a six–year period, with the possibility of taking the other states on–board by mid–term of project life. The project will build up the capacity of Fadama users and provide rural infrastructure, asset acquisition support, advisory services and project management services.

I.62. ***Community–Based Agricultural and Rural Development Programme (CBARDP) [2004–2009; Total cost: US$68.5m; IFAD loan: US$29.9m].*** Following the successful implementation of the IFAD–supported Agricultural and Community Development projects (ACDP) in Sokoto and Katsina states in 2000, the government has adopted the community–based, demand–driven approach to rural development. This approach involves the rural communities and the poor in project design and implementation of field activities. The new programmes initially focus on the northern states in those areas most vulnerable to climatic and population pressures or intensive economic activities. Support is provided in the areas of: advisory and capacity–building services by government, pioneering CBOs, NGOs and the private sector; land rehabilitation; and soil erosion control. The programme is expected to pave the way for a rapid expansion of investments in sustainable growth in agricultural output and productivity, combined with non–agricultural activities, natural resource management, rural infrastructure and social services.

I.63. ***Community–Based Natural Resources Management Programme (CBNRMP) [2003–2010; Total cost: US$82.2m; IFAD loan: US$15.0m].*** The CBNRMP aims at improving the living conditions of poor rural communities in the nine Niger Delta States of Nigeria. The programme is supported by IFAD and adopts the Community–Driven Development (CDD) and participatory approaches in identifying and prioritising the communities' needs and plan to implement activities to address these needs. The programme focuses on institutional capacity and support development, mitigating social unrest, increasing productivity of agriculture and artisanal fisheries, diversifying sustainable livelihood activities, improving access to markets and social infrastructure and protecting the fragile and complex physical environment.

I.64. ***Roots and Tuber Expansion Project (RTEP) [2002–2010; US$23.05m].*** The RTEP is a follow–up to the successfully implemented IFAD–assisted Cassava Multiplication Project (CMP), which contributed to Nigeria achieving the number one position in cassava production in the world. RTEP aims at raising smallholders production of cassava, yam, potatoes and cocoyam, as well as their by–products to enhance national food security and improve rural household incomes. The thrust of RTEP is the consolidation of the gains of the CMP by emphasising the development and dissemination of improved varieties of planting materials. Twenty–six ADPs are participating, while nine Federal and three International Agencies are involved in oversight supervisory roles.

I.65. ***Presidential Initiatives on Crop Production, Processing and Export (PICPPE).*** Concerned about the dwindling fortunes and importance of some crops such as cocoa, oil palm, groundnut and cotton, for which Nigeria has a comparative advantage in producing, the President of Nigeria took the initiative to summon key stakeholders in these crops to brainstorm and fashion out the best ways of restoring the country's prime position in the production of these crops. He also declared that the era of striving for self–sufficiency as a national goal was over, and that the country must now produce surplus for export to earn foreign exchange and boost the non–oil export drive necessary for the diversification of the economy. Rice, cassava and vegetable oil received special attention while tree crop production was addressed from the perspective of rapid multiplication and distribution of planting materials (seeds and seedlings). Special committees were set up under the chairmanship of the Minister of Agriculture and Rural Development, to access the status of these crops and develop strategies for rapidly increasing their production and adding value to their products. The reports of these committees have been processed to, and approved by, the Federal Executive Council. Approval by the National Assembly and sourcing of funds for the implementation are in progress.

- *Rice Production, Processing and Export Project (RPPEP) [₦68.16bn]***.** This project aims at realising an output of 15 million tonnes of paddy or 9 million tonnes of milled rice by 2007, from the cultivation of some 3 million hectares and the use of short duration, disease–resistant, and high–yielding rice varieties for planting and to sustain production. It is expected that this project would contribute to reduced poverty and enhanced living standards through: (i) increased food availability; (ii) increased local rice consumption; and (iii) increased income of all in the rice food chain, including producers, processors and marketers; Adjunct to this initiative are the ongoing National Rice Production Programme, the Sasakawa Global 2000 Rice Project of Carter Foundation, the Japanese–assisted Rice Production Programme and the ADB–supported NERICA Promotion. The RPPEP will start with rainfed upland and lowland rice cultivation and the full exploitation of the Fadamas and the existing irrigation facilities. Use of improved varieties of seeds and improved milling technology for high quality rice will be adopted. It is expected that the project output will drastically narrow the local demand–supply gap, generate employment, enhance income and conserve foreign exchange. It is private sector driven with government support largely through existing subsidy and low interest credit financed from the 10 percent levy on rice imports.

- *Cassava Production, Processing and Export Project (CPPEP) [₦65.526bn plus US$10.2m].* With the high tonnage of cassava production in Nigeria, being the largest in the world, there is great need for an assured market outlet for the commodity. Also because of the many uses of the commodity, the potentials of the crop as a major foreign exchange earner are enormous. Cassava is a source of flour, starch, chips, paper, pellets, adhesive, and a carrier for pharmaceuticals, among others. Ongoing efforts in promoting cassava production include the IFAD–assisted Root and Tuber Expansion Programme and the Pre–emptive Management of Cassava Mosaic Disease coordinated by IITA. It is expected that as much as 150 million tonnes per annum of cassava will be produced from this initiative, which would be about four times the present levels between 36 and 40 million tonnes. The project will be private sector driven, and government support will be mainly in providing tractors and processing machinery at 25 percent subsidy.

- *Vegetable Oil Production, Processing and Marketing Programme (VOPPMP)/National Accelerated Industrial Crop Production Project (NAICPP) [₦50.76bn].* The main objective of this programme is to reverse within five years, the supply–demand shortfall through smallholder estate developers, processors and other stakeholders in the sector. The activities include developing one million hectares of oil palm and producing 5 million tonnes of groundnut, 1 million tonnes of seed cotton and 0.67 million tonnes of soybeans. Other sources of vegetable oil are sheanut, cocoa, coconut, castor oil, melon, sunflower and beniseed. The programme will be co–funded by government and the private sector and the enabling environment will include, physical incentives such as subsidized inputs and credit to stem unfair competition from imports and prevent dumping. A 10 percent development levy shall be paid for all vegetable oil imports.

Rural Infrastructure and Support Services

I.66. ***Rural Access and Mobility Project (RAMP) [2005–2010; US$225m].*** Improvement of access and mobility in the rural areas is acknowledged as one of the surest ways of raising the standard of living of the rural dwellers. RAMP is a pipeline project, which is a follow up on the roads and rural infrastructure programme of the defunct DFFRI. It will undertake the rehabilitation and construction of rural roads, development of inland waterways and provide an intermediate mode of transport appropriate for the rural environment. State and Local Governments would be assisted to develop and improve accessibility mobility in their rural areas, in order to promote non–farm employment and income generating activities. The capacity of the rural dwellers would also be built to enable them to undertake the construction and maintenance of rural feeder roads and an intermediate mode of transport.

I.67. ***Large–Scale Irrigation Infrastructure Development (LSII) [1997–Ongoing; ₦66.613bn].*** This is a FGN–funded programme, comprising several multi–purpose dams in various parts of the country, which are in different stages of construction to supply water to urban and rural populations, generate power and provide water for irrigation and fisheries development. The downstream irrigation infrastructures of the completed dams have not been fully developed and, even where some development has taken place, the facilities are in a serious state of disrepair. However, while renewed efforts are being made to complete the dams, priority is being given to the rehabilitation of existing structures with the conviction that they will generate satisfactory economic returns. In this strive community–based irrigation schemes are being promoted as a suitable means of extending the benefits of irrigated agriculture to a large number of rural communities that will own the schemes to ensure sustainability.

I.68. ***Rural Finance Support Programmes.*** A number of donors (DFID, IFAD, USAID) are supporting or presently preparing programmes aimed at enhancing financial services delivery in rural areas, which are listed below.

I.69. ***Promoting Pro–Poor Financial Services (ProFinS) [2005–2009; £7.5m].*** This programme is presently being prepared by DFID with the main objective to enhance poor peoples' access to financial services by facilitating the development of a viable financial services market. It is envisaged that ProFinS would have the following three pillars: (i) improvement of market information available to regulators and the private sector; (ii) policy advice and building capacity of regulators, especially CBN; and (iii) establishment of an Innovation Fund to offer incentives for pro–poor innovation, with a focus on better integrating the various financial sector organisations.

I.70. ***Nigerian Rural and Micro Finance Institution Building Programme [2006–2011; US$15m].*** With a view to both enhance access of the poor, women and farmers to financial services, and to contribute to the deepening of the rural financial infrastructure, IFAD is currently preparing for this capacity and institution building programme. The proposed project envisages four major areas for intervention: (a) supporting and strengthening the rural financial intermediaries to enable them provide rural financial services to clients in a sustainable manner; (b) supporting the CBN in its role to create and maintain a dynamic regulatory and supervisory framework for the growth of viable rural financial institutions; (c) supporting umbrella organisations of rural financial institutions to strengthen them in their capacity building, advisory and advocacy roles vis–à–vis their members; and (d) facilitating the creation of linkages between rural clients, financial institutions, input suppliers, food processors and exporters, business development services and donor–funded rural development programmes supporting on– and off–farm income–generating activities.

I.71. ***Promoting Improved Sustainable Microfinance Services (PRISMS) [2004–2007; US$5.1m].*** This USAID–funded programme has the objective to facilitate the provision of financial services to the underserved micro, small and medium entrepreneurs (MSME) sector. This is to be achieved through a series of private–private and public–private partnerships, including: (i) demonstration of successful and profitable engagement with the MSME sector to the Nigerian commercial banking industry via PRISMS' commercial banks partners; (ii) technical assistance and policy advice to CBN as well as capacity building; and (iii) collaboration with and coordination among other donor–supported interventions in the sector.

I.72. ***Rural Slaughter House Project (RSHP) [2004–2008; ₦706.9m].*** This project is expected to adopt the FAO Size II slaughter house design in providing one facility per state and FCT, which would result in a higher level of meat hygiene and reduce the risk of the public consuming contaminated and diseased meat and products. Slaughter slabs would also be constructed in each Local Government Area in the country.

I.73. ***Agricultural Market Support Services (AMSS) [2005–2008; ₦15.0bn].*** This project would aim to improve the quality and competitiveness of agricultural commodities by providing market support facilities. This would include the establishment of: (i) well–equipped produce grading centres; and (ii) systems for quality control and price assurance of commodities. The project is expected to contribute to increased farmer income and reduced poverty and would cover the entire country.

I.74. ***On–Farm/Rural Storage Project (OFRSP) [2005–2008; ₦475.28m].*** Following a successful pilot phase of development, construction and popularization of the small (1.0 tonne) to medium (5–10 tonne) capacity concrete silos, this project is aimed at reducing post harvest losses through improved on–farm/rural storage facilities. The project is expected to contribute to increased income of farmers and is to be executed nationwide.

<u>Livestock and Fisheries</u>

I.75. ***Cattle Breeding and Multiplication Project (CBMP) [2005–2010; ₦50.95m].*** Livestock development in the country is centred on raising the genetic standing of local breeds through selection and cross breeding with exotic stock. The project would strengthen the cattle breeding and multiplication centres at Funafuna (Niger State), Oshiri (Ebonyi State) and Jibiro (Adamawa State), with the aim to maximize the benefit of cross breeding and also to conserve the gene pool and to raise elite breeds of animals for sale to local farmers.

I.76. ***Small Ruminant Breeding and Multiplication Project (SRBMP) [2005–2010; ₦58.95m].*** The project would aim at improving the local breeds of small ruminants, especially goats and sheep, through selection and multiplication. This will make it possible to have a relief source of improved stock of breeding sheep and goats for livestock farmers. Balani and Oado sheep breeds in Katsina State, Sokoto Red Goat in Zamfara State and the West African Dwarf goat in Oyo State are being reared for this purpose.

I.77. ***Animal Vaccine Production and Veterinary Drug Manufacture (AVPVDM) [2005–2010; ₦1.4bn].*** The objective of this project is to upgrade the facilities in the National Veterinary Research

Institute, Vom, Plateau State, to raise the present level of vaccine production and veterinary drug manufacture to cater for West Africa's sub–regional needs. Currently, a total of 20 vaccines, comprising 11 bacterial and 9 viral vaccines are being produced. The veterinary drugs include sera and biologicals. Because it is a profitable and viable venture, it is expected to be privatised or run as a joint venture with private sector in due course.

I.78. ***Aquaculture and Integrated Fish Farming Project (AIFFP) [2004–2009; ₦105m].*** This project is intended to boost local fish production through improved fish–farming and fish culture practices, and the rehabilitation of community–based fish farms. The project focuses on the many privately–owned and government–owned fish farms in flood plains, fadamas, lakes, rivers, and other inland water bodies. These water bodies are suitable for raising table–size fish at homestead and commercial levels. The project is to address the identified constraints of inadequate human and technical capacities, insufficient production and supply of viable fish seeds (fingerlings), poor linkages between producers and consumers (fish farmers) of fish seeds, low quality fish feeds, etc. The components of the nationwide project include rehabilitation of Aquaculture Technology Transfer Centres, rehabilitation of community–based fish farms, and implementation of various fisheries development programmes for major indigenous fish species. In the light of recent Government Policy pronouncements, in future this project would focus on enabling the private sector to undertake the activities and not on rehabilitation of fish farms or community or homestead fish ponds by government. The project would address the identified constraints by creating viable linkages between suppliers and fish farmers. Private sector would be supplying inputs and government would be assisting with extension and field support as well as monitoring and evaluation of implementation.

I.79. ***Fisheries Terminals Development Project (FTDP) [2004–2006; ₦610m].*** This project is intended to provide shore–based facilities for sea–going fishing vessels including trawlers, medium–sized fishing vessels, and boats for artisanal/small–scale fishing. These provisions include ice flakes, fuel, lubricating oil, potable water, vessel repair facilities, fish handling, processing and storage facilities. There are three existing Coastal Fishery Terminals in need of rehabilitation as they deteriorated over the years due to lack of maintenance. Installed plants and equipment will be repaired/replaced, while piers/jetties (quay walls) will be rehabilitated. The Presidential Forum on Fisheries and Aquaculture emphasised the need to form a public/private partnership for improving the management and ensuring the sustainability of these terminals. Also, an assessment of existing stock of tunas and other deep–sea fishery resources of commercial importance will be carried out in the Gulf of Guinea, off the coastal waters of Nigeria.

I.80. ***African Regional Aquaculture Centre (ARAC).*** The project aims to reactivate ARAC for the training of senior personnel from Sub–Saharan African (SSA) countries in aquaculture research and development, and aquaculture information services. This proposed intervention is expected to restore the centre to its previous status as a centre of excellence for regional personnel development. The project components include construction of fish and shrimp hatcheries, a water re–circulation system for intensive fish production, nursery ponds, brooder ponds, fish feed mills, a biotechnology/genetic laboratory, classrooms, office/staff/student buildings and research laboratory complex. ARAC's fishponds have recently been confirmed to have been poorly sited on sandy soils requiring constant pumping to maintain the ponds and, therefore, require considerable investment. The fish ponds do not retain water and the pumped water could be subjected to pollution. Consequently, it has been difficult to initiate self–sustaining activities such as the production/supply of fingerlings and fish feed to support private fish farmers. If the larger objectives of ARAC as the regional training centre for SSA countries are to be achieved, there will be need to relocate the fish ponds to a more suitable area.

Input Supply

I.81. ***Fish Seed Industry Development Project (FSIDP) [2004–2010; ₦36.5m].*** The project is intended to increase the production and the distribution of genetically improved and fast–growing fish broodstock and fingerlings. The local capacity for broodstock and fingerling production will be enhanced, while private sector will be facilitated to build modern and bigger hatcheries. The project is expected to increase the production/availability of viable and fast–growing fingerlings in order to stock existing fish ponds, cages, pens, and other depleted water bodies. The project includes support to the private sector for infrastructure rehabilitation of viable existing government hatchery complexes. The management of the complexes would be by the private sector, while government would strengthen the extension delivery system for the fish seed industry.

I.82. ***Crop Seed Industry Development Programme.*** The rationale for this programme is the desire to meet the ever increasing need of farmers for high quality, disease resistant improved seeds to raise their productivity and output. Through this programme, availability and access to these improved seeds will be enhanced.

- *Foundation Seed Multiplication Programme (FSMP) [2004–2007; US$4.5m].* The Federal Government, through the National Seed Service, produces and supplies foundation seeds using outgrowers. This is an ongoing programme for meeting the needs of farmers and is linked to the initiatives of the National Accelerated Industrial Crop Production Project (NAICPP). Agricultural activities are constrained by inadequate availability of certified seeds, especially those with wide adaptability for the farming systems and hence this project will rapidly multiply and distribute to farmers newly released, high–yielding and standardized quality seeds of cereals and legumes developed by National and International Agricultural Research Institutes, as well as develop National Strategic Seed Reserves. The project spans the six agro–ecological zones of the country. Main activities include production of foundation seeds of major arable crops and legumes, construction of storage facilities and training of seed producers.

- *National Seed Quality Project (NSQP) [2002–2007; US$1.24m].* It is the statutory responsibility of the Federal Government to ensure high quality of traded seeds. The project's objectives are to strengthen seed quality assessment schemes in general, to secure the quality of seed supply to farmers and to facilitate seed exports to neighbouring countries. It represents a tripartite arrangement between government, seed producers and users/farmers and is expected to guarantee availability of quality seeds and to prevent the use of substandard seeds by farmers. The project covers all states, including the FCT. Main activities include provision of vital equipment for seed testing, seed health screening, genetically modified seed detection and improvement of technical capacity of staff through training.

- *Community Seed Development Project (CSDP) [2004–2007; US$2.5m].* In this project, the Federal Government, through the National Seed Service (NSS), provides the improved seeds and controls the seed quality. The State Governments, through the ADPs, provide the complementary extension services. Seed producers and sellers operate through community–based organizations that disseminate information on the advantages of improved seeds to the rural farmers. Because the number of organized private seed enterprises is inadequate to meet the ever–increasing seed requirements of farmers, this project aims to improve the availability of, and access by farmers to, improved, high quality seeds in rural areas. All 774 Local Government Areas are involved, and the target groups are smallholder farmers. The main activities include provision of foundation seeds, agro–inputs, basic seed conditioning and clearing equipment as well as training and workshops for extension personnel.

Marketing Support

I.83. ***Market Information System (MIS) [2005–2007; ₦824.64m].*** This project would be aimed at reducing the problems associated with agricultural produce marketing through the establishment of a functional market information system. Through this project up–to–date market information such as prices, commodity availability, transportation situations and sources of demand would be made available. This would facilitate marketing, result in remunerative prices, increase income, generate employment and reduce poverty. Coverage is nationwide and the project is expected to be extended beyond 2007.

I.84. ***Multi–commodity Development and Marketing Companies (MCDMC) [2005–2007; ₦1.5bn].*** This intervention involves the establishment of three multi–commodity and marketing companies namely: Arable Crops Development and Marketing Company; Tree Crops Development and Marketing Company; and Livestock and Fisheries Development and Marketing Company. The aim is to minimize the bottlenecks associated with agricultural produce marketing by establishing production, processing and storage centres. The companies would be set up in the state/zones where the respective commodities are produced. The three companies have been incorporated as limited liability companies, and current efforts are geared towards raising the government’s 40 percent equity share of ₦600m for the establishment of the companies. They will be private sector managed and driven, while government equity investment will be privatized within five years of take–off.

I.85. ***Export Promotion Village Project (EPVP) [2003–2010; ₦300m].*** This project aims at expanding exports; stimulating rural development by ensuring a stable and fair price market; upgrading entrepreneurship, productivity and quality consciousness among rural producers; and improving the living conditions in the villages through employment opportunities and income generation. The project is expected to result in the development of viable and commercially–oriented village institutions capable of mobilising the productive capacities of small producers and building a new supply source of exportable products. Village institutions will be linked with established exporters, while development of supplies will be matched by development of the market. One EPV per geopolitical zone would be established at an estimated cost of ₦50m per EPV. The ongoing pilot phase of the establishment of EPVs has shown promising results and an expansion phase is proposed for this project.

(iv) Lessons Learnt

I.86. ***Project planning and design.*** Many projects in the past were planned without active participation of the target beneficiaries, such as the local communities, producer organisations, local councils, NGOs and the private sector in the project development process. The result was beneficiary alienation as, more often than not, the priorities of the planners were at variance with those of the beneficiaries, leading to very limited accruable benefits. Technologies, which respond to the priority needs of beneficiary communities to complement existing local practices and which yield visible short–term benefits, were often missing. The total effects of these weaknesses were minimal commitment by stakeholders, project abandonment, insecurity of project assets, sabotage and lack of ownership by the project beneficiaries. The way out will be institutionalising full stakeholder participation in project identification, design, appraisal, implementation, monitoring, evaluation and impact assessment, including constraints analysis.

I.87. ***Project implementation.*** Inordinate delays were usually experienced in project implementation, especially with respect to project take–off, provision of project inputs and avoidable extensions of project life. Wider consultations involving the project planners, implementers, beneficiaries and other stakeholders in project design should reduce delays and implementation failures arising from limited knowledge of the project and improve ownership by all stakeholders.

I.88. ***Implementation arrangements.*** Organisational and management structures for the implementation of most projects either did not take cognizance of, or were improperly aligned with, existing institutions. This often led to suspicions, role conflicts and niche protection, duplication of functions and waste of scarce resources. Involvement of all stakeholders in the project design is likely to reduce such shortcomings.

I.89. ***Project sustainability.*** The above factors have hampered the sustainability of the impacts of most projects. Even when projects were successfully implemented, most of the processes initiated by the projects and related activities usually discontinued once the external assistance ended. This was mainly due to instability in government policies and priorities, staff transfers and rationalisation, inadequate staff remuneration and weak ownership by beneficiaries. A typical example is the current difficulty being experienced in sustaining the acclaimed success of the ADP extension delivery system since the closure of the World Bank loan funding.

I.90. ***Inputs availability and product market.*** Weak linkage between production and marketing was observed in many of the projects implemented in the past. For instance, the Fadama I Project helped farmers to increase output without provision for storage, processing and marketing of the produce. Also, while the extension delivery component was successful, the input supply component, which was key to the adoption of the new technology being promoted, failed. Project design and implementation should address all issues relating to the produce’s value chain, from the input market to the output market, if maximum benefits are to accrue to all stakeholders.

I.91. ***Shared and protected resources.*** Conflicts in the use of shared resources such as water, pastureland, access roads, agricultural land and forest reserves have adversely affected project implementation in many cases. Typical are the pastoralist/farmer conflicts, desecration of wildlife sanctuaries, farmer encroachment on forest reserves, hunter invasion of national parks and livestock traversing highways. The adoption of a participatory planning process involving all stakeholders in dealing with shared resources, and better enlightenment on the rationale for establishing reserves and sanctuaries, would reduce areas of friction and lead to acceptable compromise solutions in the interest of all stakeholders. In addition, it would be crucial to have conflict resolution mechanisms in place, which resolve any conflicts at an early stage and foster cooperation.

I.92. ***Gender issues.*** Most agricultural projects in the past focused on technical issues. No due cognisance was taken of the fact that men and women often produce different crops and have different responsibilities in production, transportation, storage, processing and marketing of agricultural commodities. Access to inputs also differs, especially with regard to land and credit. Gender mainstreaming in project design and implementation should be emphasised in order to empower both male and female farmers.

II. CONSTRAINTS AND OPPORTUNITIES

II.1. Nigeria's land and natural resources, the qualified and skilled personnel and the developed agricultural research institutions all provide potential for substantial accelerated growth of agriculture and the rural sector. However, development of effective policies and programmes and their successful implementation, specifically at the State and lower administrative levels has not been satisfactory, due to several constraints resulting in poor growth in the sector and worsening of the poverty situation over the years. It has now been realized that unless the policies and programmes developed reflect the felt needs of the beneficiary groups, and are effectively implemented, pervasive poverty in rural areas cannot be reduced and development cannot be sustainable. The major constraints and opportunities of the sector are detailed below.

A. Weaknesses and Constraints

II.2. ***Macro–economic.*** Macro–economic policies and reforms have not resulted in satisfactory economic growth in the past, nor have they reduced year to year fluctuation leading to a great deal of uncertainties. With variations in growth rate, high rate of inflation, high interest rate and high indebtedness, Nigeria has not provided the right framework for investment in the agricultural sector. The trade policy regarding agricultural commodities has not been consistent, and often contradictory statements and actions of government have discouraged investors in the agricultural sector. A World Bank report[17] states, "While tariffs and non–tariff barriers (NTBs) created some incentives for agriculture, natural conditions and policies — especially those affecting irrigation and the exchange rate — influenced agriculture more dramatically. Changes in protection post–SAP (1994–98), compared to the earlier SAP period (1990–93), had different implications. Whereas import substitutes continued to be well protected, the exportable received low protection as well as taxation. Such policies, while promoting food imports, stifled exports, and worsened the trade balance with minimal policy effects". Only in recent years, government has issued a number of policies, which if properly implemented, would help to revive the agricultural sector.

II.3. ***Productivity.*** An increase in agricultural production has come about mostly from area expansion rather than productivity increase. In a country where only 0.5 percent of the cultivated arable land is irrigated, dependence of farmers on erratic and highly fluctuating rainfall has resulted in a low–input/low–output scenario, with the traditional cultivation method being the predominant mode. Nigeria's fertilizer consumption at 7 kg/ha is one of the lowest in SSA. Watershed development, which could substantially improve soil moisture retention capacity and arrest soil degradation, is practiced only in very limited areas, and has not yet resulted in any measurable impact on productivity. Cereal output is a mere 1.5 tonnes per hectare in a world situation where 5.0 tonnes per hectare is readily obtainable. Local dairy cows produce about 1,000 litres per lactation, while exotic breeds produce over 5,000 litres per lactation. The best performance of local broilers is 1.0 kg market weight in eight weeks as compared to over 2.0 kg in six weeks for improved breeds. Low productivity results in poverty of smallholders, who are forced into subsistence farming, as their annual output of crops hardly meets the consumption needs of the families for more than two–thirds of a year.

II.4. ***Natural resource degradation.*** Land degradation is one of the most serious problems affecting the agricultural and rural sector. The three major aspects relate to: (i) soil degradation that affects about 50 million people with an annual cost estimated in excess of US$3.0bn; (ii) water

[17] An Interim Strategy Update for The Federal Republic of Nigeria. February 2002. World Bank Report No. 23633 – UNI.

contamination affecting 40 million people estimated at US$1bn per year; and (iii) large–scale deforestation that affects 50 million people and is estimated to cost US$570m annually[18].

II.5. ***Infrastructure.*** The rural areas in Nigeria have suffered from urban bias in respect of basic infrastructure, such as passable roads, electricity, safe drinking water supply for humans and animals, schools, health facilities, markets and telecommunications. In the absence or inadequacy of such infrastructure facilities, costs of inputs, production, rural transport and storage have been high, adversely affecting adoption of modern technology to enhance productivity and returns on investment by farmers, specifically the smallholders. Due to the low population density in many areas, the cost of providing access to rural roads, markets, other infrastructure and services in these areas is very high.

II.6. ***High cost of agricultural inputs.*** The depreciation of the Naira from ₦122/US$1 in 2002 to ₦132 in 2004, an increased rate of inflation from 12.9 percent in 2002 to 17.0 percent in 2004, and increasing costs of transport as a result of rising fuel costs, have led to an increase in agricultural input costs, especially fertilizer, from an average of ₦1,200/50kg bag in 2002 to ₦1,800 in 2004[19]. The situation was aggravated by the inability of government to import sufficient quantities of fertilizer and the poorly implemented subsidy on fertilizers. Animal production inputs have similarly been affected. The cost of investment on machinery, hand tools, water pumps and other production items have also gone up considerably, while farm–gate prices of commodities remained low. The poor availability of institutional credit and its high cost in an inflationary economy have resulted in farmers deciding to minimize risk through low investment in inputs, which negatively affects productivity.

II.7. ***Financial resources.*** Although a lot of political commitment has been demonstrated at the level of policy formulation and strategy development, this has not been matched by flow of public resources to the agricultural and rural development sector[20.] Most departments in the Ministries of Environment, Water Resources, Agriculture and Rural Development did not receive any funding for capital expenditure (investment) during the last three years. This shortfall in public investment was not matched by increased private investment in the sector. In addition, financial institutional structures in rural areas are weak. Although no estimate is available regarding the extent to which farmers' credit requirement are met from institutional sources, it is believed that not more than 2–3 percent of estimated credit is provided by them, including the microfinance initiatives. There is a huge gap between the demand and supply of rural and agricultural credit, and micro–credit alone will not be sufficient to meet agricultural investment requirements to achieve a 6–7 percent growth being targeted by the government in coming years. The desired investments in irrigation, tools and machinery, transport, storage, processing and marketing would require well–managed credit systems that are presently missing in most rural areas.

II.8. ***Marketing.*** Due to inadequate rural infrastructure, in particular transport and market infrastructure, market transaction costs are high. As a result, farmers are facing high costs of inputs and reduced prices for their produce. Limited storage and processing capacity leads to high losses, reduced quality, gluts and consequently depressed prices. Rural production areas and primary markets are often poorly connected to larger markets in urban areas. The high handling and transportation costs significantly reduce the competitiveness of the farm produce from rural areas. Developing markets, collection centres and processing and storage facilities for crops, livestock and fisheries products would be a precondition for increased income from agriculture.

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18 Source: World Bank Report No. 23633 – UNI.

19 Source: FMARD Market Survey 2004.

20 Annual budget allocation to FMARD, FME and FMWR (irrigation and drainage only) combined averaged 5.2% during the 1999–2003 period (see para. IV.5.).

II.9. ***Weak institutional capacity.*** There are presently over 20 public institutions involved in supporting agriculture and rural development in the country. Some of these institutions were set up to respond to specific development needs and services which could have been handled by existing institutions. The multiplicity of institutions, duplicity in mandates, unclear responsibilities and often political rather than technical considerations resulted in numerous overlaps of activities, poor coordination, weak implementation capacities and consequently limited effectiveness of public sector interventions in agriculture and rural development.. In addition, low staff motivation, lack of transparency in operations, poor accountability and the absence of a proper staff performance evaluation system, have compounded the problem of weak institutional capacity.

II.10. ***Policy inconsistencies and weak coordination.*** Policy disharmony, a consequence of inadequate consultation in the policy formulation process, has often led to a lack of synergy between macro–economic and agriculture sector policies. The post SAP economic deregulation, market liberalization and floating exchange rate resulted in increased costs of production through high cost of imports and increased cost of credit. Local agricultural production became unprofitable because of the influx of cheap imports from subsided advanced economies. The wild policy swings from total bans to zero duty, such as was witnessed for wheat in 1988, and the converse for rice in 2004, shows the instability and inconsistency policy can be subjected to. The existing institutional arrangements by the Federal Government for cooperation among various departments and ministries engaged in activities related to agriculture have not been very effective for coordination of policies, strategies and programmes. The coordination mechanism in the states and at local level is also very weak.

B. Strengths and Opportunities

II.11. Investors will only put their money into enterprises, which are technically feasible and profitable. Potential areas of investment in Nigeria's agriculture include input production and supply, staple food crop production, industrial crops production, livestock production, fish production, forestry, processing, storage, marketing, agro–industry and manufacturing, export and agricultural support services. A recent survey[21] reveals that foreign investors are attracted to activities/enterprises that are capital intensive, and those that add value to primary output such as storage and processing into intermediate or final (finished) products, as well as marketing/distribution through domestic and/or export trade (e.g. establishment of the fertilizer manufacturing industry, construction of grain elevators and marketing of agro–chemicals). Primary production or upstream enterprises/activities, crop planting and harvesting, from which primary commodities emerge (e.g. maize, cassava and cocoa production), and agro–services, are more attractive to local investors. The three main incentives for domestic investment are: (i) high demand; (ii) high rate of return; and (iii) availability of raw materials. There is high potential for domestic and foreign investment in different agricultural and agro–allied enterprises in the different zones of Nigeria, in view of availability of abundant resources and raw materials and the opportunity to earn good returns on investment. Therefore, it would be crucial to remove or significantly reduce the identified constraints to investment in order to stimulate the flow of investment into the agricultural and rural development sector.

II.12. ***Investment and comparative advantage.*** The agricultural commodities in which Nigeria has a comparative advantage in the domestic, regional or world market are divided into two groups. The first comprises unprocessed commodities, which include palm produce, cassava, cocoa, yam, cocoyam, rubber, kola, timber, crayfish and shrimps in the southern zones. The north–east and the north–west have a comparative advantage in cotton, gum Arabic, cereals, legumes and vegetables, notably tomato,

[21] USAID. Agriculture in Nigeria. Identifying Opportunities for Increased Commercialisation and Investment. November 2003.

pepper and onion. The north–central zone, being a transitional zone between the north and the south, has a comparative advantage in production of soyabean, yam, cassava, groundnut, maize, citrus and cashew. The second group that has a comparative advantage includes the processed products from primary commodities produced in the various zones. Thus, in the north, orange juice, vegetable oil, soybean oil and meal, vegetables, cotton lint, textile, hides and skin and in the south gari, fufu, elubo, cassava chips, yam flour, rubber products, plantain chips, cocoa powder, chocolate and timber, have a comparative advantage in the region. However, since the comparative advantage is a dynamic concept, further commodity–specific studies need to be initiated, in order to determine the extent of these advantages to the prospective producers and processors.

C. Conclusion

II.13. With commitment and sincerity in the implementation of programmes on privatization, deregulation of the downstream activities of the petroleum industry, institutional reforms, and with appropriate tariffication on importation of some agricultural commodities, which the country can produce with profit, the Nigerian economy has a strong potential for growth. Further, if Nigeria can implement successfully various programmes related to NEEDS, and adequately support the implementation of existing agricultural programmes, the agriculture sector will have adequate capacity to accelerate agricultural growth and thereby contribute to reducing rural poverty and regional disparity.

III. INVESTMENT PROGRAMME OUTLINE

A. Priority Setting

III.1. The agricultural investment priority for Nigeria derives itself from: (i) the identified needs of the sector to ensure national food self sufficiency and food security for the widely dispersed rural population in poverty; (ii) the opportunities and the comparative advantage it has for agricultural and related activities, both within the economy and in the regional context; and (iii) the constraints that should be removed or minimized to accelerate agricultural production and rural income growth and employment within a medium–term framework. The proposed priority programmes are aimed at strengthening public and private institutions at local level, so that with participatory management of resources, rural income, consumption and employment will be increased, and vulnerable groups, landless labourers, women farmers, smallholders, and rural artisans will have the opportunity to benefit from such programmes.

III.2. Though endowed with abundant natural resources for development, rural Nigeria is inhabited mainly by the poor, with large segments of its population generally bypassed by the benefits of development. Given the role agriculture plays in stimulating the process of broad–based economic growth, it is imperative that proper attention be given to agricultural production, processing, marketing and the development of small–scale agro–business. In spite of the various programmes and projects implemented by past Nigerian Governments, aimed at promoting agriculture and rural development, agricultural productivity has remained very low. The average agricultural growth rate of 5 percent in recent years, even though higher than the population (2.8 percent) and GDP (3.4 percent) growth rates, is still considered unsatisfactory. The required growth rate for the sector is projected at 10 percent if the target growth rate of 7 percent set for the economy by government is to be achieved.

III.3. Nigeria’s priority areas of investment in agriculture and rural development are predicated on: (i) the importance of the commodity or activity to national food supply and food security, poverty alleviation, income generation and general well–being of the rural populace; (ii) the extent to which demand for a specific commodity is being met from local production; (iii) the foreign exchange expenditure on the importation of the commodity or its substitute; (iv) the potential of the commodity or activity in generating foreign exchange for the nation; (v) the comparative advantage for the production of the commodity; and (vi) the linkage to, or catalytic effect on, agricultural production generally. Through the earlier enumerated policy reforms, including synchronising macro–economic policies with agricultural policy, confidence in the economy is being engendered and this should encourage medium and long–term investments by the private sector.

III.4. The priority areas presented below[22] provide the basis for the preliminary identification of programmes/projects in Section III.C. The validation and prioritisation of the proposed programmes and the selection of projects took place at the zonal and national stakeholder workshops[23].

(i) Sustainable Development and Management of Land and Water Resources (CAADP Pillar 1)

III.5. The spatial and temporal variability of rainfall in Nigeria makes a compelling case for the development and judicious management of the available water resources for optimal benefits. Nigeria is endowed with a large volume of water resources, estimated at about 250 million m^3, made up of 190 million m^3 of surface water, and the balance in the form of groundwater. Total irrigation potential is estimated to be between 2 and 2.5 million ha, while only around 10 percent of this potential is currently being exploited (220,000 ha). As a result, water is still a limiting factor to agriculture in much of the country, especially in the semi–arid and dry sub–humid agro–ecological zones that constitute 31 percent of the nations land mass. Water stress for crops grown under inadequate and erratic rainfall is a major constraint, which has limited productivity of crops and livestock over the years. The increase in crop production has mostly come about from increasing crop area. Irrigation and rainwater management are therefore a precondition for agricultural intensification.

III.6. The degradation of the soil through over–cultivation, cultivation of marginal lands and massive land clearing with heavy equipment in high erosion–prone fragile soils, is most acute in high population density areas of the North Central, South Eastern, South Western and South–Southern geo–political zones of the country. Since such soil degradation is not backed by adequate recharge with appropriate soil nutrients, the capacity of the rural lands for food and agricultural production is severely limited. Soil management is therefore crucial for sustainable agricultural production.

- ***Irrigation.*** Currently, around 36,000 ha of land are cultivated under formal public irrigation schemes. An estimated 55,000 ha are under formal fadama irrigation (resulting from the World Bank supported Fadama I project) and 90,000 ha under informal fadama irrigation and village/individual developed areas. In addition, it is estimated that areas under uncontrolled flood recession account for another 160,000 ha. Total commercial private sector irrigation is estimated to cover 38,000 ha. The high cost of developing the downstream infrastructure of large dams and poor maintenance of large public schemes have compelled a shift to the construction of small earth dams and the exploitation of fadamas as an inexpensive system of irrigated agriculture. About 2 million hectares of fadamas are available, out of which about 800,000 ha are under cultivation. The development of small–scale, farmer–owned and operated irrigation, mainly in fadama areas, over the last 15 years under ADPs and other programmes has been quite successful.

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22 The order in which the priority areas are presented does not imply any ranking.
23 See Annex 4.

Future interventions should be based on theses experiences, focusing on low–cost technologies and taking into account the needs of the local communities by involving them in programme planning and management from the outset.

- ***Land Improvement.*** Large areas in all agro–ecological zones will need improvement, if the agricultural productivity is to increase. Specific interventions will be required to conserve soil, control erosion and halt desertification. Good agricultural practices, such as the use of organic fertilizers, judicious land clearing and cultivation systems, contour farming, alley cropping, sylvo–pastoralism and agro–forestry, will substantially reduce land degradation and improve soil fertility. As the current use of fertilizer is usually not based on soil deficiency status or plant nutrient requirements, but rather on general prescriptions, a national soil classification and mapping system should be introduced.

(ii) Improvement of Rural Infrastructure and Market Access (CAADP Pillar 2)

III.7. Government's past efforts to provide infrastructure for rural development through the ADPs, the Directorate of Food, Roads and Rural Infrastructure (DFRRI), the National Agricultural Land Development Authority (NALDA) and the River Basins and Rural Development Authorities (RBRDAs), have not delivered satisfactory results due to poor and uncoordinated implementation. The availability of potable water is still very limited. Electricity is in very short supply in rural areas, and modern communication facilities are rare. Only about 25 percent of the rural villages are located on tarred roads, which are linked to major (urban) centres. As a result of limited government's investment in rural infrastructure such as roads, irrigation facilities, water supply, rural electrification, and telecommunication, growth has remained low. Investments in infrastructure should be planned in a holistic way, including education, health, potable water supply, electricity and non–conventional sources of energy, irrigation, rural roads and markets, if the quality of life and economic development in rural areas is to be improved.

III.8. To overcome the difficulties of the past, and based on the lessons learnt, the thrust of current policy on infrastructure is that the public sector will continue to finance infrastructure development as part of its poverty reduction strategy. However, the sheer magnitude and complexity of the rural infrastructure problem requires action by all stakeholders. Therefore, state monopoly in the provision of some infrastructure should be removed to encourage competition, reduce corruption, enhance efficiency, improve quality control, reduce prices and improve the service delivery system in rural areas. NGOs and community participation should also be encouraged to improve cost sharing over time in implementation and maintenance of rural infrastructure projects, with special attention on roads, transport, communications, energy, markets, commodity storage, water and sanitation.

- ***Rural access and mobility.*** The development of access roads and improved mobility in rural areas is considered a major input in the strive to improve the living standards of the rural communities. To achieve this objective, all–season access roads to the communities, farms and markets should be constructed by government, intermediate means of transport need to be promoted, the existing poor rural roads should be rehabilitated, properly drained and hard surfaced, while the capacity for the regular maintenance of the roads and transport facilities, especially by the beneficiary communities, should be strengthened.

- ***Market infrastructure.*** Most rural markets are essentially open spaces with make–shift sheds and limited accessibility by vehicles. Therefore, basic facilities such as concrete aprons, open and covered stalls, water supply and sanitation, communications, fencing as well as storage facilities for smallholders would be required. The provision of improved market infrastructure with easy access to rural roads, and the promotion of improved on–farm/rural storage facilities would be essential for reducing high marketing transaction costs and losses of perishable commodities. Market infrastructure development would need to be complemented by programmes to improve: (i) agricultural marketing services; (ii) availability of market information; (iii) access to inputs, including credit; and (iv) capacity building.

- ***Development of alternative energy sources.*** Most rural areas do not have assured and steady power supply from the national electricity grid. Therefore, it would be crucial to encourage investment in the already successfully developed and tested power supply from solar energy, biogas, efficient fuelwood stoves, wind–powered and small hydro–powered generating systems.

(iii) Improvement of Household Food Security and Income (links to CAADP Pillars 1, 3, 4 and 5)

III.9. Although Nigeria is close to meeting most of its national food needs, and there is no widespread problem of chronic malnutrition, the problem of food insecurity at some times of the year, especially among rural households, is prevalent in many areas across the country. The extent and nature of food insecurity and malnutrition, particularly in the Northern Savannah, was first identified by a participatory rural appraisal study on household food security and nutrition in Kano State conducted by FAO[24] and confirmed by the Nigeria Food Consumption and Nutrition Survey 2001[25]. A strong case was therefore made for increasing small farmer production of commodities, especially those in which Nigeria has a comparative advantage in meeting national demand, and for export, such as cassava, yam, groundnut, vegetable oil and ginger. While the expansion of farm output, processing and agro–based trade are crucial for raising incomes and improving rural livelihoods, these interventions mainly address the availability dimension of food security. If poverty and hunger among the rural poor is to be reduced, they need to be complemented by specific interventions geared to improving the access to, and the utilization of, food by the most vulnerable groups, such as nutritional education and social initiatives to facilitate access to food by the neediest,

- ***Productivity improvements.*** Interventions to bring about the productivity gains that are required to achieve food security and income increases would need to focus on promoting, in a participatory way: (i) upgrading appropriate technology for water control; (ii) high–yielding seeds, and improved planting and breeding material; (iii) farm mechanisation; and (iv) improved management practices for crop, livestock and fishery production.

- ***Agricultural diversification*** should be promoted, which would include the production of high value crops such as vegetables and fruits and other tree crops, as well as different livestock and fisheries products, linked to ***capacity building in processing and marketing skills***. While productivity improvements and agricultural diversification will be crucial for enhancing food security and income, they need to be complemented by interventions outlined under the other priority areas, as well as appropriate financial services programmes.

24 KNSG/FAO/TCP/NIR/4555(T): Participatory rural appraisal report on household food security and nutrition in Kano State. 1996.

25 FGN/IITA/USAID/USDA/UNICEF. 2003. Nigeria Food Consumption and Nutrition Survey 2001.

(iv) Fisheries and Aquaculture Development (links to CAADP Pillars 1, 3, 4 and 5)

III.10. The fisheries sub–sector is substantially contributing to the move to attaining food self–sufficiency in Nigeria, especially with regard to the crucial animal protein requirements. It accounts for 5.4 percent of the 40 percent contribution of agriculture to GDP (2002). The resources available include a continental shelf area of about 38,000 km^2, Exclusive Economic Zone (EEZ) of 210,000 km^2 and an inland water surface area of 14 million hectares. These resources presently yield around one million tonnes per annum. Against an annual demand of 1.5 million tonnes, the importation of about 560,000 tonnes, valued at US$400m annually, has become the bridge gap measure. The issue, therefore, is how to best harness the rich fisheries resources in the country, develop the enormous aquaculture potential, stock the large inland water bodies and thus make local fisheries production competitive.

III.11. The interventions should be directed at maximising existing potentials, as well as opening up new resources. Special attention should be given to aquaculture, which represents one of the most efficient husbandry practices for animal protein production and one of the fastest growing agricultural production systems in the world. Various levels of production would need to be targeted depending on the system adopted:

- Subsistence/homestead ponds including integrated poultry, fish and rice–fish culture;
- Integrated artisanal fisheries development including culture–based fisheries and inland water management;
- Commercial medium–scale fish farms;
- Intensive water re–circulating system; and
- Aquaculture inputs development including broodstock, fingerlings and fish feed.

III.12. Efficient management of the coastal fisheries resources would substantially increase the quality and value of the shrimp catch. The management of marine fish resources should be enhanced by an effective monitoring, control and surveillance system. There is potential for targeting tuna, offshore mesopelagia and demersal fish resources if the required investments are made in the facilities in the fisheries terminals, appropriate vessels and gear to make their exploitation economically viable.

(v) Livestock Development (links to CAADP Pillars 3,4 and 5)

III.13. Livestock plays a very important role in the nation’s economy contributing between 5-6 percent of the GDP and 15–20 percent of the agricultural GDP annually over the past decade. The estimated livestock population in 2001 included: 15.60 million cattle, 28.69 million sheep, 45.26 million goats, 5.25 million pigs, 118.59 million poultry and 1 million horses, camels and donkeys. The livestock sub–sector is dominated by traditional systems of production, processing and marketing. About 85 percent of the cattle herd, sheep and goats are reared by transhumant pastoralists, and most traditional livestock production systems are part of the mixed crop/livestock farming systems. Livestock production is a complementary activity to crop farming, and livestock farmers take advantage of any land, labour or feed resources which have no alternative use.

III.14. Nigeria has always been a net importer of livestock and livestock products, and because of the vagaries of climate and vegetation, supply of livestock and food of animal origin have generally been unstable. A demand/supply gap exists in all classes of livestock, meat and milk. The national supply therefore comprises domestic production, traded livestock from neighbouring countries and imported meat and dairy products.

III.15. Interventions should focus on making the livestock production fully private sector driven, with the aim to achieve a 50 percent increase in animal protein consumption of Nigerians[26]. They should also address the possibility of entering the export market with livestock products in the medium–term. Specific areas for attention include:

- Accelerated cattle production through genetic improvement of indigenous stock, improved feeding resources and land grazing reserves development;
- Sheep and goat production through genetic improvement and disease control;
- Resuscitation of poultry production to pre–SAP level by facilitating the private sector to fill the unutilized installed capacities of hatcheries, feedmills and breeding units, and the commercialisation of Shika Brown[27];
- Expansion of the National Veterinary Research Institute, Vom, in Plateau State, for vaccine production and veterinary drug manufacture through initial public/private sector joint venture arrangement before full privatisation in due course; and
- Development of abattoirs and slaughter houses and processing, storage, packaging and marketing facilities.

B. Criteria for Selection of Programmes/Projects

III.16. Potential programmes/projects under the NMTIP will address at least one of the above–mentioned priority areas, thereby supporting the government's strategy as outlined in the NEEDS, NAP and NIRDS, and contributing to the pillars of CAADP. The proposed projects presented below have been selected on the basis of the following criteria:

- They have a multi–sectoral impact on accelerated growth and poverty reduction through agriculture and rural development;
- They address basic constraints of the sector;
- They promote food security and poverty reduction; and
- Their implementation is largely achievable within the plan period.

III.17. Additional key selection criteria are listed below, which have been discussed and further elaborated during validation and prioritization of projects at the stakeholder workshops.

III.18. ***Comparative advantage.*** Resource allocations to the sector need to target areas in which Nigeria has a comparative advantage in the context of regional or global competitors. This would

[26] From an average of 10 grams/capita/day in 2004 to 15 grams/capita/day.
[27] The local parent stock developed by the Nigerian Animal Products Research Institute, Shika, Zaria.

require to identify, for each of Nigeria's agro–ecological zones, agricultural products that are competitive in domestic, regional and world markets.

III.19. ***Technical feasibility*** of the activities and technologies promoted by a project will be a precondition for their adoption by the project's beneficiaries as well as for the project's sustainability. Examples of similar previous or ongoing projects, which have proved their technical viability, would be useful indicators. The development of new technologies should involve all relevant stakeholders, including producers, processors and researchers, amongst others.

III.20. ***Financial and economic viability.*** Although a detailed analysis of the financial and economic viability of a project will not be possible at this identification stage, a number of criteria will provide guidance as to whether the project idea should be pursued further. These will include a preliminary analysis of: (i) crop and farm enterprise budgets; (ii) investment costs per ha and per beneficiary, as compared to ongoing interventions; and (iii) estimated overall investment costs and returns (cost–benefit analysis).

III.21. ***Absorptive capacity.*** Project design must take into account the human and technical capacity of the institutions and communities involved in the project. This will be crucial not only for successful project implementation, but also for ensuring that the project outputs can be sustained once the support by the project has phased out.

III.22. ***Synergy with ongoing programmes.*** While it is a precondition for selection that the proposed projects do not duplicate and/or adversely affect ongoing interventions, areas of synergy with other projects should be actively sought, e.g. by identifying interventions that complement and strengthen the impact of other programmes.

C. Identification of Projects for Preparation

III.23. On the basis of the priority areas and selection criteria outlined above, and an analysis of government priorities and main development partners' areas of interest, a preliminary list of projects has been prepared. The project proposals were reviewed, further elaborated and prioritized at six zonal workshops in September 2004[28] and at a national stakeholder workshop in January 2005. (see Annex 4). The projects are listed in Table 1 below and include the following types: (i) new project proposals; (ii) projects presently under preparation, but for which additional funding is being sought; (iii) projects proposed as expansion phases of ongoing interventions; and (iv) ongoing projects, which suffer from funding constraints. A brief preliminary outline of each project is presented in Annex 3.

III.24. The National Council on Agriculture (NCA), at its annual meeting in March 2005, endorsed the findings from the stakeholder workshops and the preparation of the following three Bankable Investment Project Profiles (BIPPs) under the TCP agreement with FAO: (i) Rural Access and Mobility Project; (ii) National Programme for Food Security; and (iii) Cassava Production, Processing and Marketing Project. The three BIPPs are summarized below and presented in Volumes II, III and IV respectively. Furthermore, the NCA recommended that the Federal Government of Nigeria should fund the preparation of the following three additional BIPPs: (i) Production, Processing and Export of Rice Project; (ii) Integrated Aquaculture Development Project; and (iii) Increased Poultry Production Project.

[28] A total number of 20 projects were discussed at the six zonal stakeholder workshops held on 2 September 2004 and in an in–house workshop by FMARD, FMWR and NAIC on 18 October, 2004. The listed 16 projects presented below were ranked in at least one geo–political zone of the country as a priority.

III.25. ***BIPP 1: Rural Access and Mobility Project (RAMP).*** The proposed project is planned as the first five–year phase of a possible series of assistance to the implementation of the national rural transport policy in order to address the chronic constraints to rural development in Nigeria due to the inadequacies in the level of transport access and mobility available to rural dwellers. The project would be implemented in selected states in each of the six geo–political zones of Nigeria and would have the following components: ***(i) Capacity Building and Project Coordination:*** strengthen the coordination capacity of the FMARD Directorate of Rural Development (DRD) and the capacity of the State and Local Governments, relevant agencies and entrepreneurs and rural stakeholders to identify, design, formulate and implement interventions; ***(ii) Rehabilitation and Maintenance of Road Transport Infrastructure:*** rehabilitation and maintenance of critical and high priority links of the state rural road system to ensure access from the agricultural production zones to markets, improved access to social and economic services, and linkage of the local government and community road networks to the higher level road network; ***(iii) Rural Mobility Improvements:*** development of strategy and implementation of enhanced provision and use of public transport services including intermediate means of transport (IMT); and ***(iv) Promotion of Small and Medium Enterprise (SME) Development:*** advice through technical assistance and training and support to local stakeholders wanting to establish SMEs to provide various services within the rural transport sector.

III.26. ***BIPP 2: National Programme for Food Security (NPFS).*** The NPFS would be a five–year expansion phase of the ongoing National Special Programme for Food Security (NSPFS) with the objective to improve national food security and reduce poverty on an economically and environmental sustainable basis. Specific objectives would be to: (i) improve household food security and incomes through increase in productivity, diversification and sustainable use of natural resources; (ii) enhance food security of consumers through improved access to and availability of food and also increase income of producers through more efficient marketing; (iii) enhance farmers and consumers access to support services such as extension, credit nutrition and health education; and (iv) foster participation of the poorer section of the rural population in the development of the community. The present programme would be expanded from one to three sites per senatorial district, thereby covering 327 or about half of the LGCs in the country with a total of about 4 million farm households. The project would support the following components: ***(i) Site Development:*** establishment of 218 production/ demonstration sites in selected LGCs through provision of agricultural equipment, inputs and services to promote intensification and diversification of production and as well as agro–processing and on–farm storage; ***(ii) Site Support and LGA Outreach:*** improving critical rural services in the project area and facilitating access to these services by the farming community (agricultural inputs and commodity marketing; rural finance; strengthening research–extension–farmer–linkage; health and nutrition, and expansion of activities promoted under Site Development); ***(iii) Community Development:*** fostering community empowerment and group development and provision of funding for community development projects (e.g. small–scale rural infrastructure, micro–earth dams and community forestry); and ***(iv) Management Support:*** providing expertise and training as well as operational support for programme implementation.

III.27. ***BIPP 3: Cassava Production, Processing and Marketing Project.*** Under the overall development objective to diversify the economy and reduce dependence on oil revenue, the project would (i) substantially increase cassava production through the use of improved planting materials and better husbandry practices with a view to meeting the local feed needs and the requirements for industrial raw materials and exports; (ii) generate value added through promoting appropriate processing and industrial utilisation of cassava products; (iii) put in place an effective supply chain system which would link production with processing and markets. The five–year project would have the following components: ***(i) Production Support:*** Planting of an incremental area of one million ha with selected high–yielding Cassava Mosaic Virus resistant varieties. To this end, some 30,000 ha of planting material nurseries would be established across the participating 30 states and FCT. Small scale farmers, who presently account for 95 percent of total production, would be encouraged to form groups; ***(ii) Processing and Marketing:*** Promotion of a diversified processing approach and adoption, dissemination and marketing of locally developed processing equipment. Quality cassava–based products for local and export demand would be produced in integrated mills of various capacities, starting from 2 t/day. Establishment of a functional tuber collection and payment system for outgrowers through the provision of collection trucks with cranes and weighing equipment. Holding of trade fairs and trade promotions; ***(iii) Project Coordination and Management:*** Establishment of a three–tier coordination and M&E system; capacity building and implementation support for Federal, State and Local Government implementing agencies.

Table 1: Preliminary Identification of Projects

Priority area (*)	Project (*)	Status	CAADP Pillar (**)
Rural Infrastructure and Market Access	1) Rural Access and Mobility Project	Govt. pipeline, funding commitments by WB and ADB, further foreign assistance sought. Project preparation fund being finalised.	2
	2) Rural Water Supply and Sanitation Project	Government proposal.	2
	3) Rural Energy Project	Government proposal.	2
	4) Agricultural Marketing Support Services Project	Government pipeline.	2
	5) Rural Enterprises Development	Government Proposal.	2
Household Food Security and Income	6) National Programme for Food Security – Expansion Phase	Ongoing and Govt. pipeline, expansion phase being prepared, foreign assistance sought.	1,3,4,5
	7) Increased Cassava Production, Processing and Export	Government pipeline. Federal Executive Council (FEC) approved.	1,2,3
	8) Increased Production, Processing and Export of Rice	Government pipeline. FEC approved.	1,2,3
	9) Increased Vegetable Oil Production, Processing and Export	Ongoing (NAICPP) and Government pipeline.	1,2,3
Livestock Development	10) Increased Poultry Production	Government proposal.	3,4,5
	11) Transboundary Animal Disease & Pest Control	Ongoing. Expansion phase proposed.	4,5
	12) Animal Vaccine and Vet Drug Manufacture	Ongoing. Expansion phase proposed.	3,4,5
	13) Increased Monogastrics and Small Ruminants Production	Government proposal.	4,5
Fisheries and Aquaculture Development	14) Integrated Aquaculture Development	Ongoing. Expansion phase proposed.	3,4,5
	15) Culture Based fisheries – Stocking of Water Bodies	Ongoing. Funding constraints.	4,5
Land and Water Management	16) Community–Based Integrated Land Management For Sustainable Food Production	Ongoing. Funding constraints.	1,3

(*) The order in which the priority areas / projects are presented does not imply any ranking. (**) See *Preamble*.

IV. FINANCING GAP

IV.1. At the Maputo Summit of the African Union in July 2003, Heads of State and Government have pledged themselves to commit *"… allocating at least 10 percent of national budgetary resources for* [the] *implementation of* [CAADP] *… and sound policies for agricultural and rural development within five years"*. Although Nigeria is striving to reach this target, so far no formal decision to operationalize this declaration and integrate it into the annual or medium–term budgetary process has been taken at the government level. Increasing public investment would be basically geared to provide leverage for accelerating private investment in production, processing, marketing, storage, transport and export, and for efficient utilization of all investments, both public and private. It has been realized that the present public investment in the agriculture sector is low and must be increased in critical areas to provide adequate incentives to the private sector activities listed above. The increased public allocation should go to the priority areas identified in Section III that take into consideration the national priorities reflected in the New Agricultural Policy, and the National Policy for Integrated Rural Development, and the respective strategies including those under the NEEDS, which strongly link to the various CAADP pillars.

IV.2. However, it is important to keep in mind that increasing public expenditures alone will not be sufficient, as increased private investment and agricultural growth primarily depend on: (i) a conducive overall policy and institutional environment; (ii) the quality of the public expenditure programme; and (iii) the efficiency of public resource use and of public service delivery.

IV.3. The total public investment for agricultural and rural development includes expenditures on usual agricultural activities reflected in the budget of the FMARD (crop, livestock, fisheries, rural development), as well as the allocation made for other ministries for activities that aid agricultural production and agricultural GDP (irrigation and water resources, rural development, forestry and environment). For the purpose of this analysis, the following budgets have been included in the agriculture and rural development sector: (i) Federal Ministry of Agriculture and Rural Development; (ii) Federal Ministry of Environment; and (iii) Federal Ministry of Water Resources (irrigation and drainage only).

IV.4. While estimating Nigeria's budgetary allocation to agriculture and rural development, the country's federal structure needs to be taken into account. A complete analysis should therefore include allocations made by the governments in the states and the local governments. Although Federal Government sectoral allocations made in the past and for the current year are available, compilation of such data in respect of the States and Local Governments is still ongoing. However, a discussion with the responsible senior officials at the Federal Ministry of Agriculture indicated that, although there would be considerable variation in such allocation among the states, overall total allocation to agriculture and rural development for all the states taken together would mainly follow the same pattern as that of the Federal Government.

IV.5. The budget allocations to the agriculture and rural development sector as defined above, as a percentage of the total federal budget during the period 1999–2003, have varied between 3.0 and 8.1 (average 5.2). For the 2004, the allocation was 7.1 percent, with government projections in percentage terms increasing to 7.4 percent in 2006. The Federal Government's actual and projected total and sector budget allocations from 1999 to 2006 are presented in Table 2.

Table 2: Federal Budget Allocation to the Agriculture and Rural Development Sector from 1999 to 2006 (₦ billion)

Year	1999	2000	2001	2002	2003	2004	2005	2006
Total Federal Budget	271.04	624.80	948.44	743.91	885.84	889.16	933.62	989.64
% increase over previous year	n.a.	130.5	51.8	(21.6)	19.1	0.37	5.0	6.0
FMARD	9.44	16.70	18.99	8.02	14.13	18.98	19.74	20.53
FME	–	0.88	1.29	0.51	0.11	3.47	3.64*	3.82*
FMWR (Irrigation/Drainage)	2.39	1.26	35.94	51.40	27.38	40.78	44.86	49.35
Total FMARD, FME, FMWR (irrigation/drainage)	11.83	18.84	56.22	59.92	41.62	63.23	68.24	73.70
% of Total Federal Budget	4.4	3.0	5.9	8.1	4.7	7.1	7.3	7.4

Source: FMF. 2005–2006 are projections from the NEEDS document.
*For the Federal Ministry of Environment for 2005–2006, 5 percent increase is projected.

IV.6. Table 3 presents the budget for 2004 and the budgetary projections for the 2005–2010 period, and the financing gap in terms of resources to meet the 10 percent target by 2009. For the purpose of this analysis, the figures are expressed in US dollars at 2004 prices, and the following assumptions are made:

- Overall budget growth would increase from 0.37 percent per year in 2004 to 6 percent in 2006, as projected in the National Economic Empowerment and Development Strategy (NEEDS) and to an annual average of 7.25 percent from 2007 to 2010;
- Present sector budget projections are based on the NEEDS, assuming that the sector budget share would reach 7.4 percent in 2006 and, thereafter, would remain constant at 7.5 percent; and
- In order to reach the 10 percent target by 2009, the sector budget share would have to increase to 8 percent in 2007, and subsequently by one percent per year until 2009.

IV.7. The resulting annual additional resource requirement would vary from US$40.1m in 2005 to US$248m in 2010, totalling US$646.5m over the 2005–2010 period.

Table 3: Projections of Federal Budget Allocation to the Agriculture and Rural Development Sector 2004–2010 and Financing Gap

		2004	2005	2006	2007	2008	2009	2010
Current total public budget projections (*)	US$m	6,736.06	7,072.88	7,497.27	8,022.08	8,583.63	9,184.48	9,919.24
Increase over previous year	*%*	*0.37*	*5.0*	*6.0*	*7.0*	*7.0*	*7.0*	*8.0*
Projected allocation to agriculture and rural development (**)	%	7.1	7.3	7.4	7.5	7.5	7.5	7.5
	US$m	479.02	516.97	558.33	601.66	643.77	688.84	743.94
Increase over previous year	*%*	*51.9*	*7.9*	*8.0*	*7.8*	*7.0*	*7.0*	*8.0*
Required allocation to sector to meet 10% target by 2009	%	7.1	7.3	7.4	8.0	9.0	10.0	10.0
	US$m	479.02	516.97	558.33	641.77	772.53	918.45	991.92
Increase over previous year	*%*	*51.9*	*7.9*	*8.0*	*14.9*	*20.4*	*18.9*	*8.0*
Financing gap (***)	US$m	0	0	0	40.11	128.75	229.61	247.98

(*) 2004 prices, US$1 = ₦132; 2004–2006 projections from NEEDS; from 2007: projections based on FMF estimates.
(**) 2004–2006 projections from NEEDS; from 2007: projections based on FMF estimates.
(***) Required allocation minus projected allocation.

IV.8. It should be observed that the achievement of the 10 percent target only serves as an indicator for the increased relative budget allocation to the sector. It does not necessarily mean that sufficient resources are available for achieving the stated goals of accelerated agricultural growth, enhanced food security and reduced poverty. The actual amount available for public investment depends on three factors: (i) the growth rate of the overall budget; (ii) the sector share of the total budget; and (iii) the recurrent budget share of the sector budget. It is therefore critical to use realistic projections for overall budget growth rates. With the expected additional allocation to the sector, the recurrent budget share of the total sector budget is likely to fall. Presently, about 44 percent of the total federal budgetary allocation to the sector is being earmarked to meet recurrent expenditure, leaving about 56 percent for investment.

IV.9. The financing gap estimation will be revised when additional quantitative information on financial commitments to the sector over the period becomes available, including state and local government budgets, as well as the budgets of other ministries for activities related to agriculture and rural development.

V. MONITORING AND EVALUATION

V.1. Monitoring and Evaluation (M&E) of the NMTIP will be carried out within the NEEDS and FMARD M&E frameworks. In the FMARD, overall responsibility for sector monitoring and evaluation rests with the Department of Planning Research and Statistics (DPRS). The planned monitoring and evaluation of the NMTIP will be based on a number of key indicators to be developed in respect of physical, financial and programme performance, in relation to targets and objectives both in quantitative and qualitative terms. Specific performance and impact indicators would be defined for the various projects, based on each project's logical framework, and integrated into FMARD's M&E system. The Federal Ministry of Finance, the National Planning Commission and the NEPAD Nigeria Office in the Presidency would periodically monitor overall programme implementation and macroeconomic and rural development indicators. The main indicators to be monitored, which need to be further developed in close consultation with the stakeholders, are presented below. The indicators will be measured against data generated from the implementation process, making appropriate reference to standard surveys and censuses undertaken by the National Statistical System. The roles and responsibilities of the stakeholders in the NMTIP activities will be clearly defined.

Indicators measuring achievement of development objectives:

- Number of undernourished people.
- Household food security situation.
- Dietary energy intake.
- Self–sufficiency ratios for major food crops.
- Incidence of rural poverty.
- Growth of the agricultural sector and its contribution to GDP, broken down by sub–sector.
- Export revenues from agricultural commodities.

Indicators measuring achievement of target of allocating 10 percent of the national budget to agriculture and rural development:

- Percentage of the national budget allocated to the agriculture and rural development sector and sub–sectors.
- State and local government budgets and allocation to agriculture and rural development.
- Development partners' funding provision to agriculture and rural development.
- Actual public expenditures in the agriculture and rural development sector and sub–sectors and share of capital budget of total budget.

Indicators measuring sector performance and achievement of programme outputs:

- Production and yield levels of major crops.
- Number extracted and productivity (milk, meat) of livestock.
- Incidence of animal diseases.
- Area under irrigation (developed/rehabilitated).
- Area under aquaculture (total/aquaculture integrated into irrigation schemes).
- Outreach of rural financial services.
- Extension agent/farmer ratio.
- Number of extension staff trained.
- Number of farmers trained in modern farming techniques.
- Number of small–scale agro–processing industries.
- Number of farmer–based organisations.
- Kilometres of rural feeder roads constructed, rehabilitated or maintained.
- Number of rural markets constructed, rehabilitated or maintained.
- Share of rural population with year–round access to rural markets.
- Environmental impact.

ANNEXES

Annex 1: **Macroeconomic and Sector Indicators**

Annex 2: **Sector Policies, Strategies, Programmes/Projects and Linkages to CAADP**

Annex 3: **Projects identified by Government**

Annex 4: **Summary Outcome of the National Stakeholder Workshop and the National Council on Agriculture**

Annex 6: **Map of Nigeria**

Annex 5: **List of References**

Annex 1: Macroeconomic and Sector Indicators

Table 1: Selected Macro–Economic Indicators						
	1998	1999	2000	2001	2002	2003
Population (million)		111.7	115.2	118.8	122.4	125.8
Population – Average Annual Growth Rate, 1991–2002 (%)	2.83	2.83	2.83	2.83	2.83	2.83
GDP at 1990 constant price (₦ billion)		312.18	329.17	344.31	356.28	392.76
Growth rate (%)		0.9	5.4	4.6	3.5	10.2
Interest rate (base lending rate %)	18.3	22.5	21.3	26.0	20.6	19.6
Gross fixed capital formation % of GDP	5.3	11.0	12.2	8.8	10.2	8.8
External Debt Stock % of GDP		80.5	68.1	61.2	72.0	61.1
External Debt Service (US$ million)	1,272.5	1,724.9	1,716.0	2,128.2	1,168.5	1,809.3
External Reserves (US$ million)	7,100.0	5,450.0	9,910.4	10,415.6	7,681.1	7,467.8
External Debt Stock (US$ million)	28,773.0	28,066.9	28,273.8	28,347.0	29,788.9	30,999.0
Exchange rate market mid rate (₦/$)	76.8	92.3	101.6	111.9	120.9	129.4
Gross National Savings % of GDP		21.6	23.1	19.3	19.5	25.7
Current Account Balance % of GDP		1.4	15.7	4.7	0.7	6.9
Inflation (CPI %)	10.0	6.6	6.9	18.9	12.9	14.0
Domestic Debt Stock % of GDP		24.8	19.8	19.6	21.3	18.1
Human Development Index (HDI)	0.4	0.4	0.4	0.4	0.4	0.4
Source: CBN Annual Report / Statement of Account 31st Dec 2003.						

Table 2: Selected Social Indicators					
	1999	2000	2001	2002	2003
Education					
Adult Literacy Rate (%)	57	57	57	57	57
Primary Education Enrolment (million)	23.71	24.90	27.38	29.58	30.46
Secondary Education Enrolment (million)	6.06	6.36	7.00	7.49	7.63
Tertiary Education Enrolment (million)	0.98	1.03	1.14	1.25	1.27
Percentage of Annual Federal Budget	11.1	8.7	7.0	7.9	7.9
Health					
Population per Hospital Bed	1,564	1,611	2,124	2,230	2,342
Population per Physician	4,479	4,529	4,675	4,722	4,769
Life Expectancy at Birth		54	54	54	57
Primary Health Care Institution	8,970	10,149	10,393	15,266	16,137
Percentage Annual Federal Budget	4.5	2.7	3.9	4.7	4.7
Water					
Total Volume of Available Water ('000 m^3)	5,675,800	5,675,800	6,546,581	7,037,575	7,037,575
Domestic Use (%)	13.2	13.2	14.2	15.2	15.2
Industrial Use (%)	25.0	25.0	27.0	27.0	27.0
Irrigation (%)	35.0	35.0	35.0	35.0	35.0
Percentage Annual Federal Budget	–	2.2	7.2	4.8	4.8
Environment					
Total Forest Area Protected (km^2)	9,122,291	9,122,291	9,122,291	9,122,291	9,122,291
Deforestation per annum (ha)	240,000	240,000	250,000	250,000	250,000
Reforestation per annum (ha)	22,500	22,500	22,500	22,500	22,500
Source: CBN Annual Report and Statement of Accounts 31st December, 2003. Computerised from FMARD data.					

Table 3: Structure of the Economy					
	1999	2000	2001	2002	2003
Sector Share of GDP (%) [1]					
Agriculture	36.70	35.83	35.58	35.85	34.62
Industry	35.42	36.99	37.30	34.68	38.16
Building / Construction	1.98	1.95	2.09	2.11	2.08
Wholesale / Retail Trade	13.61	13.11	12.85	13.22	12.68
Services	12.29	12.11	12.18	14.14	12.45
Real Growth Rate (%) [2]					
GDP	0.9	5.4	4.6	3.5	10.23
Oil Sector	-7.50	11.10	5.20	-5.70	23.90
Non–Oil Sector	4.40	2.90	4.30	7.96	4.44
Agricultural Sector	5.29	2.90	3.90	4.30	7.00
National disposable income	0.20	4.30	4.60	3.90	4.40
Real gross fixed capital formation	-2.90	17.00	15.20	11.20	3.50

1) Source: CBN Annual Report 31st Dec. 2003. 2) Source: FOS, National Accounts of Nigeria, 2003.

Table 4: Characteristics of Nigerian Agriculture			
	Small Scale	Medium Scale	Large Scale
Average total area per farm household	Under 2 ha	2–10 ha	Above 10 ha
Percentage of total farm households	70	25	5
Approximate no. of farm households	7 million	2.5 million	0.5 million

Source: FMARD.

Table 5: Rainfall Distribution by Agro–ecological zones			
Agro–ecological zone	Mean Annual Rainfall (mm)	Growing Periods	
		Major Season (days)	Type
Semi Arid Zone	500	90	Unimodal
Dry Sub Humid zone	800	90–150	Unimodal
Sub Humid Zone	1,150	150–200	Unimodal
Humid Zone	1,250	200–250	Bimodal
Very Humid Zone	1,600	250–300	Bimodal
Flood Zone	2,000	300–360	Extended
Plateau Zone	1,450	200	Unimodal
Montane Zone	1,700	200–300	Bimodal

Source: Nigeria Profile of Agricultural Potential