



**New Partnership for
Africa's Development (NEPAD)**
**Comprehensive Africa Agriculture
Development Programme (CAADP)**

**Food and Agriculture Organization
of the United Nations**
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GOVERNMENT OF THE REPUBLIC OF ZAMBIA

SUPPORT TO NEPAD-CAADP IMPLEMENTATION

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**NATIONAL MEDIUM TERM INVESTMENT PROGRAMME
(NMTIP)**

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

Bankable Investment Project Profiles (BIPPs)

Volume II: Nega–Nega Smallholder Irrigation Scheme Development Project

Volume III: Sustainable Aquaculture Development Programme

Volume IV: Smallholder Dairy Development Project

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

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Abbreviations

ABF	Agri-Business Forum
ACF	Agricultural Consultative Forum
ACP	Agricultural Commercialization Programme
ADB	African Development Bank
AIDS	Acquired Immuno-Deficiency Syndrome
AMIC	Agricultural Marketing Information Centre
ASIP	Agricultural Sector Investment Programme
BIPP	Bankable Investment Project Profile
CAADP	Comprehensive Africa Agricultural Development Programme
CBPP	Contagious Bovine Pleuropneumonia
CDT	Cotton Development Trust
CLUSA	Cooperative League of the United States of America
CSO	Central Statistics Office
CSP	Country Strategic Plan/Country Strategy Paper
DAC	District Agricultural Committee
DFID	Department for International Development
ENRM	Environment and Natural Resource Management
EU	European Union
FRA	Food Reserve Agency
FTA	Free Trade Area
GART	Golden Valley Agricultural Research Trust
GDP	Gross Domestic Product
GRZ	Government of the Republic of Zambia
HDI	Human Development Index
HIPC	Highly Indebted Poor Countries
HIV	Human Immuno-Deficiency Virus
IFAD	International Fund for Agricultural Development
ISTT	In-Service Training Trust
LDT	Livestock Development Trust
LGB	Larger Grain Borer
MACO	Ministry of Agriculture and Cooperatives
MEWD	Ministry of Energy and Water Development
MFNP	Ministry of Finance and National Planning
MOL	Ministry of Lands
MTEF	Medium Term Expenditure Framework
MTENR	Ministry of Tourism, Environment and Natural Resources
NACP	National Agricultural and Co-operative Policy
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
NMTIP	National Medium-Term Investment Programme
NORAD	Norwegian Development Agency
PER	Public Expenditure Review
PHS	Post Harvest Survey
PRSP	Poverty Reduction Strategy Paper
RPA	Rural Participatory Appraisal
SAP	Structural Adjustment Programme
SFAP	Support to Farmers Associations Project
SIDA	Swedish International Development Agency

SHEMP	Smallholder Enterprise and Marketing Programme
TNDP	Transitional National Development Programme
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
ZAMPIP	Zambia Processing Infrastructure Project
ZATAC	Zambia Agribusiness Technical Assistance Centre
ZEGA	Zambia Export Growers Association
ZNFU	Zambia National Farmers Union

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 recent **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*

- 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.*

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**.*
- Preparation of **National Medium-Term Investment Programmes (NMTIPs)**.*
- Formulation of the related “**Bankable Investment Project Profiles**”(BIPPs).*

¹ Pillar 5 was initially not part of CAADP, but has been added in recognition of the importance of the sub-sectors.

It is within this context that the Government of the Republic of Zambia, in an effort to reinforce its interventions aimed at fighting poverty and food insecurity, has requested FAO to assist in preparing a NMTIP and a portfolio of BIPPs, with the aim to:

- *create an environment favourable to improved competitiveness of the agricultural and rural sector;*
- *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 present NMTIP, which draws on work of the recent Agricultural Commercialisation Programme (ACP) prepared by the Ministry of Agriculture, and is intended to contribute to the Poverty Reduction Strategy Programme (PRSP). It was prepared by the Lead National Consultant², under the overall supervision of the National Project Coordinator/NEPAD focal point in the Ministry of Agriculture³(MOA) in close collaboration with the NMTIP Core Team of MOA. The team was assisted by experts from the FAO Investment Centre Division⁴ while the Office of the FAO Representative provided crucial administrative support. In the process of preparing this document, participation was sought from major stakeholders from government, development partners, farmer's organisations, private sector and civil society. Key to the finalization of the NMTIP was the National Stakeholder Workshop held on 20–21 January 2004, during which a draft of this document was discussed and validated, and project ideas for the BIPPs prioritized, based on agreed-upon selection criteria. Three of these were further developed into BIPPs, that are presented in a separate document.⁵ Lastly, the NMTIP and the BIPPs were reviewed by an FAO Virtual Task Force of technical experts.

This document starts with a brief description of Zambia'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 partner 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 identified. Finally, an attempt has been made to estimate the financing gap in terms of additional resources that would be required to meet the target of allocating 10 percent of national budget to the sector within five years, and a proposal put forward for monitoring and evaluation of the NMTIP implementation.

² Mr Namukolo Mukutu, Agriculturist.

³ Mr Eliko C.J. Kalaba, Chief Planner, Ministry of Agriculture.

⁴ Mr Pietros Kidane, Senior Economist, TCIS, and Mr H. Kolshus, APO, TCIS.

⁵ For the purposes of the present exercise, “*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 cooperating 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 a project/programme proposal elaborated to the feasibility study level.

I. INTRODUCTION

A. The Economy

I.1. Zambia is a landlocked country with a population of 9.9 million as per 2000 census of which 60 percent lived in rural areas. The country is one of the heavily indebted poor countries (HIPC). External debt stood at US\$7.3 billion in 2001. At about US\$730 Zambia has one of the highest per capita debt. Gross Domestic Product (GDP) per capita in 2002 was US\$330, and it is ranked 163 out of the 175 countries covered by the United Nations Development Programme (UNDP) Human Development Index (HDI), 19 positions from the bottom. Out of 88 developing countries, Zambia ranks number 66 on the Human Poverty Index, 21 positions from the bottom. According to the Central Statistical Office (CSO) Surveys, poverty has increased from 69.7 percent in 1991, to 72.9% in 1998.

I.2. At independence in 1964, Zambia inherited a strong mining-based economy. With her abundant resources, prospects for human development looked promising. A modest GDP growth was registered during the first ten years of independence, mainly due to a sizeable expansion of import substitution and infrastructure development. However, the period after the first ten years experienced a decline in GDP growth per capita to a fraction of the level at independence. This was worsened by external shocks such as the 1974 oil crisis prices and decline in copper prices, leading to long term unfavourable economic trends during the 1990s. These have created a fertile ground for poverty and hunger.

I.3. Government of the Republic of Zambia (GRZ) has introduced economic reforms aimed at liberalizing the economy. Some adjustment programmes with limited impact were introduced in the late 1980s. Far-reaching economic reforms, which set the path for real economic liberalization, were carried out from 1991 onwards. These reforms abolished price controls and monopolies in handling goods and services for the government and parastatals and opened up to private sector participation. Controls on foreign exchange and imports were also lifted and many public enterprises were privatized. These measures slowed the economic decline, but did not lead to the *a priori* expected high economic growth as the structural changes are still ongoing.

I.4. GDP grew by 1.1% annually from 1982 to 1992 while it grew by 1.5% from 1992 to 2002. Real GDP per capita declined by an average of 0.5% per year over the period 1995 to 2002. The slow or lack of economic growth in Zambia implies that the previous levels of public expenditure and social assistance are beyond the means of current public revenue. A review of the public expenditure in the 1990s reveals that there was a substantial increase in the share of social expenditures (health, education, community development and training) after 1993. Debt repayment shares of the budget increased from 1991 to 1995, but were reduced since then. There has been a steady reduction in the infrastructure spending, including agriculture, energy, water, transport, works and supply.

I.5. High government budget deficits have led to high interest rates, high inflation and currency depreciation. The real lending interest rate increased from 16% in 1995 to 23% in 2002. Commercial bank interest rates are high at around 50%. Annual inflation is over 20%. Devaluation of the local currency, the Kwacha, has continued. The central bank's open market operations exert pressure on interest rates, due to the need to control money supply growth and meet the rising domestic debt service financing obligations. The growth in money supply has shown a somewhat declining trend, but still remained high and volatile, averaging 37% per year over the same period. Export earnings in 2002 amounted to 945 million US\$, of which copper and cobalt accounted for 59%.

I.6. Table 1 reports on selected macroeconomic indicators. Efforts to control money supply growth have been insufficient to prevent the rate of inflation from remaining stubbornly high at an annual average of 28% over the same period, although with a declining trend.

Table 1: Selected Macroeconomic Indicators, 1998–2003						
	1998	1999	2000	2001	2002	2003
Inflation (CPI%)	30.6	20.6	30.1	18.7	26.7	21.7
Interest rate (base lending rate, %)	37.4	42.6	37.6	46.4	42.5	40.5
Real GDP growth rate at 1994 prices(% change)	-1.9	2.2	3.6	4.9	3.0	4.3
External debt (US\$ billion)	6.9	6.5	6.3	7.3	6.5	6.5
Exchange rate market mid rate (ZK/US\$)	1,862	2,386	4,109	3,607	3,931	4,749
Current Account Balance (US\$ million)	-275	-483	-612	-743	-652	-628

Source: MFNP, Macroeconomic Indicators, August 2003 and 2004 Budget Speech

I.7. The inflation rate has exhibited a downward trend from 1998 to 2003. There are two outliers, however, in 2001 and 2002, which saw increases in inflation due to high maize prices that followed the occurrence of droughts. Interest rates remained high, above 30%, during the period 1998 to 2003. This was mainly attributed to continued domestic borrowing by Government and the high Statutory Reserve Ratios for commercial Banks. The GDP growth rate for the country exhibited consistent growth from a low of -1.9% in 1998 to 4.3% in 2003. There was a decline in GDP growth rate from 4.9% in 2001 to 3.0% in 2002 due to the drought of 2001. The country continued to grapple with the enormous external debt that above US\$6 billion, reaching a high of US\$7.3 billion in 2001. The Kwacha continued to depreciate against the US\$ for the entire period between 1998 and 2003. The current account balance depreciated significantly between 1998 and 2003. It reached a low of minus US\$743 million in 2001 but recovered to US\$628 in 2003. The dip in the current account balance in 2001 could be attributed to the drought that occurred in that year.

B. Agricultural Sector

I.8. **Contribution to the Economy.** Zambia's agricultural sector is the key to the development of the Zambian economy and is the engine of growth for the next decade and beyond. Agriculture generates about 22% of GDP and provides livelihood for more than 50% of the population. The sector employs 67% of the labour force and is by far the main opportunity source of income and employment for women who constitute 65% of the rural population. The potential increase in rural incomes can reduce poverty. In the recent years, the agricultural sector has also emerged as an important foreign exchange earner. In 1990, agricultural exports accounted for less than 2% of the total export value, but increased to 20% in 1999. Agriculture is therefore a key tool for poverty reduction.

I.9. **Physical.** Zambia has cultivable land of 42 million hectares of which only 14% is cropped. Water bodies such as lakes and rivers are largely unexploited. Only 11.8% of Zambia's irrigation potential is utilized. Zambia has a resource endowment for development of a wide range of crops, livestock and fish given the diversity of its agro-ecological regions. Region 1 is the low rainfall region (less than 800 mm annually) in the valley areas; region 2 has moderate rainfall (800–1,200 mm annually) on the central and eastern plateau, while region 3 covers the northern areas with annual rainfall above 1,200 mm.

I.10. **Structure.** There are three main categories of farmers in Zambian agriculture: small, medium and large-scale farmers. According to the 2000 Census of Population and Housing there are 1.3 million agricultural households in Zambia (CSO, 2003).

I.11. Agricultural production is dominated by the small-scale producers, who account for more than 70% of the farming population. However, at least 25% of the small-scale are food insecure each year. Maize is the major crop for small-scale farmers, accounting for 60% of utilized land during much of the 1990s, followed by drought tolerant crops such as sorghum, millet and cassava. Cash crops form less than 10% of the planted area of the average small-scale farmer (SHEMP, 2003).

I.12. Fish are an important source of income and dietary supplement for people throughout Zambia. There are 6,000 smallholder fish farmers and 13,900 fishponds in use in Zambia today. The use of fishponds allows farmers to improve their own diets and also sell their fish at times of high prices.

I.13. Zambia's land tenure is categorized in two main systems: Customary and leasehold. 94% of the total land in Zambia falls under the customary land tenure system that is controlled and allocated by traditional authorities. The leasehold tenure provides for title deeds for a renewable period of 99 years.

I.14. **Institutions.** The institutional functions and responsibilities of Zambian agriculture have in the last decade entailed both public and private sectors. The *Ministry of Agriculture and Cooperatives* (MACO) is responsible for agriculture policy, cooperative legislation and services such as livestock, fisheries and agricultural extension and research, phyto and non-phytosanitary services. The *Ministry of Lands* (MOL) is responsible for land use policy on all land matters, The *Ministry of Energy and Water Development* (MEWD) is responsible for energy policy and water resource management. The *Ministry of Tourism, Environment and Natural Resources* (MTENR) is responsible for all matters to do with natural resources management and the protection of Zambia's heritage as well as promoting eco-tourism. The *Ministry of Finance and National Planning* (MFNP) is responsible for resource mobilization, national and regional planning.

I.15. MACO has facilitated the establishment of statutory Boards to assist in her regulatory role. These include *Food Reserve Agency* (FRA), the *Tobacco Board of Zambia* and the *Coffee Board of Zambia*. In recent years MACO has partnered with stakeholders to set up Trusts as innovative tools for service delivery. The *Golden Valley Agricultural Research Trust* (GART), *Cotton Development Trust* (CDT), *Livestock Development Trust* (LDT), *In-service Training Trust* (ISTT) and *Zambia Export Growers Trust* (ZEGA Trust). MACO has also facilitated the formation of the *Agricultural Consultative Forum* (ACF) to promote dialogue amongst sector stakeholders.

I.16. Several private sector initiatives have been facilitated and promoted by the overall market liberalization environment in the last decade. The establishment of agricultural commodity exchanges in Lusaka and Kapiri Mposhi, the promotion of innovative out-grower models such as the *Dunavant Distributor Model*, CARE's REAP, and the more recent establishment of the *Warehouse Receipt System* (WRS) being cases in point. In addition, several projects have been initiated to support market reforms. These include, *Smallholder Enterprises Marketing Programme* (SHEMP), *Support to Farmer Associations* (SFAP), and *Zambia Agribusiness Technical Assistance Centre* (ZATAC).

I.17. It is expected that the private and public sectors will continue to collaborate closely to ensure economic development in Zambian agriculture. This will call for a clearer definition of the roles of the public and private sectors. The ACF is expected to play a key role in fostering this partnership.

I.18. **Financing** The sector has suffered from reduced level of investment and resource allocation inflows from the state budget and donor contributions. For instance over the period 1996 to 1999, the average budgetary allocation to the sector had been 4 percent of the total national budget. This is only half the average for the period 1981 to 1993.

I.19. In spite of its high potential, the agricultural sector has not developed commensurate to its resource endowment. In the first 25 years after independence, the agricultural sector in Zambia grew by an average of 2.5% per annum, considerably below the population growth rate, then estimated at 3.7%. Average growth rate for the 1990s was slightly above the population growth rate, thanks to the increased production of high value export crops. The country is still a net importer of food, and poverty is prevalent in many rural areas.

C. The Strategic Framework

(i) *Government Objectives and Strategies*

I.20. The Government of the Republic of Zambia has since the early eighties realigned agricultural policy to achieve market liberalization, as part of the *Structural Adjustment Programme* (SAP). The SAP included an economic and social policy package with an emphasis on the revitalization of the economy through productive sectors such as manufacturing and agriculture. This adjustment process entailed a multi-pronged approach of macro-economic structural reforms, privatization, liberalization of markets and prices and selected sector reforms.

I.21. Agricultural market reforms formed a key part of the broader and ambitious programme of liberalization initiated in the past decade with the motive to open up the economy from a highly regulated and over-centralized to a more market-oriented one.

I.22. The Government of the Republic of Zambia has placed agriculture as one of the key priority sectors for economic growth and development and poverty reduction. The vision for Government is thus to develop an efficient and competitive agricultural sector that assures food security at both household and national levels and also maximizes the contribution of the sector to GDP. To realize this vision, Government has in the past three years prepared several documents to guide development in the sector: These documents are: *National Agricultural and Cooperative Policy* (NACP); *Poverty Reduction Strategy Paper* (PRSP); *Agricultural Commercialization Programme* (ACP); and *Transitional National Development Plan* (TNDP).

I.23. The NACP has been formulated to achieve the following sector objectives:

- To ensure national and household food security through dependable annual production and post harvest of adequate basic foodstuffs at competitive cost;
- To contribute to sustainable industrial development by providing locally produced agro-based raw materials;
- To increase agricultural exports thereby enhancing the sector's contribution to the National Balance of Payments;
- To generate income and employment through increased agriculture production and productivity; and
- To ensure that the existing agricultural resource base is maintained and improved upon.

I.24. The PRSP was launched in 2001 to mainstream poverty reduction into economic policies. To facilitate the development of sector programmes which act as pillars for implementing poverty reduction programmes, the TNDP was launched in December, 2002. Zambia's pro-poor economic policy framework, as articulated in the PRSP and TNDP involves a special role for agriculture. This is

because the sector has unique characteristics of not only enhancing economic growth but also promoting equity.

I.25. The overall objective of the PRSP is to promote a broad-based economic growth to reduce poverty through a combination of growth-promoting investments in key economic sectors, with the primary focus being on agriculture and other rural activities and supporting infrastructure, improved access and quality in the provision of social services, governance, and the integration of policies on HIV/AIDS, gender and the environment across the main sectors.

I.26. The PRSP further outlines the poverty reduction strategy for the rural sector: (i) reducing production costs through improvements in rural infrastructure such as roads; (ii) employment opportunities on part-time and full-time through large scale agriculture, agro-processing and tourist ventures; (iii) self employment through outgrower schemes; (iv) small scale businesses in farming, fishing, carpentry, and others resulting from rising purchasing power in rural and urban areas; (v) better food security in subsistence farming through the appropriate interventions that were outlined for the agriculture sector; and (vi) social interventions in education, health, sanitation.

I.27. The ACP has been formulated as the agricultural component of the PRSP to guide the sector's vision as set out in the NACP. The overall goal of the ACP is to achieve sustainable and broad-based agricultural growth.

I.28. The strategies for achieving the agricultural sector policy objectives are as contained in the PRSP, ACP and TNDP and fall into the following broad components:

- marketing, trade and agri-business promotion;
- agricultural finance and investment;
- agricultural infrastructure and land development;
- technology development and dissemination; and
- agricultural sector management and coordination.

I.29. All future development programmes are expected to be based on and drawn from the broad framework of agricultural development outlined above. It is important therefore that resource allocation under support from cooperating partners, both bilateral and multilateral, and GRZ is guided by the NACP, PRSP, TNDP and the ACP.

I.30. To achieve the poverty reduction targets set for 2015, it has been estimated that the Zambian economy has to grow by 6–8% over the intervening period. However, the projected growth rates for 2002 were 4.3% and 4% for 2003 and 2004. The PRSP states that higher growth rates are possible only after significant improvements are realized through public sector institutional and structural reforms. The contribution of agriculture sector to GDP is projected to increase by an average of 3.2 percent from 2002 to 2004. Such growth rates will inevitably require more resources, but *Public Expenditure Review* (PER) shows that the agricultural sector has in the past not been prioritized. The share of the agricultural sector in the aggregate public expenditure came down to 2.5% in 1996 as against the 10.6% in 1994. The share increased to 6.0% in 1997, but decreased to 3.1% in 1998 and to 3.0% in 1999. However, the appropriate budget for agriculture has never been fully released. For instance, the disbursement to agriculture in 2002 was only 61% of the allocated budget.

I.31. The matrix in Annex 1 shows the linkages between the policy thrusts and activities proposed by GRZ in the PRSP, TNDP and *Medium Term Expenditure Framework* (MTEF), and the five pillars

defined in the 2003 African Union/NEPAD *Comprehensive Africa Agriculture Development Programme* (CAADP).⁶

(ii) Major Strategies of Cooperating Partners

I.32. A number of donors and financial institutions are involved in the agriculture and rural sector in Zambia, as shown in Annex 2. According to the 2002–2010 *Country Strategic Plan* (CSP) of USAID, donor coordination takes place regularly through three informal groups for private sector, agriculture and natural resources to discuss programmes, issues and areas for synergy and collaboration.

I.33. **World Bank.** The overall goal of the World Bank' is to promote growth and diversification in production and exports to improve delivery of social services and incorporate crosscutting policy for HIV/AIDS, Gender and the Environment. The Strategic Objectives of the Bank are: (i) sustained economic growth anchored in a diversified and export-oriented economy; (ii) improving lives and protecting the vulnerable; and (iii) effectively and efficiently managed public sector. The *Country Assistance Strategy* (CAS) is currently under preparation. The Bank fielded a mission in December, 2003/January 2004 to consult government and other stakeholders.

I.34. **IFAD.** The International Fund for Agricultural Development's mandate is to combat hunger and rural poverty in developing countries. The latest IFAD interventions in Zambia aimed to reinforce household food security and reduce vulnerability through support services, improved access to productive assets and technical knowledge and assistance to diversify incomes. Following the liberalization, IFAD has increasingly focused its support on strengthening the linkage of smallholders to suppliers and produce markets. In line with the broad areas of intervention prioritized in the PRSP, future IFAD interventions are likely to be focused on (i) smallholder livestock sector; (ii) rural financial services; (iii) natural resource management including conservation farming; and (iv) further support for smallholder commercialization.

I.35. **ADB.** The African Development Bank has adopted a strategy for the support of the agricultural sector in Zambia. The strategy identifies achieving broad-based agricultural growth by increasing agricultural productivity and the incomes by smallholder farmers as key strategic priorities in the agricultural sector as the driving force for reducing rural poverty, enhancing food security and providing the base for accelerated growth in the overall economy in a sustainable manner. This will be achieved through intensifying, expanding and diversifying production for export and facilitating market linkages through strengthening and expansion of smallholder farmers and agro-business schemes. Development activities would be targeted in any future ADB projects or Zambia.

I.36. **EU.** The European Union with its member countries and the commission is one of the largest donors in Zambia. Its *Country Strategy Paper* (CSP) provides a framework for assistance from the EU for the years 2002 to 2007. During the PRSP dialogue, it was concluded that the private sector should become the prime actor of the economy. Agriculture, mining and tourism were selected in the interim PRSP as the sectors with the best potential for equitable growth and private investment. The EU assistance will focus on transport infrastructure, institutional development and capacity building, macro-economic support and other programmes (health, HIV/AIDS and education). The CSP states that measures to reduce poverty in the rural areas will depend on availability of an adequate transport infrastructure. Thus, three major interventions are foreseen within the transport sector: (i) preventive maintenance of trunk, main and district roads; (ii) maintenance and rehabilitation of feeder roads, and

⁶ See *Preface*.

(iii) transport mode study (rail/road) and studies for track upgrading. However, EU assistance to agriculture and tourism was not considered at that stage due to the absence of adequate sector policies.

I.37. **USAID.** Built on experience to date, the 2004–2010 CSP outlines the USAID approach to support Zambia in addressing its challenges and accelerating growth. The CSP is based on five strategic objectives: (i) increased private sector competitiveness in agriculture and natural resources; (ii) improved quality of basic education for more school aged children; (iii) improved health status of Zambians; (iv) government is held more accountable; and (v) reduced HIV/AIDS transmission and impact through multi-sectoral response. The CSP states that strategic objective to increase competitiveness of agriculture and natural resources is in complete conformance with GRZ programmes in both its underlying principles and its planned implementation. Four intermediate results will contribute towards the achievement of this objective: (i) increased access to markets; (ii) enhanced value added production and service technologies; (iii) increased access to financial and business development services; and (iv) improved enabling environment for growth.

I.38. **DFID.** The UK Department for International Development prepared its CSP for Zambia in 1999 and it emphasizes that it would work to assist poverty reduction strategies. The proposed strategy was considered to be in line with Zambia's then *National Poverty Reduction Action Plan* and focuses on four areas of work: governance, livelihoods health and education, and HIV/AIDS. Within the impact area of livelihoods, DFID aims to enhance the livelihoods of poor people in both rural and urban areas. Main areas of focus would be: (i) build on existing partnerships in peri-urban areas; (ii) community mobilization and work on roads and water supplies in the Northern Province; and (iii) drought preparedness and mitigation in the Southern Province.

I.39. **SIDA.** Zambia is one of the countries that receive more support from Sweden through Swedish International Development Assistance. The overall aim of SIDA's aid to Zambia is to reduce poverty through initiatives in healthcare, agriculture, the infrastructure and commerce. Initiatives against HIV/AIDS will have greater scope than before. Agriculture is the greatest beneficiary for SIDA assistance, and the scope of objectives for SIDA's support to agricultural development in Zambia for the period 2003–2005 is: (i) preservation of natural resources and promotion of sustainable agriculture; (ii) economic and social development; (iii) capacity and institution building; and (iv) gender focus. The two key components are: Policy Support to MACO; and the *Agricultural Support Programme*.

I.40. **NORAD.** Zambia is one of Norway's main partner countries in development cooperation and receives support through the Norwegian Development Agency. A country strategy was prepared in 2001 for the period 2001 to 2005 and the development cooperation is concentrated in the following areas: (i) education; (ii) good governance; (iii) roads; and (iv) natural resource management (especially wildlife). In addition NORAD funds *Support to Farmer Association Project* (SFAP) in capacity building as part of a joint private sector development initiative of MACO, *Zambia National Farmers Union* (ZNFU), and *Agri-Business Forum* (ABF). NORAD also supports the *Agricultural Consultative Forum* (ACF) to promote dialogue between private and public sectors. Since Zambia, through the PRSP, has given the highest priority to the development of the agricultural sector, Norway will increase its assistance for agricultural development. Negotiations are underway to channel NORAD support through the Royal Netherlands Embassy.

I.41. **Netherlands.** The emphasis of the Netherlands support is to enhance an enabling environment for the private sector involvement in the agriculture sector. This is achieved through support to policy formulation and dialogue (ACF), research and development of appropriate technology (GART, LDT), training (ZEGA, LDT), enhancing market access (LDT, Phytosanitary at Mount Makulu Research Station).

(iii) Project Pipeline

I.42. Annex 3 provides an overview of ongoing projects and programmes and of some initiatives in the pipeline for which basic information is available.

II. CONSTRAINTS AND OPPORTUNITIES

II.1. With Zambia's agricultural potential, there are a range of opportunities for enhancing economic growth and reducing poverty in Zambia. However, several factors constrain the full tapping of this potential. These constraints and opportunities are discussed below.

II.2. **Macroeconomic.** Macro-economic policy reforms have had less than *a priori* expected results. Inflation, interest rates and foreign exchange rates have been unstable in the last decade. Growth was only experienced in five of the ten years. The mismatch between demand and supply of funds in the money market and inbuilt structural problems have combined to lead to this unsatisfactory performance of the economy. In recent years, Zambia has embarked on an economic and social policy package of reforms that emphasize the revitalization of the economy through productive sectors such as mining, manufacturing and agriculture. This entails a multi-pronged approach comprising macro-economic structural reforms, privatization, liberalization of markets and prices, selected sector reforms, and targeted infrastructure development. Thus, restoration of a macroeconomic stability and creation of a conducive environment for the development of key markets have remained an integral part of Zambia's reforms. Zambia has risen to the challenge before. With will and purpose an enabling macro-economic environment for enhancing equitable economic growth, especially through agriculture, remains a reality.

II.3. **The Duality Factor.** The dual nature of the access to agricultural services implies that while the private sector has successfully managed to serve the needs of larger farmers, most smallholder farmers are still unable to take advantage of the opportunities offered through the liberalized markets. The duality of farming in Zambia therefore requires that realism, innovativeness and ground-breaking interventions are introduced to re-invigorate broad-based growth in the agricultural sector.

II.4. **Low Productivity and Competitiveness.** Domestic resource and factor costs of production in Zambia are higher than regional competitors. Despite budgetary measures to cushion the agricultural sector, factor costs continue to escalate. Farmers are exposed to high interest rates, high fuel costs, electricity tariffs and security cost. A combination of poor crop and animal husbandry, low access to farm power and mechanization, decreasing soil fertility, especially in traditional farming areas have led to low average yields and reduced incomes to especially smallholder farmers. Actual maize yield on the farm for smallholders has averaged less than 20% of potential yields. These levels of productivity are too low and unsustainable.

II.5. By overcoming the technical and economic factors that combine to constrain smallholder farmers' efficiency together with her being well endowed with tremendous potential for the production of a wide range of crop and livestock, fisheries and forestry enterprises Zambia's prospects for growth in agricultural GDP are moderate to high in maize, legumes and oilseed crops, industrial crops (cotton, sugar, tobacco, spices and coffee), floriculture and horticultural crops. The livestock sector also offers potential for growth in piggery and poultry industries, hatcheries and meat processing, dairy and milk processing. Fisheries and fish processing also offer potential.

II.6. The production of crops and livestock for local and export markets is backed by a network of public and private sector technology development, assessment and transfer systems. In order to strengthen linkages between agri-business promotion and research, more private-public sector research and extension systems are being advocated, promoted and tested. GART and CDT are two cases in point. The outputs from these institutions seem to be more relevant to the needs of agri-business than that from traditional public-sector based research and extension systems. As GRZ is supporting crop diversification initiatives by identifying and promoting *Processing Zones* for exportable high value crops and livestock as well as work out a package of strategic fiscal and business incentives, agri-business extension messages to farmers and traders are being strengthened.

II.7. A surge of interest in agri-business activities and increased use of organic and conservation farming practices has been witnessed in recent years. These have become accepted in many areas as the sustainable way to increase agricultural production and trade.

II.8. **Droughts.** Although Zambia has generally adequate rainfall in normal years, it has suffered from occasional severe droughts, particularly in the last few years. This has resulted in severely reduced crop yields and production, particularly maize. The recurrence of droughts has highlighted the country's vulnerability to over-dependence on rain-fed farming, hence the need to promote irrigated agriculture in order to improve production and food security. More than 90% of the country's irrigation potential remains unutilized.

II.9. **Crop and Livestock Diseases and Pests.** Outbreaks of the Larger Grain Borer (LGB) in maize, Cassava Mealy Bug and Cassava Mosaic Virus, frog eye in soya beans and weevils in sweet potatoes have constrained agricultural production. The outbreak of corridor disease (East Coast fever) especially in Southern Province has had devastating effects on livelihoods. In addition, outbreaks of trypanosomiasis and contagious bovine pleuropneumonia (CBPP) have also devastated drought power and food security of households dependent on farming systems that involve livestock. Consequently such households have lost the benefits of manure, milk, draught power and meat. National cattle reduced from 5.4 million in 1996 to only 1.2 million in 2000. The Livestock sector also offers potential for growth in piggery and poultry industries, hatcheries and meat processing, dairy and milk processing. Fisheries and fish processing also offer potential. Furthermore, outbreaks of swine fever have constrained movement and marketability of pigs and pork products. The *Livestock Development Plan* provides an opportunity for growth through an integrated approach to livestock development.

II.10. **Agricultural Marketing.** Market reforms in the last decade have entailed both public and private sector initiatives. Private sector initiatives have been facilitated and promoted by the overall market liberalization environment. However, small have by and large been disadvantaged specifically, with respect to export market opportunities. Most of the export enterprises are highly specialized and require expert extension advice and facilities to produce. Disease pressure, perishability and other inherent characteristics of high value crops lead to most small scale farmers failing to meet the stringent quality and phytosanitary standards required on the international market. Consequently, they are left out of such lucrative markets. Marketing systems for livestock disadvantages both the traditional and commercial producer. This is because of their focus on sales on need rather than the principles of livestock production. This thus leaves traditional producers at the mercy of traders. Improved markets and better prices for livestock and livestock produce are thus key to developing the livestock sector in Zambia. Growing livestock markets provide a good opportunity for poor livestock keepers to come out of poverty.

II.11. **Agricultural Finance.** The liquidity problems and general lack of agricultural credit is seen by many as one of the core constraints to full tapping of Zambia's agricultural sector potential. Economic fundamentals obtaining in Zambia presently favour commercial banks lending to

Government rather than the productive sector. Farmers in Zambia are paying interest rates of above 50% of the principal. This has made it difficult for farmers to replace machinery on the farms and therefore unable to expand operations. Growth of agriculture is stunted, as there is little reinvestment since farmers have been eating into their capital. All efforts are thus being directed towards the creation of a conducive climate for finance and investment in agriculture.

II.12. ***Land Tenure Insecurity and Women Rights to Land.*** Land tenure insecurity is still experienced in Zambia. Land alienation into leasehold, inappropriate and exploitative administrative practices and limited women's land rights are constraints to land security in Zambia. The exploitative administrative practices have been a long-standing source of tenure insecurity in Zambia. Whilst statutory laws are non-discriminatory in Zambia, women are not able to own and control land because of lack of knowledge of their rights and socio-economic constraints such as lack of capital and illiteracy. In addition, women do not actively participate in local decision-making pertaining to land issues in their communities, due to traditional values. The new Land Policy being formulated should address these issues.

II.13. ***Environment.*** Key constraints to sustainable environment protection and utilization include: (i) unsustainable use of natural resources due to pollution and inadequate sanitation, soil degradation, air pollution, wildlife depletion and deforestation; (ii) lack of national environmental policy to harmonize the legal framework for the protection of natural resources; (iii) inadequate enforcement of the legal framework; (iv) weak mechanisms for encouraging genuine participation of communities and the private sector in environment and natural resources management (ENRM); (v) low public awareness about sustainable use of the environment; (vi) limited access to alternative (new and renewable) energy technologies. Several pieces of legislation are in place to protect the environment. In 2003, the government revamped the environmental policy development policy process to harmonize all the regulations and sectoral policies in tourism, environment and natural resources sector.

II.14. ***Agricultural Infrastructure.*** Poor agricultural infrastructure is one of the major constraints that affected production of crops, livestock and fisheries in rural outlying areas. It constitutes one of the major constraints faced by the farming community in the process of commercialisation. Inaccessible road networks increase transaction costs and inhibit growth. The government recently embarked on a major programme to improve trunk and feeder roads, but resources have been limited. GRZ however remains committed to infrastructure development as an integral part of agricultural development.

II.15. ***Impact of HIV/AIDS.*** The continued spread of HIV/AIDS has affected the farming industry in Zambia in many ways. HIV/AIDS is estimated at about 20% of the adult population in Zambia. The prevalence rate for the 15–49 year age group is 16% according to the *Demographic and Household Survey 2001/2002*. This has affected the quality and quantity of human labour available for efficient agricultural production. Increased medical expenses have diverted resources from agricultural investment. Trained staff in the industry continues to die or are rendered unproductive. Mitigation measures such as labour saving technologies are however being developed to ensure sustained agricultural productivity.

II.16. ***Institutional Capacity for Stakeholder Consultations and Collaboration.*** The quality, depth and breadth of institutional support to agriculture that is provided by public institutions is inadequate on its own to address the dynamic needs of the different categories of farmers and stakeholders. In recent years, the sector has benefited from more structured institutional support frameworks that have inbuilt consultative mechanisms between public and private sector players in policy development and project design. These include the ACF, DAC and Trusts — GART in research, CDT in cotton, LDT in livestock, ISTT in training, and ZEGA in exports of flowers and vegetables.

II.17. **Conclusion.** To realize the potential of the agricultural sector in terms of contributing to economic growth, poverty reduction and food security, within the policy framework in the NACP, PRSP, TNDP and ACP, sequenced interventions that overcome the key constraints outlined above while also tapping the potential is the way forward for Zambia. This calls for a cocktail of interventions that simultaneously deals with policy, resource and capacity constraints but recognizes that Zambia remains a sleeping giant in agricultural development that simply needs awakening through systematically tapping her potential. GRZ has in recent years shown some resolve to realign policies to meet this challenge. By emphasizing agriculture as the engine for economic growth, Zambia for once has a good chance for promoting equitable economic growth.

III. INVESTMENT PROGRAMME OUTLINE

III.1. The GRZ's investment programme for the medium term can be extrapolated from the MTEF, the PRSP, TNDP and the ACP. It is thus essential that any project/programme that is being considered for support is built around the government's priority investment areas. It is in this regard that a deliberate effort has been made to develop *Bankable Investment Project Profiles* (BIPPs)⁷ that fit into the government's priority areas and coincide with the five pillars of CAADP.

III.2. The emphasis of these bankable projects is on providing advisory services to farmers to improve the quality of farming, especially for small-scale farmers. The projects are also designed to assist farmers increase agricultural production and productivity through adoption of proven technological innovations and provision of strong linkages between farmers and farm support organizations. In these projects farmers are reoriented to management and marketing skills to operate on a commercial basis and appreciate farming as a business in a market-driven environment. The overall thrust of these projects is thus creativity through innovation.

A. Project Selection Criteria

III.3. One of the major programme/project selection criteria utilized in the identification of the programmes highlighted above was the identification of the priority investment programmes of Government. These Government priority investment programmes were drawn from the ACP, PRSP and TNDP. In summary, the Government's priority areas were utilized in conjunction with known donor interests to identify the investment portfolios highlighted above. It is envisaged that specific BIPPs in the context of the priorities highlighted above, will be formulated as per the following additional criteria:

III.4. **Technical Feasibility.** These are crucial tests as to whether or not the proposal is technically sound and sustainable in terms of resource utilization. One key indicator that will be utilized will be the referral to past similar projects/programmes that have been successfully implemented.

III.5. **Financial and Economic Sustainability.** It is generally accepted that it is difficult to determine the financial and economic viability of a project during the early stages of formulation. However, an attempt will be made to develop criteria that will facilitate the determination of the financial and economic viability of proposed projects during the early stages of formulation. One criterion that could be utilized is the comparison of investment costs against expected returns. That is, a simple cost-benefit analysis.

⁷ See *Preface*.

III.6. ***Ability to Implement the Project in the Context of Ongoing Programmes.*** It is important to note that any proposed new programme/project will be introduced into an environment where there are a number of ongoing programmes/projects. There will be need to ensure that the new programme does not have an adverse effect on and/or duplicate the impact of other programmes but rather complements and actually strengthens the impact of the other programmes. A subjective analysis can be undertaken to determine whether or not the new programmes will have an adverse effect on and/or duplicate the impact of other programmes.

B. Priority Setting

III.7. ***Priority 1: Marketing, Trade and Agribusiness and Agriculture Finance.*** This positioning of marketing, trade and agribusiness as the top priority of Government is manifested by Government's continued commitment to the liberalization of Zambia's agricultural sector and development and rehabilitation of rural infrastructure. The main objective of this priority area would be to facilitate the development of a competitive, efficient and transparent private-sector driven agricultural marketing system. It is expected this would contribute to the generation of increased incomes from farming, marketing, trading and agro-processing. This priority is a close parallel to the second pillar of the CAADP, Improving rural and trade related capacities. Areas that could be targeted for further development as projects include:

- ***Strengthening of Market Information Systems*** to enable farmers make informed decisions about their cropping portfolio and increasing their bargaining power during the marketing season. This can be achieved by identifying gaps in service provision by the Agricultural Marketing Information Centre (AMIC) and develop a project that will supplement the activities undertaken by AMIC.
- ***Development of Entrepreneurship Skills among Extension Workers:*** To effectively commercialize Zambia's agricultural sector, there is need to ensure the development of entrepreneurship skills among rural agribusiness farmer groups. Any project developed should complement the ongoing efforts of the SHEMP and the SFAP.
- ***Market Development through Capacity Building*** of smallholders, large-scale farmers, producer organizations, traders and processors for whom profitable crop production, trade and processing are feasible. In livestock the focus should be on facilitating the links between the producers and markets.
- ***Agricultural Finance:*** Support provision of complementary funding for the undertaking of a Pre-feasibility Study for the establishment of a specialist Agribank and also provision of funding for the development of agricultural credit that can be provided by commercial banks.
- ***Poor State of Roads:*** Assist prioritize areas with high concentrations of farmers and possessing growth potential and target these areas as growth poles.

III.8. ***Priority 2: Technology Development and Dissemination.*** This is clearly one of the key priorities of Government. This problem of low productivity also applies to new non-traditional crops that have been identified for export. More specifically, there is need to adapt demand-driven technology for increased production of products with competitive advantage in local, regional and international markets. Whilst there has been considerable investment in technology development and dissemination for traditional crops such as maize, there is need to develop and disseminate technology

for non-traditional export crops. There will be need to work closely with both private and public sector players in the development of technology for non-traditional export crops. Key activities will comprise:

- **Accelerating Adoption of Conservation Farming** to increase small-scale farmer yields, and therefore encourage more sustainable systems through a two-step approach of fast and medium track technologies.
- **Support to Extension Services** The emphasis of this activity will be on changing the culture of doing things and building on weaknesses in the extension programme. It will thus aim at strengthening MACO's extension services through training and provision of support services for field operations.

III.9. Other initiatives by the private sector and NGOs on extension will be supported as they are complementary through strengthened linkages. Through the improved coordination, duplication and overlap of the delivery of services to small scale farmers will be avoided.

III.10. **Priority 3: Livestock Disease Control and Eradication and Fisheries Development.** This is another key priority area for GRZ. Livestock has continued to provide regular cash income to small-scale farmers in addition to enhancing household food security. Its invaluable contributions to crop production through animal draft power and manure remain critical to increased production among the small-scale farmers. Livestock also brings about the efficient use of agro processing by-products and provides industrial forward and backward linkages in the economy.

III.11. The Livestock Disease Control and Eradication Programme will buy into the comprehensive *Livestock Development Plan* and accelerate its implementation. The focus will be on improved control of animal diseases, with emphasis on development and production of vaccines to control endemic diseases, and improved provision of veterinary services to farmers (vet kits, motor cycles).

III.12. The Fisheries Development Programme will include fish conservation (fisheries management in natural water bodies), fish stock assessment, aquaculture (fish farming) production and research and fingerlings production.

III.13. **Priority 4: Land Development and Improved Use of Water for Increased Agricultural Production.** One of the most mentioned clichés in Zambia is the underutilization of the abundant land and water resources in the country. This is one of Zambia's most important priority areas, which coincides with the placement of the agricultural sector as the engine for economic growth.

III.14. This activity will also support monitoring of land and water utilization and land tenure reforms to ensure effective utilization of land. This entails the development of a comprehensive implementation strategy, which is well funded, harmonize other laws that affect women's land rights with their land law to ensure that women can fully utilize the provision of owning land provided by the land law. In addition sensitisation and education campaigns to influence traditional norms, values and laws to allow women to own and control land, address the issue of land alienation from customary to leasehold, and to promote the widespread utilization of irrigation technology around the country through a four-path approach of enabling environment, alternatives to formal irrigation, improving the productivity of existing assets and promotion of new investments.

C. Identification of Bankable Investment Projects

III.15. The NMTIP will be supported by a portfolio of BIPPs. The aim will be to assist the GRZ in transforming ideas into proposals that could be financed by loans or grants from IFIs, grants from bilateral donors, and food aid for development, as well as governments' own resources.

III.16. Based on the investment programme outline described earlier and on the outcome of NMTIP *National Validation Workshop* held on 20–21 January 2004, the following three BIPPs have been identified and prepared (they are presented in separate documents):

- *Nega–Nega Smallholder Irrigation Scheme Development Project;*
- *Sustainable Aquaculture Development Programme;*
- *Smallholder Dairy Development Project.*

IV. FINANCING GAP

IV.1. Heads of State and Government have pledged themselves to commit “... *allocating at least 10% of national budgetary resources for [the] implementation of [CAADP] ... and sound policies for agricultural and rural development within five years*”. An analysis of Zambia’s public finance over the past three years, however, reveals that allocation of the national budget to agriculture is far below this level. Accordingly, it could be argued that the 10% target cannot be achieved in a five-year period. Nonetheless, it is worth noting that according to the FAO *Zambia and Malawi Desk Review on Food Security and Possible Development Interventions*, the agricultural sector’s share of the total national expenditure budget in Zambia was as high as 11% in 1991. It might, therefore, not be so unrealistic to envisage that this parameter gets back up to 10% by 2008.

IV.2. A number of assumptions were made in estimating the financing gap. For the year 2003, the actual expenditure on the agricultural sector was derived from the Yellow Book for 2004. The Yellow Book is the official annual publication by the Ministry of Finance and National Planning that contains the national budget for each year. For the period 2004 to 2007 estimates, a 2% annual increase has been assumed for the agriculture programme forecast. For analysis purposes the year 2003 has been utilized as a base year, with the total agricultural programme requirement for 2003 being utilized as the actual requirement for 2003. This figure translated to 1.7% of the total budget for 2003. It is then assumed that the allocation to the agricultural sector will increase by 2.0% between 2003 and 2004 and by 2.1% in subsequent years until it reaches 10% in 2007 (Table 2).

IV.3. The figure utilized for 2003 was obtained from the Yellow Book, whilst the figures for 2004 to 2007 were obtained from the Government’s Green Paper on the MTEF. The Green Paper explains Government’s proposed economic objectives and policies for the period 2004–2006 and provides the basis for the preparation of the MTEF. The National Budget estimate for 2007 was estimated by assuming a 5% increment in funding over the 2006 estimate depicted in the Green Paper. It must also be noted that a number of activities for other Ministries also contribute to agricultural and rural development. Some of the line Ministries that are considered to be agricultural and rural development Ministries include the Ministry of Works and Supply; the Ministry of Community Development and Social Welfare; the Ministry of Tourism, Environment and Water Development; Ministry of Lands; and Ministry of Local Government and Housing. All these ministries contain components that directly contribute to agricultural and rural development.

Table 2: Zambia – Agricultural Financing Gap					
(ZMK million) *	2003	2004	2005	2006	2007
Agriculture Programme Forecast	119,220	121,604	124,036	126,517	129,047
Agriculture Programme Requirement	119,220	253,816	424,372	611,591	812,900
Gap	0	137,356	303,994	487,010	683,853
Total Public Sector Budget	6,931,510	6,859,880	7,316,760	7,741,660	8,129,000
<i>% Actual</i>	<i>1.7</i>	<i>1.8</i>	<i>1.7</i>	<i>1.6</i>	<i>1.6</i>
<i>% Requirements</i>	<i>1.7</i>	<i>3.7</i>	<i>5.8</i>	<i>7.9</i>	<i>10.0</i>

* The figures in the financing table have been maintained in ZMK to avoid minor changes in percentage proportions between budget figures. US\$ equivalent amounts can be derived by using an exchange rate of 1 US\$ to ZMK 4,750.

V. MONITORING AND EVALUATION

V.1. The monitoring of the NMTIP for Zambia will be undertaken within the overall framework for the monitoring of the Poverty Reduction Programmes and Non-Poverty reduction Programmes in Zambia. The overall monitoring and evaluation of the NMTIP will incorporate the production of quarterly and annual reports that will be made available to all key stakeholders. The monitoring of NMTIP will mainly focus on the agricultural sector. The key indicators to be considered will be derived from the programme documents and could include:

- No. of smallholder farmers with access to financial services;
- No. of dams constructed or rehabilitated;
- Contribution of the agricultural sector to overall economic growth broken down by sub-sector;
- Contribution of the agricultural sector to Annual GDP broken down by sub-sector;
- Number of new dams/boreholes constructed/;
- Km of irrigation canals built/rehabilitated;
- Production and yield levels of major crops;
- No. of livestock;
- Incidences of livestock diseases;
- No. of farmer associations trained;
- No. of extension workers trained;
- No. of special financial “windows” created for smallholder farmers;
- No. of studies on agricultural finance undertaken; and
- Specialist agricultural lending institution.

V.2. The indicators will be measured against data collected from a number of institutions. This will include baseline data and data contained in annual progress reports. Reference will also be made to *Post Harvest Survey* (PHS) and *Household Census* data collected by the CSO.

V.3. A deliberate effort will be made to clearly define responsibilities for monitoring of the NMTIP activities. The ACF which has included the monitoring of the agricultural component of the PRSP will monitor agricultural activities in close collaboration with MACO, whilst other line Ministries will be responsible for monitoring activities that fall under their mandate.

ANNEXES

- Annex 1: Government Investment Programme**
- Annex 2: Activities/Interest of Cooperating Partners**
- Annex 3: Inventory of Ongoing and Pipeline Projects**
- Annex 4: List of References**

Annex 1: Government Investment Programme

Sector/Policy/Activity	Potential Relevance to CAADP Pillars				
	1	2	3	4	5
<i>Overall Goal: To promote a self-sustaining export-led agricultural and livestock sector, which ensures increased household income and food security</i>					
Marketing, Trade and Agribusiness Promotion					
• Enhance entrepreneurial skills		X	X		
• Improve provision of market information		X	X		
• Increased production of food crops		X	X		
• Increased production of high value crops (outgrower promotion)		X	X		
• Increased processing capacity		X	X	X	
• Increased use of grades and standards		X		X	
Agricultural Finance and Investment					
• Improved environment for provision of agricultural finance	X	X	X	X	
• Increase in volume of agricultural credit	X	X	X	X	
• Increase in access to agricultural credit and insurance services	X	X	X	X	
Agricultural Infrastructure and Land Development					
• Target infrastructure development and rehabilitation in productive and high potential areas	X	X	X		
• Establish close links with outgrower schemes and the private sector	X	X	X	X	
• Establish close links with infrastructural development projects such as ZAMSIF and RIF	X	X	X		
• Promote employment of labour-based techniques in infrastructure development	X	X	X	X	
• Extend support to Rural Electrification Programme	X	X	X	X	
Sector Management and Coordination					
• Enhance capacity for sector management, policy review, monitoring and evaluation	X	X	X	X	X
• Enhance capacity for stakeholder coordination	X	X	X	X	X
• Enhance capacity for provision of financial management and procurement services		X	X	X	X
• Enhance capacity for human resource training and development	X	X	X	X	X
• Enhance capacity to deal with the environment, HIV/AIDS and gender issues	X	X	X	X	X
Technology Development and Dissemination					
• Promote conservation farming	X		X	X	X
• Encourage partnerships with NGOs and the private sector for the development and dissemination of improved technology	X	X	X	X	X
• Promote and facilitate public extension staff attachments with private sector outgrower promoters and agricultural service providers	X	X	X	X	
• Strengthen and enforce legislation to control livestock diseases	X		X		X
• Promote community-based livestock management			X	X	X
• Reduction of cost of stock-feed			X	X	X
• Pasture improvement				X	X
• Expansion of aquaculture production			X	X	X
• Strict enforcement of fishing regulations			X	X	X
• Improved on-farm storage			X	X	X
• Support to the development of small-scale irrigation	X	X	X	X	

Annex 2: Activities/Interest of Cooperating Partners

Cooperating Partner	Areas of Interest/Project	Potential Relevance to CAADP Pillars				
		1	2	3	4	5
World Bank	• Agricultural Extension, Research and Infrastructure Development	X	X	X	X	X
	• Institutional Arrangements and Capacity Building			X		
	• Market Development		X			
SIDA – Sweden	• Entrepreneurship and Business Development		X	X		
	• Land, Crop and Livestock Husbandry	X	X	X	X	X
	• Seed	X		X		
	• Infrastructure Fund		X	X		
	• Capacity Building among Relevant Support Structures		X	X	X	
	• Management, Information and Learning Systems		X	X	X	
	• Smallholder Access to Planting Materials and Extension Support	X	X	X	X	
IFAD	• Support for Smallholder Enterprise Group Development		X	X		
	• Market Linkage Development		X	X		
	• Policy/Legislative and Institutional Support	X	X	X	X	X
ADB	• Irrigation Development	X		X		
	• Rural Savings and Credit	X	X	X	X	X
	• Capacity Building			X		
	• Infrastructural Development		X			
	• Livestock Development					X
USAID United States of America	• Agribusiness Development		X	X		
	• Trade and Investment Enhancement		X	X		
	• Development of Early Warning		X	X		
	• Development of Stakeholder Consultation in the Ag Sector	X	X	X	X	X
NORAD – Norway	• Development of Stakeholder Consultation in the Ag Sector	X	X	X	X	X
	• Farmer Mobilization Fund			X		
	• Extension Fund Attachment			X	X	
	• Technical Assistance	X	X	X	X	X
	• Training Programme	X	X	X		
	• Pre-ship Financing Support		X	X		
	• Farm Level Infrastructure Support		X	X		
	• Community Infrastructure – Storage Sheds		X	X		
	• Input Credit	X	X	X	X	
GTZ – Germany	• Working Capital Support	X	X	X	X	X
	• Support to Southern Province			X		
Netherlands	• Development of Stakeholder Consultation in the Ag Sector	X	X	X	X	X
	• Livestock Development					X
JICA – Japan	• Participatory Village Development in Isolated Areas	X	X	X	X	X
Irish Aid – Ireland	• Development of Stakeholder Consultation in the Ag Sector	X	X	X	X	X

Annex 3: Inventory of Ongoing and Pipeline Projects

PROJECT/PROGRAMME	FUNDING AGENCY	LIFELINE	TOTAL BUDGET
Ongoing Projects/Programmes			
SHEMP	IFAD	2000–2007	US\$18.4 million
Agricultural Support Programme	SIDA	2003–2005	SEK132 million
Small-scale Irrigation Programme	ADB	2002–2007	ZMK29.025 billion
ADB Support to Eastern Province	ADB	2000–2003	ZMK135 billion
Participatory Village Development in Isolated Areas (PaViDIA)	JICA	2002–2009	US\$ 678,000
GTZ Agricultural Sector Support Programme	GTZ	1998–2003	€3.5 million
Smallholder Access to Processing, Extension and Seeds Project	NORAD, SIDA	2000–2004	US\$2.3 million
CLUSA – Implementing Programme on behalf of SHEMP	IFAD	2001–2004	US\$12.7 million
AFRICARE – Implementing Programme on behalf of SHEMP	IFAD	2003–2005	US\$866,378
Support to Farmers Association Project	NORAD	2000–2004	US\$3 million
Agricultural Consultative Forum	USAID, Royal Netherlands Embassy, Royal Norwegian Embassy, Irish Aid	2004–2007	US\$1.24 million
Projects in Pipeline			
Support to Decentralized Rural Development in Southern Province	GTZ	2004–2009	€11.0 million
Agricultural Development Support Project	The World Bank	2005–2019	US\$260 million
Smallholder Agricultural Production and Market Support Project	ADB	2005–2010	US\$50 million

Annex 4: List of References

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