FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

ETHIOPIA'S AGRICULTURAL SECTOR POLICY AND INVESTMENT FRAMEWORK (PIF) 2010-2020

FINAL REPORT
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TABLE OF CONTENTS

1.	INTRODUCTION	1
	1.1 THE POLICY AND INVESTMENT FRAMEWORK	
2.	BACKGROUND	2
	2.1 SOCIAL AND ECONOMIC CONTEXT 2.2 THE AGRICULTURAL SECTOR 2.3 POLICY FRAMEWORK – GENERAL	3 4
	2.4 POLICY FRAMEWORK – AGRICULTURE AND RURAL DEVELOPMENT	8 9
3.	POLICY, STRATEGY AND INSTITUTIONAL GAP ANALYSIS	9
	3.1 POLICY GAP ANALYSIS	10
4.	KEY ISSUES IN AGRICULTURE AND RURAL DEVELOPMENT	12
	4.3 RURAL COMMERCIALISATION	13 13 14
5.	PIF RATIONALE, OBJECTIVES AND EXPECTED OUTCOMES	16
	5.2 GOAL AND DEVELOPMENT OBJECTIVES 5.3 PRODUCTIVITY AND PRODUCTION 5.4 RURAL COMMERCIALISATION 5.5 NATURAL RESOURCE MANAGEMENT	17 19 20
	6.2 RURAL COMMERCIALISATION	23 23 23
7.	TEN-YEAR INVESTMENT FRAMEWORK	24
	7.1 INDICATIVE FINANCING PLAN	24
8.	BENEFITS AND BENEFICIARIES	28
9.	RISKS AND SUSTAINABILITY	29
4.2 AGRICULTURAL PRODUCTIVITY 4.3 RURAL COMMERCIALISATION 4.4 NATURAL RESOURCE MANAGEMENT 4.5 DISASTER RISK MANAGEMENT AND FOOD SECURITY 4.6 CROSSCUTTING ISSUES 5. PIF RATIONALE, OBJECTIVES AND EXPECTED OUTCOMES		31

10.2 AID MODALITIES	32
10.3 MONITORING AND EVALUATION AND MUTUAL ACCOUNTABILITY	32
11. CONCLUSIONS AND RECOMMENDATIONS	33
11.1 Summary	33
ANNEXES	34
ANNEX 1: PIF RESULTS FRAMEWORK	34
ANNEX 2: PIF COST ESTIMATES AND FINANCING PLAN	38
ANNEX 3: ROAD MAP FOR THE IMPLEMENTATION OF THE ETHIOPIA'S AGRICULTURAL	
SECTOR POLICY AND INVESTMENT FRAMEWORK	44

Working Paper: Ethiopia's Agriculture Sector Policy and Investment Framework: Ten Year Road Map (2010-2020). Consultancy report prepared by Demese Chanyalew, Berhanu Adenew and John Mellor.

Working Paper Annexes:

- 1. Scope of PIF Ethiopia
- 2. Pillar Configuration
- 3. Agro-Ecology
- 4. Agricultural Growth: The Cereals Sub-Sector
- 5. Existing Strategies Relevant to PIF
- 6. Basic Principles Governing Agricultural Development Policy
- 7. Agricultural Sector Institutions Category
- 8. Aid Flow, Allocation and Utilisation
- 9. List of PIF Programmes by Proposed Institutional Arrangement
- 10. MOA Directorates/Programmes/Projects List
- 11. Ongoing Programmes Budget and Details on PIF Period Incremental Areas
- 12. More on the Prioritisation of Investment Areas Within the Sector
- 13. Core Technical Components of the Identified Investment Areas
- 14. More on International Experience
- 15. Persons Met During the consultations in the Preparation of the PIF
- 16. Comparison of Sectoral Budget Estimate PIF Versus GOE Projections for the FYGTP
- 17. Expected Investment Benefits and Risks
- 18. National Consultation Workshop Consolidated Comments and Consultant Team Response

Supporting Documents:

- 1. Plan for Accelerated and Sustained Development to End Poverty
- 2. Five Year Growth and Transformation Plan
- 3. Agro-Industry Master Plan
- 4. CAADP Stocktaking documents
- 5. CAADP Compact
- 6. Rural Economic Development and Food Security Sector Working Group Terms of Reference
- 7. Global Agriculture and Food Security Program draft application
- 8. Food Security Program 2010-2014
- 9. Productive Safety Net Program 2010-2014
- 10. Household Asset Building Program 2010-2014
- 11. Agricultural Growth Program Activity Approval Document
- 12. Ethiopian Strategic Investment Framework for Sustainable Land Management
- 13. Ethiopia Land Administration and Land Use Development Project
- 14. Ethiopia Water Sector Strategy
- 15. National Adaptation Program of Action
- 16. National Nutrition Program

LIST OF ABBREVIATIONS

ADLI Agriculture Development-Led Industrialisation

AGP Agricultural Growth Programme

AMIP Agricultural Marketing Improvement Programme

ARDPLAC Agriculture and Rural Development Partners Linkage Advisory Council

ATVET Agriculture Technical and Vocational Education and Training

BoA Bureau of Agriculture

BoFED Bureau of Finance and Economic Development

CAADP Comprehensive Africa Agriculture Development Program

CBO Community Based Organization

COMESA Common Market for Eastern and Southern Africa

CSA Central Statistical Authority
CSO Civil Society Organisation

DA/SMS Development Agent/Subject Matter Specialist

DAG Development Assistance Group

DRMFS Disaster Risk Management and Food Security

ECX Ethiopian Commodity Exchange

EDRI Ethiopian Development Research Institute
EIAR Ethiopian Institute of Agricultural Research

ELALUDEP Ethiopia Land Administration and Land Use Development Project

ETB Ethiopian Birr

FAO Food and Agriculture Organisation

FDI Foreign Direct Investment

FDRE Federal Democratic Republic of Ethiopia

FSP Food Security Programme FTC Farmers Training Centre

FY Fiscal Year

FYGTP Five-Year Growth and Transformation Plan

GDP Growth Domestic Product GoE Government of Ethiopia

HABP Household Asset Building Programme

M&E Monitoring and Evaluation
MDG Millennium Development Goal

MoA Ministry of Agriculture

MoFED Ministry of Finance and Economic Development

MoT Ministry of Trade MoI Ministry of Industry

MoWRE Ministry of Water Resources and Energy

NAPG National Action Plan on Gender

NARS National Agricultural Research System
NEPAD New Partnership for Africa Development
NPCA NEPAD Planning and Coordinating Agency

PAP Pastoral and Agro-Pastoral

PASDEP Plan for Accelerated and Sustained Development to End Poverty

PBS Protection of Basic Services Programme
PIF Policy and Investment Framework
PM&E Participatory Monitoring and Evaluation

PPD Planning and Programming Directorate (of MoA)

PSNP Productive Safety Net Programme
RARI Regional Agriculture Research Institute
RDPS Rural Development Policy and Strategy

RED&FS Rural Economic Development and Food Security
RFIP Rural Financial Intermediation Programme
SLMP Sustainable Land Management Programme

SO

Strategic Objective United Nations Development Programme United States Dollar UNDP

USD

Fiscal Year July 8th-July 7th

Exchange Rate (September 2010) ETB 16.54 = USD 1.00

Weights and Measures
Metric System unless otherwise stated

EXECUTIVE SUMMARY

- 1. Introduction: The Policy and Investment Framework (PIF) provides a strategic framework for the prioritisation and planning of investments that will drive Ethiopia's agricultural growth and development. It is designed to operationalise the CAADP Compact signed by the Government and its development partners. The PIF is a 10-year road map for development that identifies priority areas for investment and estimates the financing needs to be provided by Government and its development partners. It is anchored to, and aligned with, the national vision of becoming a middle income country by 2020 together with a number of key policy and strategic statements. The CAADP Compact and the PIF are critical in policy alignment and securing access to the finance needed for sectoral development from both domestic budgetary and international sources.
- 2. Background: Ethiopia has undertaken a far-reaching programme of economic reforms over the last 19 years which have delivered strong economic growth. Measures of human development have improved but remain unacceptably low. Poverty and food insecurity are concentrated in rural areas, and the poorest sub-sector of rural households are chronically reliant on social safety net programmes and food aid. The agricultural sector, critically important to both overall economic performance and poverty alleviation, has performed strongly over most of the last decade, but there is still substantial scope to sustainably improve productivity, production and market linkages. Government has demonstrated strong commitment to the sector through allocation of more than 15% of the total budget, although a significant portion of this is spent on the Disaster Risk Management and Food Security (DRMFS) programme. The sector remains dominated by a subsistence, low input-low output rainfed farming system in which droughts periodically reverse performance gains with devastating effects on household food security and poverty levels.
- **3. Policy and Institutional Framework:** Agricultural Development Led Industrialisation (ADLI) is a central pillar of economic policy in the recently completed Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and the soon-to-be launched Five Year Growth and Transformation Plan (FYGTP). In the agricultural sector, Ethiopia has a comprehensive and consistent set of policies and strategies, which reflects the importance of the sector in the Nation's development aspirations. The institutional capacity to implement these, however, is generally limited.
- 4. Key Issues in Agriculture and Rural Development: Increasing productivity in smallholder agriculture is Government's top priority, recognising the importance of the smallholder sub-sector, the high prevalence of rural poverty and the large productivity gap. Productivity enhancement however, must be complemented by efforts to help farmers graduate from purely subsistence farming to semi-subsistence/semi-commercial status practicing farming as a business and to adopt more sustainable natural resource management practices in order to arrest and reverse environmental degradation. In recent years the bulk of Ministry of Agriculture (MoA) support for the sector has been in the DRMFS programme, while investments for production support, rural commercialisation and natural resource management have been more limited. In the coming years the key challenge is to re-balance policy and investments to pursue sustainable productivity and profitability objectives, whilst executing a carefully controlled phasing down strategy of social safety-net activities under the DRMFS programme.
- **5. Goal and Objectives**: The Goal of the PIF is to "contribute to Ethiopia's achievement of middle income status by 2020". The Development Objective aims to "sustainably increase rural incomes and national food security". This objective embodies the concepts of producing more, selling more, nurturing the environment, eliminating hunger and protecting the vulnerable against shocks; all of which are embodied in various national policy instruments, and are expressed in terms of four main themes, each with its own Strategic Objective:

I nemauc Area	Strategic Objectives (SOS)
Productivity and Production	• SO1: To achieve a sustainable increase in agricultural productivity and production.
Rural Commercialisation	• SO2: To accelerate agricultural commercialisation and agroindustrial development.
Natural Resource Management	• SO3: To reduce degradation and improve productivity of natural resources.
Disaster Risk Management and Food Security	SO4: To achieve universal food security and protect vulnerable households from natural disasters.

Stratogia Objectives (SOs)

Thomatic Area

- **6. Policy and Institutional Framework:** The CAADP and PIF processes have highlighted areas where policy reviews, adjustments and refinements may be beneficial. First, there is a need to re-align policy and increase budget allocations to production/productivity and commercialisation initiatives; as the need for food aid and other forms of food security related development assistance declines. Attracting private investment is key to successful rural commercialisation along with attention to other dimensions of the enabling environment for rural commercial development. In addition, generalised institutional weaknesses need to be addressed within a programme-based approach to implementation of a well structured and prioritised investment framework.
- 7. Investment Framework: Government is expected to continue its strong commitment to financing agriculture and rural development over the next decade, and the expectation of continued strong economic growth will grow the agricultural sector budget from around USD 0.7 billion in 2010-11 to as much as USD 1.7 billion per annum by the end of the PIF period. Additional investments of around USD 6.2 million are also foreseen. On this basis the total budget over the tenyear PIF would be in the vicinity of USD 18.0 billion, of which around USD 2.5 billion is already committed under existing programmes and projects. Most of the additional USD 15.5 billion of funding will be required during the second half of the PIF period. Priority investments have been identified under each of the four SOs to be financed jointly by the Government and its development partners. On the basis of Government funding 60% of costs and donors funding 40%, this indicates a contribution of around USD 9.3 billion from Government and USD 6.2 billion from donors. A lower economic growth scenario would reduce the contributions to around USD 7.7 billion and USD 5.1 billion from Government and donors respectively.
- 8. Conclusions: After decades of stagnation Ethiopia's agricultural sector is beginning to show signs of realising its full potential to provide sustenance and income for its 80 million people. The Government has demonstrated a strong commitment to development of the sector by allocation of a substantial proportion of its budget to agricultural and rural development, matched by funding commitments from the international community. The CAADP Compact sets out a clear roadmap for ongoing development of the sector and confirms Government and donor responsibilities in meeting this challenge. The PIF presented herein represents a further step forward in realising the aspirations of the CAADP Compact and the new FYGTP. The four simple strategic objectives which are the skeleton of the PIF correspond to the four CAADP pillars and provide a framework for the investments needed over the next ten years.
- 9. There are significant risks associated with such a large and ambitious investment framework, but these need to be considered in comparison to the risks associated with a less aggressive approach to sector development, which imply a high likelihood of continuing poverty, food insecurity, environmental degradation and economic stagnation. Against this background, and the proposed risk mitigation measures embedded in the framework, the case for implementing the PIF is compelling.

1. INTRODUCTION

1.1 The Policy and Investment Framework

- 1. The PIF provides a strategic framework for the prioritisation, and planning of investments that will drive Ethiopia's agricultural growth and development. It is designed to operationalise the CAADP Compact signed by the Government and its development partners in September 2009. The CAADP Compact is an initiative of the African Union's New Partnership for Africa's Development (NEPAD) Planning and Coordinating Agency (NPCA) founded on a vision and strategic framework to eradicate hunger and poverty and place the continent on a path for sustainable socio-economic growth. The PIF is a 10-year road map for agricultural and rural development that identifies priority areas for investment and estimates the financing needs to be provided by Government and its development partners. It is anchored to, and aligned with, the national vision of becoming a middle income country by 2020 together with a number of key policy and strategic statements including:
 - the recently announced draft Five-Year Growth and Transformation Plan (FYGTP) for 2010/11-2014/15;
 - the strategy of Agricultural Development-Led Industrialisation (ADLI);
 - the Plan for Accelerated and Sustained Development to end Poverty (PASDEP) for 2005/06-2009/10;
 - Ethiopia's Millennium Development Goals (MDGs);
 - the Rural Development Policy and Strategies (RDPS); and
 - the CAADP Compact.
- 2. The PIF is a whole-of-Government initiative led by the Ministry of Agriculture (MoA), and reflects the priorities of the Government and a wide range of agriculture¹ and rural development sector stakeholders. The initiative is linked to the international community through the Ministry of Finance and Economic Development (MoFED). It is set within the context of the on-going institutional development of MoA and other relevant government agencies based on civil service reform.

1.2 The PIF Process

3. **Developing the PIF has been a broadly based collaborative process involving key stakeholders.** Following the signing of the CAADP Compact, MoA engaged a team of consultants to spearhead the design of the PIF. The final report of the consultancy, known as the "Ten Year Road Map²" is presented as a Working Paper that contains the key source material for this document. The PIF formulation process was overseen by the PIF Steering Committee comprising key representatives of the Rural Economic Development and Food Security Sector Working Group (RED&FS WG) chaired and directed by the MoA Planning and Programming Directorate (PPD). The PIF formulation process involved: (i) a review of key policy and strategy documents; (ii) the compilation of statistical information on sectoral trends; (iii) consultations with a broad cross section of stakeholders from Government, CSOs, CBOs, the private sector and development partners; (iv) consultations in Oromia, Amhara, SNNP and Tigray Regional States; and (v) a national consultation workshop to review the draft report in which all stakeholders took part, including representatives of the private sector and farming communities. Following a request by MoA the FAO Investment Centre provided assistance in drafting the PIF based on the information presented in the Ten Year Road Map Report.

¹ A broad definition of the agricultural sector is intended – to include all forms of agriculture, livestock, fisheries, forestry, irrigation and natural resource management.

²² Demese Chanyalew, Berhanu Adenew and John Mellor (2010): "Ethiopia's Agricultural Sector Policy and Investment Framework: Ten-Year Roadmap (2010-2020)" Main Report and Annexes included as working papers to this document.

2. BACKGROUND

2.1 Social and Economic Context

- 4. Ethiopia has undertaken a far reaching programme of economic reforms over the last 19 years. When the Government came to power in 1991, it inherited a weak command economy characterised by fiscal and current account deficits amounting to 8.7 per cent and 6.9 per cent of Gross Domestic Product (GDP) respectively, in addition to an external debt burden equivalent to 33 per cent of GDP. It therefore embarked on far-reaching reforms to achieve broad-based economic growth in a stable market economy. Price controls and subsidies were removed and the exchange rate was devalued by 250 per cent. The financial services sector was also opened up to competition from the private sector. Judicial and civil service reforms were made to remove impediments to pro-poor strategies, policies and investment programmes. Equally, regulations were put into place to encourage both domestic and foreign investment, particularly in agriculture and agro-processing. These reforms were underpinned by increased pro-poor public spending in agriculture, education, health, water, roads, rural electrification, and telecommunications.
- 5. The reforms have delivered strong economic growth over the last seven years. The economy has registered rapid growth rates averaging 11.0 per cent per annum over the past seven years, placing Ethiopia among the top performing economies in sub-Saharan Africa. These rates also exceed the economic growth rate of 7 per cent required to achieve the MDGs. The new FYGTP envisages continuing GDP growth at a minimum 10 per cent per annum. Not surprisingly, these rapid growth rates are translating into improved living conditions for the poor, including the rural poor, and a declining poverty headcount. Much remains to be done, however, to further reduce the incidence and severity of poverty. High food inflation rates have benefited rural households that are net producers of food, however, most rural households are either net buyers of food or rely on food aid or direct payments to fill their food security gaps. This means that poor rural and urban households are finding it more difficult to secure adequate food supplies, particularly as food prices increase faster than the prices of non-food items.
- 6. Although measures of human development have improved they remain unacceptably low. Ethiopia is one of the poorest countries in the world, with an annual per capita income of USD 170. Ethiopia was ranked 171st out of 182 countries on the UNDP Human Development Index in 2009. Life expectancy at birth is only 54.7 years. Infant and maternal mortality and child malnutrition rates are among the highest in the world. While access to education has increased in recent years, the overall adult literacy rate, at 36 per cent is low even by sub-Saharan African standards. Only about 58 per cent of the population have access to clean drinking water and about 80 per cent have no access to improved sanitation. About 38 per cent of children under the age of five are underweight and over 12 million people currently suffer from chronically or transitory or acute food insecurity. HIV/AIDS constitutes a major threat to sustained economic growth, with about six per cent of adults estimated to be HIV-positive.
- 7. **Poverty and food insecurity is concentrated in rural areas.** Roughly 30 per cent of the population live below the national poverty line (1075 Birr/adult in 1995/96 prices). There are marked differences, however, between rural and urban areas. Most rural households live on a per capita income of less than USD 0.50 per day. Generally, rural households have less access to most essential services. According to the latest Poverty Assessment (2005), overall progress in reducing poverty, despite strong agricultural sector growth falls short of what is required to meet MDG1 by 2015 as a result of high variability in agricultural GDP and rapid population growth. Many rural households are finding it difficult to survive without resource to seasonal or permanent urban migration in search of wage employment, and support from social safety net programmes.

8. The poorest sub-sector of rural households are unable to meet their basic needs and are chronically food insecure. About a third of rural households farm less than 0.5 hectares which, under rainfed agriculture at current yield levels, cannot produce enough food to meet their requirements. Most agricultural production is used to meet household consumption needs and, for a very large number of households, there is a prolonged hunger season during the pre-harvest period. When there are surpluses, smallholder farmers are often constrained by lack of access to markets. In all farming systems, livestock are the single most important household asset and there is a strong correlation between lack of livestock ownership and poverty, particularly among woman-headed households.

2.2 The Agricultural Sector

- 9. The agricultural sector greatly influences economic performance in Ethiopia. About 11.7 million smallholder households account for approximately 95 per cent of agricultural GDP and 85 per cent of employment. About 25 per cent of rural households earn some income from non-farm enterprises, but less than three per cent rely exclusively on income from such enterprises. With a total area of about 1.13 million km² and about 51.3 million hectares of arable land, Ethiopia has tremendous potential for agricultural development. Only about 11.7 million hectares of land, however, are currently being cultivated; just over 20 per cent of the total arable area. Nearly 55 per cent of all smallholder farmers operate on one hectare or less. In 2010, the agricultural sector accounts for roughly 46 per cent of GDP, and 90 per cent of exports. Cereals dominate Ethiopian agriculture, accounting for about 66 per cent of agricultural GDP. Livestock production accounts for about 27 per cent of agricultural GDP (AGDP) and draught animal power is critical for all farming systems. Forestry accounts for about 7% of (AGDP). Over the past decade, cereal production has more than doubled to nearly 15 million tonnes, as a result of horizontal expansion and increased yields. Nevertheless, food security remains a critical issue for many households, and for the country as a whole. Moreover, expansion of the cropped area to more marginal lands has led to severe land degradation in some areas.
- 10. **Ethiopian agriculture is dominated by a subsistence, low input-low output, rainfed farming system.** The use of chemical fertiliser and improved seeds is quite limited despite Government efforts to encourage the adoption of modern, intensive agricultural practices. Low agricultural productivity can be attributed to limited access by smallholder farmers to agricultural inputs, financial services, improved production technologies, irrigation and agricultural markets; and, more importantly, to poor land management practices that have led to severe land degradation. Ethiopia has one of the highest rates of soil nutrient depletion in sub-Saharan Africa. Estimates suggest that the annual phosphorus and nitrogen loss nationwide from the use of dung for fuel is equivalent to the total amount of commercial fertiliser applied. Land degradation is further exacerbated by overgrazing, deforestation, population pressure and inadequate land use planning.
- 11. The agricultural sector has performed strongly over most of the last decade, but there is still substantial potential to improve productivity and production. Since 1996/97 the average growth rate of the agricultural GDP has been about 10 per cent per annum, and since 2004-05 the sector has been reported to have expanded at around 13 per cent per annum, which easily surpasses the CAADP target of 6 per cent. Over this period the food poverty head count decreased from 44 per cent in 1999/00 to 38 per cent in 2005/06, and is expected to be under 30 per cent by 2009/10. Per capita grain production increased from below 150kg in 2003/04 to 213kg in 2007/08, which is close to meeting the minimum 2,100 kcal/day nutritional standard. The share of agriculture in GDP declined from 53 per cent to 43 per cent between 1995/96 and 2008/09, reflecting strong growth in other sectors of the economy. Despite these achievements, however, the Government has made poverty and hunger reduction its top priorities. It recognises much remains to be done in the agriculture sector to realise the vision to become a middle income country (defined as GDP/capita of USD 1,000) by 2020.
- 12. Government has demonstrated strong commitment to agriculture and rural development through allocations of more than 10 per cent of the total budget. To enhance the

delivery of improved production technologies and support services, the Government has, with strong support from development partners, embarked on (i) expanding coverage of the national agricultural research system into arid and semi-arid areas; (ii) training and deploying at least three development (extension) agents to each *kebele*; (iii) establishing farmer training centres in all 18,000 *kebeles*; and (iv) strengthening research-extension-farmer linkages to improve technology generation, transfer, utilisation and feedback.

- 13. **Droughts periodically reverse agricultural sector performance gains with devastating effects on household food security and poverty levels.** Vulnerability to droughts is greatest in the pastoral areas of the lowlands and the densely populated, food-insecure districts of the highlands. Drought-induced famines are further exacerbated by limited coping mechanisms and inadequate contingency planning for drought mitigation and the threat of climate change. Ethiopia has an irrigable potential of about 4.3 million hectares, but only about six per cent of this potential is currently being utilised.
- 14. **Gender disparities significantly impede women's empowerment.** While the constitution guarantees gender equality and supports affirmative action, on average, women have fewer years of schooling and heavier workloads than men. They perform a significant portion of farm work but tend to be excluded from control of farm income and inheritance of property. Women also suffer disproportionately from environmental degradation as they have to walk longer distances to collect water and firewood. The lack of draught animal power tends to intensify their vulnerability. They also shoulder a greater burden of rural poverty because of their vulnerable socio-economic position. The incidence of poverty in woman-headed households is also higher.

2.3 Policy Framework – General

- Development-Led Industrialisation (ADLI) that sees agriculture as the engine of growth. Its main thrust has been to: (i) improve agricultural extension services; (ii) promote better use of land and water resources; (iii) enhance access to financial services; (iv) improve access to domestic and export markets; and (v) provide rural infrastructure. The country's first poverty reduction strategy known as the Sustainable Development and Poverty Reduction Programme was successfully implemented over three years with strong support from development partners. The programme consolidated the gains realised under the ADLI strategy and promoted civil service and judicial reforms, capacity-building, good governance, and decentralisation and empowerment.
- 16. The Plan for Accelerated and Sustained Development to End Poverty (PASDEP) was implemented from 2005-06 to 2009-10. The highly successful PASDEP, which achieved an average 11% GDP growth, and saw the relative share of agriculture within the economy decrease from 47 percent to 41 percent, aimed to: (i) improve implementation capacity; (ii) promote accelerated and sustained economic growth; (iii) manage population growth; (iv) empower women; (v) strengthen infrastructure; (vi) develop human resources; (vii) manage risk and volatility; and (viii) create employment opportunities. In the agricultural sector, the PASDEP called for: (i) market-based agricultural development; (ii) increased private sector investment; (iii) specialised support services for differentiated agro-ecological zones; (iv) improved rural-urban linkages; and (v) special efforts to support pastoral development. These objectives were underpinned by investments to improve rural infrastructure, enhance access to financial services, promote irrigation development, ensure land tenure security, and improve the performance of agricultural markets. PASDEP also recognised the urgent need to better manage the natural resource base and protect the environment.
- 17. Achieving food security is another important aspect of Ethiopia's development plans. In 2005 Ethiopia began implementation of a more comprehensive approach to this critical issue under its Food Security Program (FSP). In the past much of the support for the chronically food insecure was met through emergency food assistance. This approach was insufficient and unpredictable and failed to address underlying causes of food insecurity. A key element of the FSP is the Productive Safety

Net Programme (PSNP), in which more predictable food and cash transfers are made to chronically food insecure households in return for labour on public works projects, in particular community-based watershed rehabilitation. These investments help to protect and build household assets, while at the same time strengthening the productive base of food insecure areas and help to reduce chronic food insecurity. In fact, the PSNP public works activities currently represent the largest SLM investment in the country.

- 18. **Removing gender disparity and ensuring gender equality** and women's empowerment is key to accelerated economic growth and social development. Women constitute about half of the population and Government has placed a strong emphasis on their participation in the development process, moving decisively to create a conducive environment for women's effective participation, contribution to and benefits from the economic, social, and political processes of the country. A National Action Plan on Gender (NAPG) has been formulated and the Government has also taken steps to improve the condition of women, including passing laws to protect women's rights. NAPG measures include programs to increase girl's and women's education, to improve access to water supply and sanitation, to focus on services related to mothers and women's health, and to adapt agricultural programs and technical and vocational training to the needs of women.
- 19. The Five-Year Growth and Transformation Plan (FYGTP) for 2010/11 to 2014/15 succeeds both PASDEP and the previous five-year development plan. The FYGTP, which was unveiled for consultations in August 2010, projects continuing economic growth at a minimum of 10 per cent per annum, and an ambitious best-case scenario of doubling GDP over the five year plan period. The plan aims to reach all of the MDGs and to continue to consolidate democratic governance and institutions and maintain the path towards a stable multi-party democratic system. This will be achieved through balanced participation of the state and private sectors and special support for the emerging states to catch up with the more advanced ones. The plan has three major goals: (i) continuing rapid economic growth; (ii) expanding access to, and improving the quality of social services; and (iii) infrastructure development. Agriculture is seen as the key driver of economic development with particular attention given to scaling-up best agricultural practices to provide a foundation for expansion of the industrial sector. Further discussion of the role of the agricultural sector in the growth process is described in "Ethiopia's Agriculture Sector Policy and Investment Framework: Ten Year Road Map (2010-2020)."

2.4 Policy Framework – Agriculture and Rural Development

- 20. Ethiopia has a consistent set of policies and strategies for agriculture and rural development that reflect the importance of the sector in the nation's development aspirations. The policy framework is based on the concept of ADLI, which has been the central pillar of Ethiopia's development vision since the 1990s. ADLI is an economy and society wide strategy in which agriculture has a central role. It envisages an economically transformed society within which agriculture will grow rapidly, but see its relative importance decline in favour of an even more dynamic industrial and manufacturing sector. The rural non-farm sector, which provides goods and services for the rural population, also has an important role to play recognising that it currently accounts for around a third of GDP. Demand for such goods and services are expected to expand in line with rising rural incomes, generating much-needed employment and self-employment opportunities for rural households.
- 21. The Rural Development Policy and Strategies (RDPS, 2003) presents specific policies and strategies to guide agricultural and rural development, based on the ADLI platform. The RDPS recognises that the development effort in rural areas cannot be limited to agriculture alone. There is a need for rural infrastructure and social development programmes and for trade and industry to build on and support developments in agriculture. Key elements of the RDPS include: rural and agricultural centred development as a means of: (i) ensuring rapid economic growth; (ii) enhancing benefits to the people; (iii) eliminating food aid dependency; and (iv) promoting the development of a market-oriented economy. It also sets out five basic directions for agricultural development:

- the **labour intensive strategy**, which sees the mobilisation of under-utilised and unproductive rural labour as a key driver of growth, rather than capital-intensive approaches. It envisages high levels of training and technology adoption in order to boost agricultural productivity without drawing heavily on the country's scarce capital resources;
- **proper utilisation of agricultural land**, by guaranteeing the availability of land to people who seek to make a living out of land, and assisting them to utilise it productively on a sustainable basis through irrigation, multi-cropping and diversified production;
- a "foot on the ground", which envisages moving ahead in a stepwise manner building on experiences and indigenous knowledge at the same time as exploring opportunities for deploying new technologies in conjunction with human resource development;
- **differentiation according to agro-ecological zones, which recognises that** Ethiopia's enormous agro-ecological diversity calls for different approaches to agricultural development in different parts of the country. This also provides the opportunity for risk management through diversification; and
- an integrated development path among various activities and products in agriculture, as well as linking these to education, health and infrastructure development.
- 22. PASDEP (2005/06 to 2009/10) and the new FYGTP (2010/11 to 2015/16) also give high priority to agriculture and rural development. PASDEP included six fundamental agricultural development strategies:
 - adequately strengthened human resources capacity and their effective utilisation;
 - ensuring prudent allocation and use of land;
 - adaptation of development compatible with different agro-ecological zones;
 - specialisation, diversification and commercialisation of agricultural production;
 - integrating development activities with other sectors; and
 - establishment of effective agricultural marketing systems.
- A number of the PASDEP principles have been rolled forward into the new FYGTP, which will correspond with the first five years of the PIF. The FYGTP recognises the pivotal role of agriculture and rural development, and plans for accelerated growth for the sector on the basis of solid performance in the previous plan period as well as growing demand for food and industrial raw materials. Infrastructure development has also created opportunities for large scale private investment in the sector including horticulture and extensive arable agriculture in areas with under-utilised land Smallholder agriculture, however, is expected to remain the principal source of resources. agricultural growth. Increasing male and female smallholder productivity and production is the main thrust of the plan and will be achieved in three major ways. First, by scaling up best practices used by leading farmers whose productivity is 2-3 times higher than the average. Second, by improving the management of natural resources with a focus on improving water utilisation and the expansion of irrigation. Third, by encouraging farmers to change from low value to high value products in order to increase their cash incomes, with complementary investments in market and infrastructure development. These initiatives will be supported by farmer training and measures to improve access to agricultural inputs and product markets using cooperatives as the delivery mechanism.
- 24. The FYGTP envisages differentiation among the three main agro-ecological zones. In the adequate moisture areas the focus will be on scaling up best production and marketing practices to increase productivity by supplying agricultural inputs and providing training to development agents (DAs) and farmers. Particular attention will be given to soil fertility management using organic and inorganic fertilisers; improved rainfed agronomic methods; irrigation and improved water use efficiency; production and distribution of seed; natural resource conservation; livestock and forage

development; capacity building, and strengthening research-extension-farmer linkages. In the **moisture deficit areas** the focus will be on soil and water conservation, and watershed management using labour-based methods. Particular attention will be given to underground and surface water utilisation; development of small ruminants, poultry and apiculture; and productive safety net initiatives to underpin food security for vulnerable households. Steps will also be taken to strengthen Government implementation capacity in the moisture deficit areas. In the **pastoral areas** the FYGTP will focus on livestock development; water for people and livestock; forage development; irrigation; improving the livestock marketing system; and strengthening implementation capacity.

- 25. The 2009 Ethiopia CAADP Study, whilst not a policy document in itself, provides further insights into the agricultural policy framework. CAADP is a framework which African Governments agreed on and created to accelerate growth and eliminate poverty and hunger on the continent. Ethiopia is in the process of institutionalising the CAADP as its agriculture sector policy, strategy and programme formulating framework, of which this PIF forms a part. CAADP embraces the principle of agriculture-led growth as a main strategy to achieve MDG1 of halving poverty and hunger by 2015. On this basis it sets principles and targets to guide national sector strategies in:
 - pursuit of a 6 per cent average annual growth rate for the agricultural sector;
 - allocation of at least 10 per cent of the national budget to the agricultural sector;
 - exploitation of regional complementarities and cooperation to boost growth;
 - the principles of policy efficiency, dialogue, review, and accountability;
 - the principles of partnerships and alliances to include farmers, agribusiness, and civil society communities; and
 - assigning responsibility for programme implementation to individual countries; that of coordination to designated Regional Economic Communities; and that of facilitation to the NPCA Secretariat.
- 26. Ethiopia has surpassed the CAADP targets of 6% average annual agricultural growth rate and 10 per cent national public expenditure share for the agricultural sector for successive years before the launch of CAADP. This does not mean, however, that poverty and hunger are tackled to the level of expectation of the Government. Indeed the Government is committed to allocate more resources to tackle these problems. The Ethiopia CAADP Study, and the CAADP Compact signed by Government and the key development partners, describes a strategy, consistent with the RDPS and PASDEP, which inform future planning frameworks including the FYGTP. The four pillars of the Ethiopia CAADP strategy which are embodied in the CAADP Compact are:
 - Pillar I: Improve natural resources management and utilisation;
 - Pillar II: Improve rural infrastructure, market access and trade capacities;
 - Pillar III: Enhance food security and improve disaster risk management; and
 - Pillar IV: Improve the agricultural research and extension system.
- 27. **Other sectoral strategies and policies** are key to realizing the objectives of the agricultural and rural development sector, which must also be acknowledged. These include:
 - Economic Growth Corridor strategy;
 - Industrialization Development Strategy;
 - Water Sector Strategy; and
 - National Nutrition Policy.

2.5 Institutional Framework

- 28. Ethiopia has a decentralised federal system of government comprising nine regional states and two administrative cities. The key government institutions consist of line ministries and bureaux at the federal and regional levels respectively. Line ministries are responsible for coordinating the design and implementation of public strategies and policies. The regional bureaux are further decentralised to woreda (district) and kebele (lowest administrative unit) levels. At the federal level, the MoFED has overall responsibility for economic policies and strategies. In addition to budgetary and fiscal management, MoFED is responsible for financial accounting and reporting, including the management of public statistics. The MoA has overall responsibility for agricultural and rural development policies, strategies and plans, including the management of agricultural research and extension services, natural resource management, input and output marketing, disaster risk management and food security (DRMFS), and private investment support.
- 29. The regional States have their own Bureaux which are counterparts of the federal ministries. The Bureau of Finance and Economic Development (BoFED) and Bureau of Agriculture (BoA) are the key counterparts of MoFED and MoA respectively. BoFEDs have a decentralised institutional structure that correspond to woreda level counterparts. The decentralised institutional structure of the BoAs reaches down to the kebele level, where there are at least three development agents working with farmers. Each regional land administration authority is charged with creating an environment conducive for sustainable land management, and ensuring that the management, administration and use of rural land follows established regulations. It plays an important role in land use planning, land administration, registration and certification. Their structure is decentralized to the kebele level where the authority works with community-based organisations in land surveying, mapping and conflict resolution.
- 30. In January 2011 the Government of Ethiopia established the Agriculture Transformation Agency by federal regulation. The primary aim of the Agency is to promote agricultural sector transformation by supporting existing structures of government, private sector and other non-governmental partners to address systemic bottlenecks in the system to deliver on a priority national agenda to achieve growth and food security. The priority national agenda is likely to be: (i) seed systems; (ii) soil fertility; (iii) cooperatives; (iv) inputs market; (v) technology access and adoption; (vi) extension and research; (vii) output markets on key commodities. The Agency will therefore undertake a range of activities on an as-needed basis to support these programmatic work areas i.e. problem solving, support to implementation, and lead implementation in specific areas such as piloting of innovations.
- 31. **Agricultural sector institutions can be classified into seven categories:** (i) government (federal, regional and *woreda* level); (ii) mass organisations including CBOs; (iii) private institutions; (iv) civil society organisations (CSOs), including cooperatives and farmer organisations; and (v) donors (bilateral/multilateral); and UN and CGIAR-affiliated institutions. The role of these institutions and their expected synergy is highlighted in the CAADP study. Multilateral and bilateral donors are recognised as essential development partners in the execution of policies and strategies, while CSOs are stakeholders and implementing bodies working in line with GoE policies and strategies. Private sector organisations are also stakeholders and beneficiaries of the sectoral policy framework.
- 32. Agricultural research and extension institutions are critical in the implementation of agricultural policies and strategies at both federal and regional levels. Ethiopia has invested heavily in development of the National Agricultural Research System (NARS), including the Ethiopian Institute for Agricultural Research (EIAR), Regional Agricultural Research Institutes (RARIs) and affiliates of the CGIAR. New research centres have been established for previously uncovered agro-ecologies, particularly in lowland, pastoral and agro-pastoral areas. In addition, to boost capacity for agricultural research, partnerships have been developed with Universities and Colleges in the different regions and agro-ecological zones.

- The agricultural extension system is a major element of the agricultural and rural 33. development strategy. Appropriate technologies need to be disseminated through a strong agricultural research and extension system. The lead technologies in this regard are improved seed, fertiliser, artificial insemination and veterinary services. The extension system has federal and regional dimensions. Core institutions are the Agricultural Technical and Vocational Education and Training (ATVET) centres and the Farmer Training Centres (FTCs). These institutions are currently functioning to produce, as well as use, the human capital that is embodied in Development Agents (DAs). ATVETs train DAs and the DAs in turn use FTCs to train farmers. At present the extension system deploys four DAs at each kebele: with responsibility for crop production, livestock production, natural resource management, and home economics. In addition, there is one animal health assistant per three kebeles, and one cooperative expert serving five kebeles. Furthermore, as part of the system, Research-Extension-Farmer Linkage Councils have been established to oversee technology generation, packaging and dissemination. These Councils are structured from woreda up to the federal level.
- 34. Seed multiplication and the distribution of improved genetics is a critical element of the drive for improved productivity. In the public sector the major institutions are the Ethiopian Seed Enterprise (ESE), and the recently established Regional Seed Enterprises (RSEs). On the livestock side there is the National Artificial Insemination Centre, which is currently operating through four regional sub-branches. In the private sector there are Pioneer Hybrid and other small seed enterprises.

2.6 Institutional Performance

35. Whilst Ethiopia has a comprehensive and consistent set of policies and strategies for the agricultural sector, the institutional capacity to implement these is generally limited. To address this important constraint MoA is implementing the civil service reform programme in an effort to improve its operational and organisational systems as well as to change its workforce attitude through civil service reform. By challenging the prevailing situation, MoA has managed to introduce efficient and effective systems and procedures, although further improvements are still needed. Changes have taken place as a result of training for staff in the areas of policy and strategy formulation. Work on improving institutional performance is continuing. The newly established Agriculture Transformation Agency is expected to also contribute to strengthening the institutional capacity performance.

3. POLICY, STRATEGY AND INSTITUTIONAL GAP ANALYSIS

The PIF process includes a comprehensive review of policies, strategies and institutions, and identification of gaps and weaknesses which need to be addressed. This review is detailed in the Ten Year Road Map Report, and is consistent with the RDPS which highlights the needs to review and revise polices as the need arises and to adjust goals according to developments over time. The policy, strategy and/or institutional gaps that have been identified during the PIF process will be addressed in a sequence manner, the first priority being given to the following three areas, in coherence with the assignment that the Government has given to the Agricultural Transformation Agency

- 1. Input markets;
- 2. Farmers' formal and informal organizations; and
- 3. Extension and research.

3.1 Policy Gap Analysis

36. Land administration and land use planning have been identified as important issues in a number of policy documents (PASDEP, RDPS), and in the June 2010 concept note on the proposed Ethiopia Land Administration and Land Use Development Project (ELALUDEP). Improved land tenure security is seen as a vital ingredient of sustainable land use and land use planning and has led

to successful land administration and certification reforms, and a new unit, the Rural Land Administration and Use Directorate, has been established within MoA. Considerable progress has been made through the issue of more than 6.3 million first level land certificates (out of 13 million rural households). There remain, however, a number of policy, institutional, technical and organisational gaps that need to be supported. Therefore, support is requested from the development partners for the design and implementation of ELALUDEP to improve land administration and land use planning in order to achieve sustainable land management by enhancing security of tenure of smallholder farmers, pastoralist and agro-pastoralists through efficient and effective land policies, legislation, certification and administration.

- 37. **There is a lack of focus in livestock development policy.** A livestock breeding policy and strategy has been formulated, but this has been criticised for lack of attention to related issues of animal health and nutrition. The lack of a dairy sub-sector development policy has also been highlighted. These issues are also reflected in the limited capacity of MoA in the area of animal health and livestock production (following the disbandonment of the Livestock Department).
- 38. The supply of high quality seed at affordable prices is critical for improved agricultural productivity. Ethiopia has so far been unable, however, to develop a comprehensive seed production and distribution system to guarantee supplies of high quality seed to all farmers. Key policy issues include the mandate for production, pricing and distribution among public and private enterprises, seed importation, and the role of Government in regulating the seed industry. Private sector participation is stagnant and mainly limited to hybrid varieties. Major policy reviews are seen as necessary at all stages of the seed supply chain from breeder seed to commercial certified seed production. Fiscal constraints mean that public sector seed production can only meet a small fraction of demand, but private suppliers seem unable or unwilling to fill the gap. There is also a need to harmonise seed policy and certification systems to facilitate intra-regional seed trade.
- 39. The availability of financial services is constraining the capacity of smallholders and emerging commercial farmers to adopt improved agricultural practices. This includes both short term seasonal credit for crop inputs and medium-longer term finance for capital investments. A very small portion of imported capital goods are destined for the agricultural sector, and most of this is for production of export commodities such as horticulture and flowers. Staple food crop producers find it very difficult to access finance for import of capital goods. If Ethiopia is to embark on accelerated irrigation development, and modern large-scale grain production and agro-processing, investors need to have access to medium/long term loans and foreign exchange.

3.2 Strategy Gap Analysis

- 40. There is a need for a strategic review of agricultural water management to accompany the proposed major investments in irrigation development. This calls for analysis of water management options in order to direct investment to the most productive uses of Ethiopia's water resources. Currently, water is mainly used to irrigate horticultural crops and large-scale industrial crops such as cotton and sugar. Consideration should be given to use of agricultural water to produce high value staple food crops as import substitutes, as well as livestock feeds to improve exports of animal products. Gender issues in irrigation development also need to be considered.
- 41. **Value chain efficiency improvement.** Agricultural marketing and value addition is conducted mainly through the informal sector through traders. Poor marketing services and facilities and transport in rural areas present a large constraint to agricultural commercialisation. There is a need to strengthen agribusiness linkages along the major agricultural commodity value chains. Support to farmer cooperatives and organisations will be crucial to improving marketing and value addition.
- 42. The strategy for private sector participation in the fertiliser production and supply chain also needs to be reviewed. The Government's fertiliser policy envisages a tripling in fertiliser

use through a competitive and efficient importation and marketing system. Cooperatives are expected to play a key role, but private sector traders also need to be engaged in the import and distribution system. Competition between traders and cooperatives will bring down prices to farmers. Further gains could be made through private investment in fertiliser manufacturing.

- 43. The focus on primary production has tended to overlook the importance of post-harvest losses. Available data suggest annual losses in the vicinity of 15-20 per cent of potential grain production due to poor pre-harvest practices and natural disasters; and losses of up to 30 per cent post-harvest due to inappropriate collection, transport, storage, pest control etc. Post harvest losses for non-grain commodities are also high. There is a need for a strategy to reduce the level of losses to say 10 per cent.
- 44. **A strategy is needed to address human health constraints which affect agricultural productivity** in the labour intensive smallholder farming systems. This applies particularly to HIV/AIDS affected households that are severely constrained in their capacity to produce their subsistence food needs. Chronically poor households suffering from under-nutrition and malnutrition also find it difficult to improve their productivity due to labour constraints.
- 45. **An enhanced livestock sub-sector strategy is needed** to address key constraints to livestock productivity. Livestock feed shortages are crucial in both the highlands, where grazing land is becoming extremely scarce, and in the lowlands due to rangeland degradation. There is no private sector participation in the production of compound feeds. Drought reserves of feed and forage need to be developed as a means of disaster risk preparedness and hillside grazing replaced by fodder production and stall feeding. Artificial breeding methods also need to be considered for genetic upgrading, particularly of cattle, and traditional apiculture methods could be improved.
- 46. A strategy for conservation and utilisation of forest products also needs to be articulated, including non-timber forest products (e.g. incense, resin, bamboo, honey, herbal medicines, fruits and nuts, etc.). The strategy must also recognise that most rural households rely on wood for fuel supplies, which contributes to deforestation and land degradation. The strategy therefore needs to consider alternative household energy sources and fuel-saving technologies.

3.3 Institutional Gap Analysis

- 47. Ethiopia has comprehensive policies and strategies (although with some gaps as described above) but many of these are not implemented efficiently and effectively. Most of this is attributed to institutional capacity weaknesses. Specifically it concerns how agricultural development activities are organised from the technical and budgetary perspectives, as well has how the available human, financial and physical resources are used. The Government has already embarked on the task of rectifying these problems within MoA via the civil service reform process. For the PIF to be a useful framework to guide policy and investment, the technical and budgetary coordination and allocation systems should fall within a portfolio of programmes, sub-programmes, and projects, with expenditures related to outputs. To this end MoA is piloting a programme budgeting approach under the guidance of MoFED. This will enable performance to be monitored against budgets and measurable targets. The PIF results framework presented in Annex 1 presents specific outcomes and milestone indicators under each of the strategic objectives that are suitable for monitoring in a programme budgeting context.
- 48. There are systemic capacity limitations at all levels and in all of the sectoral institutions, but the problem is most severe at the *woreda* level. Capacity limitations include human resources, working premises, equipment, communications, machinery, furniture and other facilities. The civil service reform process aims to make the most efficient use of available resources, but resource limitations also need to be addressed. ATVETs and FTCs require capacity building in order to upgrade the skills of DAs and Subject Matter Specialists, and to provide then with facilities such as housing and transport.

- 49. There are also identified institutional gaps related to sector-wide linkages, relationships and synergies. Specific issues include lack of communication among ministries and between ministries and CSOs and parastatals; inadequate vertical and horizontal collaboration among research institutes; weak research-extension-farmer linkages; and lack of communication and collaboration with the private sector. Management of the NARS presents special challenges. The Ethiopian Institute of Agricultural Research (EIAR) has the mandate to coordinate the NARS, but its coordination role is unclear, and the division of responsibilities for the conduct of research, is not well defined between EIAR, the RARIs and some of the specialised and CGIAR-affiliated institutes. The research system should play a key role in scaling up improved agricultural technologies, and coordination issues, including budget allocations amongst the various institutions need to be resolved.
- 50. MoA capacity for Planning, Monitoring and Evaluation (PM&E) is challenged in relation to the level of investments envisaged under the PIF. The CAADP and PIF studies have identified a lack of coordination of development planning among federal and regional governments, and between these, CBOs and donor organisations. Many programmes supported by bilateral agencies are not known to the PPD of MoA and regional BoAs. A number of important studies have been undertaken without coordination or traceability, often by service providers contracted by Government or donors, and have done little to improve national PM&E capacity. The PPD has the capacity to prioritise investments, design and appraise projects or programmes, and assess their potential impact relative to PIF objectives. However the increased level of investment envisaged under the PIF will stretch this capacity. This limitation has been recognised by the civil service reform process and a doubling of PPD staff resources has been proposed.
- 51. There is no formal institution with responsibility for development of the Pastoral and Agro-Pastoral (PAP) areas and alignment between formal and traditional institutions. There are a number of coordinating committees for pastoral affairs, including in the House of Representatives, Ministry of Federal Affairs and the special coordination offices of the PAP areas, but none of these has a formal mandate and responsibilities for development of the sector. Related to this is the low level of representation of the livestock sub-sector in MoA.
- 52. Responsibility for irrigation development is shared amongst MoA, Ministry of Water Resources and Energy (MoWRE), BoA and regional Bureaux of Water Resources and Energy (BoWRE). Whilst demarcation of responsibilities for construction of small, medium and large irrigation schemes is well defined, the responsibility for operation and maintenance, including the role of water user associations is less certain. Given the prominence of irrigation in Ethiopia's investment plans, there is also a need to strengthen planning and design of irrigation schemes, including community participation and environment impact assessment, and to strengthen irrigation extension services and water user associations.
- 53. Institutional arrangements in the seed system need to be better integrated and coordinated with clear lines of responsibility covering plant breeding and basic seed supply and seed multiplication, distribution/marketing, quality control/certification and pricing. There also needs to be a fair competitive framework between the parastatal Ethiopian Seed Enterprise (ESE), the Regional Seed Enterprises (RSEs), CBOs and private seed enterprises.

4. KEY ISSUES IN AGRICULTURE AND RURAL DEVELOPMENT

4.1 Overview

54. Building on the achievements of the last ten years, Ethiopia aims to become a food-secure middle income country through the ADLI strategy. Agriculture and rural development has been the central pillar of successive national development and poverty reduction plans and remains so under the new FYGTP announced in August 2010. In order to achieve these far-reaching and

ambitious objectives, the CAADP study has identified a number of key sectoral issues which need to be addressed over the next decade. It also needs to be recognised that achievement of the FYGTP targets for the agricultural sector are in part dependent on the performance of other sectors, and the economy in general. Increasing levels of investment in the sector can only be achieved if the economy and government revenues continue to grow strongly, the international community continues its support, and there are complementary investments in infrastructure, energy sector development, health and education. Population pressure also has a major bearing on agriculture and rural development.

The government has demonstrated a very strong commitment to continued agricultural growth. Between 13 and 17 per cent of government expenditure (equivalent to over five per cent of GDP) has been channelled towards agriculture (including natural resource management) in recent years - far more than the average for sub-Saharan African countries and well in excess of the recommended CAADP minimum of 10 per cent. About 60 per cent of agricultural investments are funded from the Government budget, 30 per cent from grants, and 10 per cent from concessional loans. While more than half of this expenditure supports chronically food insecure households through the PSNP and related projects under MoA's DRMFS Programme. Investments are also directed towards expanding the extension system, irrigation development, and rural commercialisation and agro-processing. The government is complementing its efforts in food-insecure areas with an increased commitment to raise national food production by investing in areas with high agricultural potential, including efforts to attract private agricultural investment in areas with under-utilised land and water resources.

4.2 Agricultural Productivity

Increasing productivity in smallholder agriculture is the Government's top priority. This recognises that: (i) smallholder agriculture is the most important sub-sector of Ethiopia's economy; (ii) there remains a high prevalence of poverty among smallholder farming communities; and (iii) there is a large potential to improve crop and livestock productivity using proven, affordable and sustainable technologies. The productivity issue is recognised by the Government and its partners under CAADP Pillar IV (Improve the Agricultural Research and Extension System). Within the broad strategic thrusts of Pillar IV and the FYGTP, there is an issue of how and where to deploy the available resources in pursuit of the productivity objective. Over the last two decades the Government and its development partners have tended to channel investments towards the chronically food-insecure sectors of the population, and natural resource conservation, which tend to be concentrated in areas of lower agricultural potential. These investments helped to meet short-term needs but failed to strengthen the livelihoods and resilience of vulnerable households and have not resulted in the achievement of food security. Ethiopia's current FSP seeks to achieve a more sustainable solution to food security through investments designed to protect and build household assets, while at the same time improving the productive base though large-scale watershed rehabilitation. There is a need, however, to increase development efforts and resources targeting high-potential rainfed areas and irrigation development, in order to accelerate productivity growth, agricultural led industrialisation and long-term food security. This does not mean, however, that special needs of vulnerable groups will be ignored: rather they will be addressed through the DRMFS Programme which falls under CAADP Pillar III (Enhanced Food Security and Disaster Risk Management).

4.3 Rural Commercialisation

57. Productivity enhancement alone will achieve food security, but will not necessarily enable the rural poor to escape poverty. To escape poverty rural households have to graduate from purely subsistence farming to a semi-subsistence/semi-commercial status practicing farming as a business, albeit on a small-scale. This issue is addressed under CAADP Pillar II (Improve Rural Infrastructure, Market Access and Trade), and calls for major improvements in the enabling environment for rural farm and non-farm commercial activity. Improved infrastructure and market

access are important elements of such an enabling environment, but rural commercial development also requires access to financial services, development of commercial supply chains for agricultural inputs, market information services, telecommunications, product standards and quality assurance systems, post harvest storage and transport facilities, etc. Diversification into higher value products will also be a key element of the commercialisation process. Since Ethiopia is a net importer of many processed food products there are substantial opportunities to add value to agricultural produce on and off the farm, to be sold at import parity prices. In this case Ethiopia's landlocked status and high internal travel costs provides opportunities for rural entrepreneurs to engage in profitable value adding activities thereby creating employment opportunities and alternative sources of income for many rural households. Increased production of quality of raw materials under **CAADP Pillar IV** will also reinforce investment in agro-processing.

4.4 Natural Resource Management

- 58. Heavy population pressure and inappropriate agricultural techniques combine to threaten the sustainability of the agro-ecosystem and its capacity to support food production, rural commercialisation and poverty reduction. This issue will be addressed under CAADP Pillar I (Improve Natural Resource Management and Utilisation), and will be complemented by productivity enhancement initiatives based on agricultural methods that are both more productive and more sustainable. The key problem area to be addressed under Pillar I is the nexus between rural poverty, natural resource management and climate change. In particular:
 - environment and natural resource degradation is often a direct cause of rural poverty;
 - rural poverty often exacerbates environment and natural resource degradation; and
 - climate change increases the vulnerability of rural people and the ecosystems they depend on for their livelihoods.
- 59. Government is already addressing the issue through the Sustainable Land Management Project (SLMP) and has requested donor support for a major land administration and land use planning initiative (ELALUDEP). This initiative, however, needs to be expanded to fully address the extent and magnitude of the problem. The first priority will be to arrest and reverse the long-term deterioration in soil fertility and soil erosion, which, if un-checked, will soon cancel the productivity gains of recent years. The specific interventions to do this are generally well understood. The challenge is to scale-up these interventions using methods that are tailored to each of Ethiopia's many agro-ecological zones and farming systems. Under the SLMP only 55 watersheds out of the 177 that have been prioritised in food secure areas are financed and there are many more watersheds in food insecure areas also in urgent need of attention. Additional watershed rehabilitation work in ongoing through the PSNP in food insecure woredas. Expanded support for sustainable land management also needs to be combined with climate change adaptation and mitigation methods, many of which also deliver benefits in terms of improved productivity, soil health and resilience to climatic fluctuations. Specific interventions are also needed in land administration, land use planning, watershed management, water harvesting, improved water use efficiency and maintenance of agricultural biodiversity. Government also gives high priority to irrigation development including smallholder and larger scale commercial schemes to exploit Ethiopia's abundant but under-utilised water resources. In the lowland pastoralist areas, investment in sustainable land management would centre around regional disaster risk management strategies currently under development through the Pastoralist Community Development Project (PCDP) and particularly include community-based measures supporting, inter alia, water conservation, irrigation, pasture management including fooder banks and bush control, disaster early warning and response systems and improved market access.. All of these have potential to reinforce the sustainable productivity thrust under **CAADP Pillar IV**.

4.5 Disaster Risk Management and Food Security

- 60. Ethiopian rural households are highly vulnerable to shocks which can quickly reverse years of progress in building household assets. In particular, exposure to climatic risks is high in light of the low capacity to store water and irrigate, and the low level of household savings, which are principally in the form of livestock that often have to be sold and depressed prices during times of hardship. Improving the capacity to manage risk is critical in overcoming poverty and food insecurity. This is reflected in CAADP Pillar III (Enhance Food security and Improve Disaster Risk Management); and the PSNP which supports the DRMFS programme, which, in financial terms, is by far the largest programme implemented by MoA. During the last three years (2007-08 to 2009-10) about 66 per cent of the total budget of MoA goes to DRMFS and continued high levels of expenditure are committed over the next four years under funding from the PSNP.
- 61. The origins and purpose of the PSNP and the related Household Asset Building Programme (HABP) evolved from recognition, by Government and development partners, of the need for a predictable and development-oriented approach to replace the more ad hoc approach based on emergency food aid. This represented a major shift in the approach to food security, which is supportive of agricultural growth
- 62. The key issue to be addressed under DRMFS is the need to increase the rate of graduation of the chronically food insecure. If the Government's poverty reduction and food security objectives are achieved, the need for DRMFS spending will decline proportionately, thereby releasing significant resources for investment under CAADP Pillars I, II and IV. However this process will need to be carefully managed to ensure that vulnerable households and communities do not lose their productive assets due to external shocks, and that other risk management initiatives are maintained, such as early warning systems, strategic food reserves, household asset building, and emergency response capacity. It also needs to be acknowledged that even with full national food security there will always be chronic and sporadically food insecure households and communities in need of assistance. One measure of success in implementing the investment strategy will be the rate at which allocations made for food security investments can be re-deployed into agricultural growth activities as increasing numbers of safety net beneficiaries graduate to become food secure.

4.6 Crosscutting Issues

- 63. **Most of the institutions that support the agricultural sector need capacity building,** particularly at the Regional and *woreda* levels. The civil service reform process in MoA is helping to make best use of available resources, **but** institutional effectiveness remains constrained by the shortage of qualified and experienced staff, lack of facilities and equipment, poor communications, and the multiple demands on their time from many different directions. These institutional weaknesses are exacerbated by the lack of private sector capacity to provide needed support services, and the low ability of farmers to pay for such services.
- 64. There are significant gender equity issues that the PIF needs to address. In rural communities women play important roles in food production and household nutrition but are disadvantaged in terms of access to resources, level of education, membership of cooperatives, and participation in household and community decision-making processes. Gender mainstreaming efforts are included in various sectoral programmes, but are not progressing as fast as expected. Gender mainstreaming needs to be strengthened and expedited in order to increase the benefit obtained from rural labour (men and women) and enhance value addition in the agricultural sector. Gender imbalances also need to be addressed at all levels of the institutional framework.
- 65. The special needs of households affected by illness and poor nutrition should be recognised and addressed. Whilst the prevalence of HIV/AIDS is lower than that in many other countries of the region, every effort must be made to ensure that the level is reduced further and that those who are affected are able to live productive and fruitful lives to the extent possible. HIV/AIDS

prevention and mitigation initiatives to improve household nutrition will therefore be mainstreamed into all programmes and projects implemented under the PIF.

- 66. The conceptual linkages between nutrition and agriculture should be recognized and operationalized. Whilst malnutrition issues are being addressed by the Ministry of Health through the implementation of the Ethiopian National Nutrition Strategy, the important role of agriculture in addressing root causes of malnutrition through the provision of sufficient, diversified and safe food should be fully recognized. Agricultural programmes and projects under the PIF will therefore build upon each other when appropriate.
- 67. Ethiopia must ensure that its national policies favour the process of regional economic integration. Ethiopia has bilateral trade arrangements with Sudan, Iran, Algeria, South Korea among others, is a member of the Common Market for Eastern and Southern Africa (COMESA) trade bloc, although it has not yet acceded to the region's free trade area (FTA) and customs union (CU) arrangements, and has also signed and ratified the Abuja Treaty that aims to establish an Africa Economic Community (AEC) by 2037 among the continent's 53 countries. At global level, it is a WTO accession country. Deeper regional integration is crucial to address the long-standing structural weakness of African economies, and thereby enable the continent to tackle the current global economic crisis. Better links with regional neighbours, ranging from improved communications (road, railway, telecommunications) to customs and food safety agreements and border procedures and banking cooperation, are essential to raising economic growth.
- 68. Climate change is a further crosscutting issue that will be addressed in all areas of the PIF. Due to the high level of agro-climatic diversity in Ethiopia climate change is likely to affect agriculture in many and varied ways during and beyond the time horizon of the PIF. The high level of dependence on rainfed agriculture makes Ethiopian rural households particularly vulnerable to climate change, which could increase the frequency of drought and associated food shortages. The most vulnerable include women, children, female headed households and the elderly. A number of instruments need to be considered for adapting to climate change including research on new crops and farming systems suited to hotter/drier conditions, water harvesting, agro-forestry, improved short and long term weather forecasting, and risk management measures to cope with increasing climatic variability. Mitigation measures such as carbon sequestration through conservation agriculture and reforestation should also be considered. In this way, climate change issues will be mainstreamed into the PIF by undertaking carbon accounting studies of all key investments and identifying opportunities for adaptation and mitigation.

5. PIF RATIONALE, OBJECTIVES AND EXPECTED OUTCOMES

5.1 Rationale for Investment

Ethiopia has struggled for many years to respond to the challenges of food insecurity and rural poverty arising from rapid population growth, low agricultural productivity, environmental degradation, weak market linkages and periodic natural disasters. Significant gains have been achieved during the last decade, but much remains to be done to achieve the national vision of becoming a middle income country by 2020. Ethiopia's policy and institutional framework has been shaped to respond to these challenges, with the new FYGTP detailing the steps forward in pursuit of the 2020 vision. None of this can be achieved, however, without a sustained and coordinated investment framework spanning the next ten years (as a minimum) which has broad consensus support amongst Government, development partners and other stakeholders. This document, therefore, provides a clear statement of the goal and development objectives of the PIF in the form of a results framework in Annex 1. The results framework includes: the overall goal and objectives of the PIF; each of its four Strategic Objectives (SOs); the key elements of the national policy framework with which the SOs are aligned; the outcomes that the PIF is expected to influence; the milestone indicators showing progress towards the achievement of each SO; and specific policy and institutional considerations pertaining to each SO.

5.2 Goal and Development Objectives

70. The PIF addresses national level aspirations expressed in PASDEP, the new FYGTP and CAADP. The Goal of the PIF is to "contribute to Ethiopia's achievement of middle income status by 2020". It is expressed in terms of a "contribution" to the highest level national development aspiration, because on its own it cannot deliver such a result. The Development Objective on the other hand is a directly deliverable result and aims to "sustainably increase rural incomes and national food security". This objective embodies the concepts of producing more, selling more, nurturing the environment, eliminating hunger and protecting the vulnerable against shocks; all of which are embodied in various national policy instruments, and are expressed in terms of four main themes, each with its own Strategic Objective and major investment programmes and projects.

Policy Al	lignment	Thematic Area	Strategic Objectives (SOs)	Major Ongoing Investment Platform
sector pro and produ (FYGTP,	agricultural • oductivity uction. , RDPS and Pillar IV)	Productivity and Production	 SO1: To achieve a sustainable increase in agricultural productivity and production. 	• AGP • 3
enterprise		Rural Commercialisation	SO2: To accelerate agricultural commercialisation and agro-industrial development.	• AGP • HABP
	e natural s sustainably , MDG7 and	Natural Resource Management	 SO3: To reduce degradation and improve productivity of natural resources. 	 SLM-ESIF PSNP AGP ELALUDEP⁴
Disaster I Managem Food Sec (MDG1 a Pillar III)	eurity. and CAADP	Disaster Risk Management and Food Security	 SO4: To achieve universal food security and protect vulnerable households from natural disasters. 	• PSNP • HABP

5.3 Productivity and Production

SO1: To achieve a sustainable increase in agricultural productivity and production.

71. **SO1** is expected to achieve a sustainable increase in agricultural productivity and production over the ten-year life of the PIF. This reflects the Government's first priority for the agricultural sector, which is to increase productivity and production as a prerequisite for food security and agricultural-led industrialisation. Under SO1 productivity gains are expected to come from closing the large gap between leading farmers and the majority, whose productivity performance (as measured by yields per hectare, livestock unit etc) is far below potential. Proven and appropriate agricultural technologies will be up-scaled through a revitalised agricultural research and extension system, combined with improved supply channels for farm inputs, with a focus on high potential areas where the investment is likely to generate the best returns. The focus will be on simple and affordable

³ PSSIDP: Participatory Small-scale Irrigation Development Programme

⁴ CINRMA: Community-based Integrated Natural Resources Management Project (IFAD & GEF)

agronomic packages including the use of improved seeds, fertilisers and fertility management, weed and pest control, and improved harvest and post-harvest management and improved animal husbandry centred on disease control, especially in young stock and improved nutrition, particularly using farming systems based on fodder production technology. These packages have been demonstrated to deliver substantial productivity improvements and attractive benefit:cost ratios for farmers. Large investments in developing the capacity of the national agricultural extension system enable this initiative to be rolled out on a large scale in conjunction with research and improved input supply systems.

- 72. Increases in production are also expected from investments to improve the utilisation of land and water resources. Whilst there has been an expansion in the cropped area in recent years, and the intensively settled areas of the highlands are virtually 100 per cent cultivated, Ethiopia still has large areas of arable land that are not used for crop production, but could be developed for large-scale commercial farming. These are largely in the mid-altitude and lowland areas where smallholder crop farming is not attractive due to the need to cultivate large areas under mechanised systems. This form of extensive agriculture is rather capital intensive and will require substantial private sector participation, including possibly foreign direct investment. On the basis of projections included in the FYGTP most of the incremental production from the smallholder sub-sector is expected to come from yield improvements, whilst in the commercial sector area, expansion will be the main source of growth.
- 73. **Irrigation development is also a high priority for boosting agricultural production** based on a combination of commercial development and smallholder schemes (which may be small medium or large in scale). In the lowland areas irrigation schemes need to be planned taking into account pastoralists' production system future requirements. In view of the capital intensive nature of irrigation development, with investment costs typically in the range of USD 5,000 to USD 20,000 per hectare, irrigation is likely to account for the largest share of investments under the PIF.
- 74. The outcomes that SO1 is expected to influence, and the milestone indicators showing progress towards these outcomes include the following:

Outcomes	Milestone Indicators
 Production of food, cash crops and livestock increased. 	 At least 8% increase in annual crop and livestock production levels.
Agricultural productivity increased.	 4% annual change in total value productivity (value outputs/value inputs) per crop and livestock unit.
• Qualitative and quantitative post harvest losses reduced.	• 3% annual reduction in post harvest losses by key commodity (grain).
•	•
 Use of agricultural inputs and improved agricultural practices increased. 	 Amount of improved seed and fertiliser utilised: total and per hectare.
	• 6% annual increment of farmers using agricultural inputs and improved practices.
	 Number of new agricultural technologies generated, tested and released.
• Dependence on commercial imports of staple food products reduced.	• % of staple food requirements imported.

5.4 Rural Commercialisation

SO 2: To accelerate agricultural commercialisation and agro-industrial development.

- 75. SO2 will build on the achievements of SO1 by helping farmers to graduate from subsistence farming to semi-subsistence/semi-commercial status, practicing farming as a business. This recognises that food security is a necessary condition for escaping poverty, but it is not sufficient household cash incomes must also increase from their currently very low levels. Smallholder farmers have to begin producing for the market and be supported to forge linkages with commercial input and output supply chains in order to connect with a growing agro-industrial sector and expanding food demand from urban consumers. Whilst the focus will be clearly on the smallholder sub-sector, greater private sector participation will be encouraged, both in commercial agricultural production and in marketing, agro-processing and farm input supply chains. The FYGTP envisages that some 3.3 million ha will be developed for extensive commercial agriculture during the first five years of the PIF period. Around USD 3-4 billion of private investment would be required to reach this target.
- 76. The commercialisation initiative is expected to produce fundamental changes in the structure and functions of Ethiopia's agricultural sector including: increases in the amount of agricultural produce entering market channels (including both domestic and export markets); diversification of smallholder production into higher value (non-staple) crop and livestock products; increased supply of raw materials to the industrial sector (in line with the ADLI policy); improved farmer access to agricultural inputs and financial services and lower transaction costs in input and output supply chains as volumes and competition increase, infrastructure and communications improve and more farming households participate in cooperatives and other forms of farmer organisation. The higher levels of commercial activity are also expected to enlarge opportunities for rural non-farm business enterprises and both farm and non-farm employment.

77. The outcomes that SO2 is expected to influence, and the milestone indicators showing progress towards these outcomes include the following:

Outcomes	Milestone Indicators
Private agribusiness investment increased.	• 12% increase in annual level of agribusiness investment.
• Smallholder household cash incomes increased.	• 8% annual increase in rural household income, consumption and expenditure levels.
 Proportion of agricultural production marketed (versus subsistence utilisation) increased. 	• 10% annual increase of agricultural production entering market channels and % used for subsistence.
 Diversification into higher value products increased. 	• 5% annual increase of share of high value products in total agricultural production.
 Raw material supply to the industrial sector increased. 	• 10% annual increase of amount of local agricultural raw materials used by the industrial sector.
 Farmer access to agricultural inputs and productive assets improved. 	• 5% annual increase of quantity of agricultural inputs supplied through commercial channels.
	• 5% annual increase of number of active agrodealers and cooperatives.
 Farmer access to rural financial services increased. 	 10% annual increase of number of rural households linked to financial service- providers.

- Agricultural export earnings increased.
- Increased value addition in rural areas
- Transaction costs in input and output supply chains reduced.
- Households' participation in farmer organisations increased.
- Farm income growth through improved infrastructure and market access strengthened.
- Rural unemployment reduced.

- 10% annual increase in agricultural export earnings as a percentage of value added in the agricultural sector.
- 5% annual increase in value addition for agricultural commodities.
- 10% annual improvement in "ease of doing business" in the agricultural sector.

•

- 10% annual increase in number and membership of rural cooperatives.
- 8% annual increase of rural communities with minimum acceptable access to rural roads, water, energy and markets.
- 5% annual increase and number of rural labour force employed in rural non-farm enterprises.

5.5 Natural Resource Management

SO3: To reduce degradation and improve productivity of natural resources.

- SO3 will spearhead efforts to conserve and utilise Ethiopia's natural resources in a sustainable and productive manner. It will reinforce the productivity and production initiatives under SO1 by ensuring that opportunities to adopt sustainable land and water management systems are grasped and threats to sustainable use of natural resources are averted. This recognises that environmental degradation is both a cause and a consequence of high levels of rural poverty. Measures to strengthen the policy and legal framework for land administration and land use, accelerate the process of land registration and certification, and develop institutional and technical capacity in these areas are high priorities of the Federal and Regional Governments. Conservation and utilisation of Ethiopia's water resources is also a high priority through watershed management initiatives, water harvesting, irrigation development and improved irrigation and drainage systems to increase water use efficiency and ensure the sustainability of irrigation investments. Equally important is the prevention and reversal of arable and rangeland degradation in the rainfed areas which cover most of the country. Soil fertility depletion and erosion are already threatening the sustainability of arable agriculture and there is an urgent need to rehabilitate damaged areas and prevent further deterioration through better soil fertility management, introduction of soil conservation measures, reforestation and appropriate conservation agriculture methods. Rangeland degradation threatens the livelihoods of pastoral communities in large areas of the lowlands, calling for alternative forms of income generation to reduce grazing pressure, and better rangeland management including the use of exclusion areas, forage development and drought preparedness. Most of these initiatives aim to increase both productivity and sustainability and are therefore consistent with the other three strategic objectives.
- 79. Climate change presents Ethiopian farmers and pastoralists with a new set of challenges. Whilst most of the anticipated climate change is still in the future and there are uncertainties about the nature and extent of change in the different agro-climatic zones of the country, there are indications that the drier areas may become even hotter and more arid; and, over large parts of the country, the frequency of extreme events, including droughts, may increase. This calls for the development of more robust and resilient farming systems that are able to adapt to a range of possible climate change outcomes as they unfold over the life of the PIF and beyond. Many of the initiatives proposed under SO1 will, in fact, contribute to such an outcome, as will the soil and water conservation measures proposed under SO3. In addition to adaptation measures, which are mainly of

a long term nature, there is a more immediate need for Ethiopia to contribute to climate change mitigation, even though the nation's contribution to the global problem is very minor. In this regard there are possibilities to increase carbon capture through reforestation and agronomic innovations that increase soil organic carbon levels, and which also have beneficial impacts on soil fertility and hydrology and fertiliser response.

80. The outcomes that SO3 is expected to influence, and the milestone indicators showing progress towards these outcomes include the following:

Outcomes	Milestone Indicators						
Area under irrigation increased.	• 8% annual increase of arable land irrigated.						
• Water conservation and water use efficiency	• .						
improved.	• 5% annual increase in crop yield per unit of water used.						
 Arable, rangeland and forest degradation 	•						
reduced.	• 3% of degraded land rehabilitated per annum.						
	• 5% annual increase in normalised difference vegetation index (NDVI).						
•	•						
 Soil health in key agricultural landscapes improved. 	• 3% increase in soil organic carbon level.						
 Security of private sector access to land resources improved. 	 80% of rural households issued with first and second level certificates. 						
• Farmers' ability to respond to climate change challenges strengthened.	 Mechanisms in place to support climate change adaptation and mitigation. 						

5.6 Disaster Risk Management and Food Security

SO4: To achieve universal food security and protect vulnerable households from natural disasters.

- 81. For the foreseeable future, there will be a proportion of rural households needing special support to help them achieve food security and protect them against shocks, principally droughts. It is expected that advancements in other areas of the PIF will progressively reduce the number of chronically food insecure households requiring food aid and other forms of assistance to survive. The rate at which the need for safety net measures can be reduced will be a measure of the success of SO1, 2 and 3. Imports of food aid are expected to decline, the effectiveness of targeting social safety net programmes for vulnerable groups will be sharpened, and the prevalence of child malnutrition (an accurate and easily measured indicator of chronic poverty and food insecurity) is expected to decline. It should be noted that this transition can only be achieved if SLM activities, such as public works programs, are sustained in these areas. As the size and enormous cost of the safety net programme begins to decline, more resources will be available for disaster risk management including disaster preparedness and mitigation, as well as for public works programs as part of SLM pillar investments.
- 82. The outcomes that SO4 is expected to influence, and the milestone indicators showing progress towards these outcomes include the following:

Outcomes	Milestone Indicators
 Number of chronically food insecure households reduced. 	 Number and % of households experiencing food gaps of three months or more.
	 % increase in households graduating from PSNP and other safety net programmes annually.
• Imports of food aid reduced.	 % decline in food aid imports.
	• 20% increase of food reserve stock.
	• 20% increase in domestic procurement of food aid supplies.
• Effectiveness of targeted social safety net programme for vulnerable groups improved.	 Number of vulnerable households receiving of transfers to cover basic consumption needs.
	• .
• Prevalence of child malnutrition reduced.	 3% annual reduction in stunted and underweight children in rural areas.
 Effectiveness of disaster risk management system improved. 	 Number of households receiving emergency assistance (medium-term trend).
	 Timeliness and adequacy of emergency response for vulnerable groups

6. POLICY AND INSTITUTIONAL FRAMEWORK

83. Whilst Ethiopia's policy and institutional framework for agricultural and rural development is comprehensive and stable, the CAADP and PIF processes have highlighted a number of areas where reviews, adjustments, and refinements may be beneficial. These are discussed below under each of the four main thematic areas.

6.1 Productivity and Production

- 84. Several policy and institutional issues need consideration as part of the drive to improve productivity and production. First, as an increasing number of people achieve food security there will be a need to re-align policy and budget allocations between DRMFS, which currently uses the majority of resources, and production/productivity initiatives. A large amount of funding, some USD 1.8 billion is already allocated to the PSNP over the next four years, so the budgetary realignment will mainly take place during the second half of the PIF as the results of food security investments materialise. Related to this, there will be a need for Government and its partners to review the balance between food aid and other forms of development assistance. These changes will represent a major departure from the current pattern of budget allocation and development assistance and reflects growing confidence that Ethiopia's chronic food security problems can be solved during the life of the PIF.
- 85. The productivity and production initiative also calls for increasing recognition of the importance of **post-harvest losses**, which are a major factor in household food security, and due to quality issues, limit the capacity of smallholders to commercialise their agricultural activities. Coordination issues between research and extension also need attention, and the capacity of Ethiopia's huge extension workforce needs to be improved with further training, equipping, operational support and stakeholder involvement over an extended period. Finally, there is a need to improve cooperative and private sector participation in the supply of agricultural inputs, particularly the production and distribution of high quality seed and encouraging private sector investment in the creation of agro-dealership networks.

6.2 Rural Commercialisation

- 86. Attracting private investment is critical to successful rural commercialisation. In order to attract private investment in the sector, including foreign investment, the Government will need to maintain a transparent system of agribusiness investment guidelines and incentives; and to accelerate implementation of the policy framework for agricultural commercialisation. The latter includes instruments such as warehouse receipts, other financial services (banking, insurance, forex, futures etc), the Ethiopian Commodities Exchange (ECX), contract farming etc. There is also a need to delineate the role of commercial and direct Government supply of farm inputs, recognising that where commercial supplies are not forthcoming Government has a role to play, but with the intention to withdraw as soon as the private sector is ready to fill the gap.
- 87. Other dimensions of the enabling environment for rural commercial development also require on-going policy and institutional review including: rural microfinance policy and microfinance institutions supporting smallholder farmers, rural non-farm entrepreneurs, and small and medium sized rural enterprises; the need to maintain a competitive trade policy and address sanitary and phytosanitary barriers to trade in agricultural and livestock products; implementation of the policies on public-private partnerships (PPPs) and cooperative development; implementation of food safety and quality improvement policies to increase domestic and international consumer confidence in the quality and safety of Ethiopian foods; and encouraging both male and female farmers/family members to become members of agricultural marketing cooperatives and other forms of farmer organisation involved in commercial agriculture. These initiatives will be supported by ongoing investments in rural infrastructure especially roads, water, energy and markets.

6.3 Natural Resource Management

88. The policy and institutional framework for sustainable natural resource management is largely in place and the main issue is implementation capacity, especially at *woreda* level where much of the work on soil and water conservation and irrigation development will be undertaken. Efforts to improve security of access to land resources are ongoing through the national land registration process, and this will increase the incentives for landholders to take good care of their land resources. The ELALUDEP proposal, however, identifies a number of priority needs in land administration and land use planning including: (i) identifying and filling gaps in existing laws, regulations and guidelines; (ii) supporting regions in the preparation of pastoral and agro-pastoral land administration policies and legislation; (iii) improving tenure security and dispute resolution; (iv) standardising regulations on surveying and registration; (v) strengthening the Federal and Regional institutional framework; and (vi) accelerating the process of cadastral surveying and issue of second level (geo-referenced) land holding certificates.

6.4 Disaster Risk Management and Food Security

- 89. The key policy and institutional issue is the need to ensure that significant numbers of beneficiaries graduate from the PSNP. Increasing the rate of graduation is a contingent upon the rate of progress under the other three strategic objectives and should be responsive to the needs of vulnerable households affected by natural disasters. As such, it is not advisable to prescribe the rate at which food security programmes can be scaled down, and to retain the capacity to respond to weather-related and other crises should circumstances deteriorate, for example through a severe and widespread drought or epidemic.
- 86. As the number of chronically food insecure households' declines several other policy issues may need to be reviewed including the role of food aid in Ethiopia's overall development assistance portfolio. Donors will need to be consulted about moving towards other forms of development assistance. Consideration should also be given to refining the policy on strategic food reserves and the use of innovative risk management tools such as weather index insurance and

commodity options trading. The DRMFS scale-down strategy will also have a bearing on policy deliberations under SO1 concerning re-deployment of resources from social safety nets to productive investments, and on the balance of effort between high and low potential areas.

6.5 Institutional Framework for PIF Implementation

- 87. Technical and budgetary coordination of the PIF will be the responsibility of the MoA and its counterpart organisations at Regional and *woreda* levels. The MoA will adopt a programme-based approach, with sub-programmes, projects and the organisational structures which support them arranged under a number of programmes. Programmes will be owned by the MoA and may comprise one or more externally funded projects, which may have project management units answerable to the Director of the host Directorate. Each programme will be the responsibility of a Directorate, Authority, Institute or Agency of MoA and existing major projects (e.g. PSNP, SLM, AGP, RUFIP, SSI, AMIP, etc.) will be arranged under the programme structure. Overall coordination will be the responsibility of the PPD.
- 88. The CAADP study identified 36 major programmes at Federal level compared to the 56 cost-centred programmes listed in the budget registry. The civil service reform process will undertake further consolidation and arrangement of programmes and projects under the four SOs identified here. The Participatory Monitoring and Evaluation (PM&E) system will require strengthening in order to improve coordination, planning, monitoring and evaluation. Capacity gaps occur at all levels and will have to be remedied, but the weaknesses are greatest at *woreda* level. The Government has already embarked on the task of rectifying these problems through the BPR process.

6.6 Priority Investment Areas

89. During the PIF formulation process, a number of priority areas for investment have been identified and arranged amongst the four SOs as shown below. Whilst Government considers that agricultural productivity (SO1) is the first priority, the PIF presents a balanced portfolio of priority investment areas from which the various regions, agro-ecological zones and commodity groups can chose according to their particular circumstances.

Strategic Objectives	Priority Investment Areas
SO1: Productivity and Production	 Irrigation development
	 Agricultural research and extension
	 Integrated seed systems developmentLivestock
	development
SO2: Rural Commercialisation	 Market system and infrastructure
	 Cooperative developmentAgricultural credit
	 Private sector support and fertilizer supply
SO3: Natural Resource Management	Sustainable land management
	 Land use planning and administration
SO4: Disaster Risk Management and Food	Productive Safety Net Programme
Security	 Disaster Risk Management

7. TEN-YEAR INVESTMENT FRAMEWORK

7.1 Indicative Financing Plan

90. Government is expected to continue its strong commitment to financing agriculture and rural development over the next ten years. Detailed financial projections are provided in Annex 2 and summarised in Table 1 below. The projections are based on the following key assumptions and estimates derived from the Ten-Year Road Map Report (Annex 11, Tables A11.1 to A11.12).

- Continued national GDP growth of 10% per annum over the ten-year life of the PIF.
- A gradual increase in the funds allocated to the budget for agriculture and rural development from 7.0% of GDP in 2008/09 to 7.5% by the end of the PIF period (Annex 4). This would see the budget increase from USD 0.72 billion in 2010/11 to USD 1.76 billion in 2019/20. Additional investments of around USD 6.2 billion are also foreseen during this period taking the total funding requirements to US\$18.0 billion.⁵
- Estimated funding commitment to ongoing programmes and projects, from Government and external sources, over the first five years amount to USD 2.54 billion of which USD 1.81 billion is committed to DRMFS through the PSNP (Annex 5).
- This leaves a total of USD 15.50 billion of the budget to be funded from Government and external sources not already committed of which about 23 per cent falls in the first half of the PIF period and 77 per cent in the second half.
- The indicative allocation of the un-committed funds (Annex 4) based on MoA's priority investment areas is shown in Table 1 below under each of the four SOs, plus an allowance for price contingencies in United States dollar denominated terms.
- On this basis the 46.8 per cent of the funding would be allocated to SO1 (mainly for irrigation development), 6.4 per cent to SO2, 19.2 per cent to SO3 and 20 per cent to SO4. This represents a major departure from the historical pattern of expenditure which has seen the bulk of expenditure directed towards SO4.

Assuming that 60 per cent of the total budget requirements (excluding already committed funds) will be financed by Government and 40 per cent from external sources in the form of grants and loans, this implies a PIF funding requirement of around **USD 9.30 billion from Government and USD 6.20 billion from development partners** over a ten year period. Assuming also that the current level of donor funding to the agricultural sector remains at the same level as that of 2007, the donor incremental funding gap is estimated at US\$???.

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⁵ This figures uses the assumptions for 'incremental needs' as shown in the "Ten Year Roadmap" report, but reduced the number in this report by the reallocation of the spending requirements for the DRMFS sector to productive sectors as explained in this document.

Table 1: PIF Financing Plan assuming 10% per annum GDP Growth (USD millions)

PIF Year>		1	2	3	4	5	6	7	8	9	10		
Fiscal Year>	Note	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total PIF	•
ARD Budget Trend (ETBbn)	a/	12.0	13.4	14.8	16.3	18.0	19.8	21.8	23.9	26.3	29.0	195.2	
ARD Budget Trend (USDmn)	a/	724	810	897	989	1,090	1,199	1,319	1,451	1,596	1,756	11,832	
ARD Incremental Investment Needs (USDmn)		87	221	370	332	527	737	835	936	1,043	1,118	6,207	
Total ARD Budget Estimate (USDmn)		811	1,031	1,267	1,321	1,617	1,936	2,154	2,387	2,639	2,874	18,039	
Funds Committed to DRMFS (USDmn Funds Committed to other Programmes	b/	540	500	400	365	-	-	-	-	-	-	1,805	
(USDmn)	b/	147	147	147	147	147	-	-	-	-	-	735	
Total Funds Committed(USDmn)		687	647	547	512	147	-	-	-	-	-	2,540	
Total Funds not Committed(USDMN)		124	384	720	809	1,470	1,936	2,154	2,387	2,639	2,874	15,499	
Indicative Allocation of Un-Committed Funds	c/												% of
Productivity and Production													Base
Irrigation (USDmn)		34	73	115	172	518	758	878	1,004	1,138	1,231	5,921	38.2%
Agricultural research		4	8	15	20	65	98	110	130	156	172	778	
Extension		3	3	5	5	19	28	32	38	41	44	318	
Seed		1	5	6	8	10	12	15	12	8	6	83	
Livestock development		0	0	0	5	22	32	40	45	50	55	249	
Subtotal (USDmn)		42	89	141	210	634	928	1,075	1,229	1,393	1,508	7,249	46.8%
Rural Commercialization(USDmn)													
Marketing		1	1	1	1	2	3	3	4	4	4	24	6.4%
Cooperatives		2	5	7	11	34	49	57	65	74	80	384	
Private sector and fertilizer supply		2	5	8	13	38	56	65	74	84	91	436	
Credit		0	1	3	4	13	19	22	25	29	32	148	
Subtotal (USDmn)		5	12	19	29	87	127	147	168	191	207	992	
Natural Resource Management (USDmn)		17	37	58	87	260	380	441	505	572	619	2976	19.2%
Sustainable land management		9	20	28	47	220	330	401	475	552	599	2681	

PIF Year>		1	2	3	4	5	6	7	8	9	10		
Fiscal Year>	Note	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total PII	र
Land use planning/administration		8	17	30	40	40	50	40	30	20	20	295	
Disaster Risk Management and Food Security		59	243	488	454	412	379	330	280	230	230	3,107	20.0%
DRM		9	13	38	54	62	79	80	100	130	110	675	
FSP		50	230	450	400	350	300	250	180	100	120	2430	
Contingencies		ı	3	15	30	77	121	159	203	253	310	1,172	7.6%
Total Indicative Allocation		124	385	720	809	1,470	1,936	2,154	2,387	2,639	2,874	15,499	100%
Allocation to Capital Budget (80%)		99	308	576	647	1,176	1,549	1,723	1,910	2,111	2,299	12,399	
Allocation to Recurrent Budget (20%)		25	77	144	162	294	387	4318	477	528	575	3100	
Funded by Government	d/	74	231	432	485	882	1,162	1,292	1,432	1,583	1,724	9,299	
Funded by DPs' Grants & Loans	e/	50	154	288	324	588	774	862	955	1,056	1,150	6,200	

a/ Total sector budget taken from Annex 4 b/ Funds committed taken from Annex 5

c / From table A.11.11 of Ten Year Road Map Report. Total varies slightly from Table A.11.11 due to difference in the way the contingencies are calculated. d/ Based on Government funding 60% of the total budget e/ Assumes development partners finance 40% of total budget

7.2 **Alternative Financing Scenarios**

The scenario presented in Table 1 represents the upper limit of a range of possible financing requirements ie. Total sector budget of US\$ 18 billion over 10 years in line with the Government's FYGTP target of 10% annual growth.

If total investments reach 15.3 billion over the 10 year period (US\$ 12.8 million if funds already committed are deducted), the average annual GDP growth would be around 6% with the allocation to agriculture remaining at the current 5.6% of GDP. With total investments reaching US\$16.7 billion over the 10 year period, the average annual GDP growth would be midway between the lower and the upper financing scenario (see Table 2).

	Low	Intermediate	Upper End
Total Sector Budget	15.3	16.7	18.0
Total Funds Committed	2.5	2.5	2.5
Total Not Committed	12.8	14.1	15.5
Funded by Government	7.7	8.5	9.3
Funded by Grants and Loans	5.1	5.6	6.2

Table 2: Alternative PIF Financing Scenarios (USD billions)

8. Benefits and Beneficiaries

8.1 Benefits

- Not surprisingly, considering the magnitude, scope and duration of the PIF the range of benefits will be extensive. In line with the importance of the sector, accelerated agricultural and rural development will make a major contribution to Ethiopia's goal of becoming a middle income country. The principal benefits of the programme will be: (i) increased production of food and non-food agricultural commodities to improve the nutritional status of rural households, boost national food security, and provide raw materials for the agro-industrial sector; (ii) accelerated commercialisation of the rural sector generating increased cash incomes from farm and non-farm enterprises; (iii) protection and enhancement of the long-term productive capacity of Ethiopia's natural resource base through more sustainable land and water management practices and measures to adapt to climate change; and (iv) continued protection of vulnerable households through the DRMFS programme. The need for the DRMFS programme, however, is expected to decline as the benefits from other initiatives accrue, thereby releasing resources for directly productive investments. All of the above will contribute to continued reduction in the prevalence and severity of rural poverty.
- A number of other benefits are also expected to accrue as the sector develops including: (i) reduction in harvest and post harvest losses; (ii) reduced imports of staple food through both commercial and food aid channels and increased export earnings; (iii) diversification of production into higher value agricultural products; (iv) improved access to financial services by smallholder farmers and rural entrepreneurs; (v) reduced transaction costs and improved efficiency in pre and post-farmgate value chains; (vi) increased participation in cooperative societies and other forms of farmer organisation; (vii) improved access to markets through infrastructure and telecommunications development; (viii) increased rural employment; (ix) higher productivity and reduced vulnerability to droughts from expansion of irrigated agriculture; (x) maintenance of agricultural biodiversity; and (xi) improving the system of disaster risk management by exploring the use of innovative risk management tools.

93. **Benefits will also arise from several of the crosscutting themes of the PIF** including: (i) improved institutional capacity and human resources at all levels from Federal Government down to the *woredas*; (ii) more balanced participation of men and women in development and incomegenerating activities and both household and community-level decision-making processes; (iii) recognition of the special needs of rural households affected by HIV/AIDS and/or poor nutrition and efforts to improve household nutrition and curb the spread of the disease; and (iv) improving the adaptability of the agricultural sector to climate change and achieving national carbon neutrality by 2020.

8.2 Beneficiaries

- 94. Whilst all Ethiopians stand to benefit from the PIF, the primary beneficiary group will be smallholder farming and pastoral households. The primary beneficiaries of production and productivity enhancement will be smallholders adopting improved agricultural practices that increase food production and cash income generation. These will tend to be located in the higher potential areas where the prospects for improving productivity are best. Medium and large scale farmers will also be able to participate through the expansion of commercial agriculture into under-utilised areas, mainly in the drier mid-altitude and lowland areas. In the lower rainfall and pastoral areas disadvantaged and vulnerable households will benefit from sustainable natural resource management initiatives as well as continued social safety net protection under DRMFS. Agro-industrial enterprises will also benefit from increased availability of raw materials, and other value chain participants will generally gain from increased volumes of produce entering market channels. Both rural and urban consumers will also benefit from improved availability, quality and lower prices for food commodities. Unemployed and under-employed people will enjoy improved income earning opportunities from employment in rural farm and non-farm enterprises.
- 95. Future generations of Ethiopians will benefit from measures to prevent and reverse environmental degradation and sustainably manage natural resources. This applies particularly to the beneficiaries of irrigation development, smallholder farmers in areas where soil conservation and watershed management activities are undertaken; pastoralists and agro-pastoralists who benefit from rangeland management/rehabilitation and animal health improvement; and all rural households who face the long-term challenge of adapting to climate change.
- 96. The number of beneficiaries of the DRMFS programme is expected to decline as other PIF initiatives bear fruit. The DRMFS programme will, however, remain a vital social safety net for those who need it, with substantial funding committed for the first four years, tapering off thereafter. By the end of the PIF the number of DRMFS beneficiaries is expected to be around a fifth of the current number and mainly confined to those affected by sporadic natural disasters, rather than the chronically food insecure.

9. RISKS AND SUSTAINABILITY

9.1 Risks and Risk Management

97. The PIF is subject to a number of generic risks that affect all development programmes and projects in Ethiopia. These include: (i) limited capacity in Government institutions; (ii) the underdeveloped private sector and lack of private investment, especially in input supply chains; (iii) the possibility that economic growth targets will not be met with leading to deterioration in the fiscal position, resurgent inflation and/or loss of budget support from donors; (iv) the ever-present threat of natural disasters, principally drought; and (v) the country's geopolitical context which presents risks of regional conflict.

- **98.** Success of the PIF depends largely on the success of the FYGTP, and as such, proposed PIF investments are based on the assumption that key FYGTP investments and goals are achieved. For example, investments in infrastructure, particularly those related to rural roads, energy, and water development, are critical enablers of the specific goals set forth in the PIF.
- 99. There are also a number of PIF-specific risks mainly related to implementation capacity in MoA and the BoAs and the capacity to engage with the private sector. MoA's capacity to plan, implement, monitor and evaluate the programmes and projects embodied in the PIF will require substantial augmentation in the context of the limited human resources with skills in these areas. There is also the risk that the required funding will not be forthcoming because of a shortfall in reaching the ambitious economic growth targets of the FYGTP leading to: (i) lower than anticipated budgetary allocations; and (ii) lower levels of support from the international community.
- 100. These risks are significant, but need to be considered in comparison to the risks associated with a less aggressive approach to sector development, which imply a high likelihood of continuing poverty, food insecurity, environmental degradation and economic stagnation. Against this background, and the proposed mitigation measures suggested in the table below, the case for implementing the PIF is compelling.

Risks	Possible Consequences	Mitigation Measures
Generalised institutional capacity	 Weak ability to design and implement programmes and projects identified under the PIF. 	Incorporate appropriate capacity building measures as indicated by the civil service reform process.
limitations.	• Low rate of disbursement of funds allocated to the PIF.	Ensure that funding and disbursement targets are realistic.
Lack of private sector investment and participation.	 Government will continue to carry the burden of farm input supply. Farmers will be unable to access inputs through commercial channels. Development of commercial farming and agro-industrial enterprises will be 	 Ensure that Government and parastatals charge commercial rates for provision of goods and services. Actively engage in PPPs. Address other constraints to private sector participation (e.g. access to
Reduced funding from Government and development partners.	 Delays in implementation of PIF programmes and projects. High percentage of available resources will continue to be needed for DRMFS. 	 financial services) CAADP Compact commits Government and donors to minimum funding levels. Select programmes and projects which make best use of available resources
Natural disasters.	Number of households requiring emergency assistance diverts resources from productive investments.	Maintain strategic food reserves for emergency use. Improve disaster preparedness and mitigation measures.

9.2 Sustainability

101. **SO1** aims to achieve a <u>sustainable</u> increase in agricultural productivity and production. This will be achieved through scaling up of technologies which are appropriate, affordable and profitable to smallholder farmers, and can be sustained without ongoing support in the long-run. The key to long-term sustainability of productivity and production is in SO2 which will endeavour to create an enabling environment for rural commercial development in which farmers can access inputs and markets through commercial channels, rather than rely on Government or parastatal interventions. Commercial incentives are therefore fundamental to long-run sustainability, of smallholder agriculture and its transition from subsistence to semi-subsistence/semi-commercial status.

- 102. **SO3 addresses the bio-physical dimension of sustainability** through a number of complementary measures to conserve and utilise Ethiopia's land and water resources sustainability. Most importantly, this will address the problems of land degradation and soil fertility depletion that threaten the sustainability of productivity enhancement measures and the livelihoods of the great majority of Ethiopians who are dependent on the country's natural resource endowment.
- 103. Under SO4, the current scale of food security programming was never intended to be sustained in the long-run. On the contrary, the objective is to re-orient and reduce the size of initiatives such as the PSNP as quickly as circumstances allow, although it is unlikely that full food security can be achieved within the life of the current PIF.

10. IMPLEMENTATION MODALITIES

10.1 Institutional Framework for PIF Implementation

- 97. **Technical and budgetary coordination of the PIF will be the responsibility of the MoA** and its counterpart organisations at Regional and *woreda* levels. The MoA will adopt a programme-based approach, with sub-programmes, projects and the organisational structures which support them arranged under a number of programmes. Programmes will be owned by the MoA and may comprise one or more externally funded projects, which may have project management units answerable to the Director of the host Directorate. Each programme will be the responsibility of a Directorate, Authority, Institute or Agency of MoA and existing major projects (e.g., PSNP, SLM, AGP, RUFIP, SSI, AMIP, etc.) will be arranged under the programme structure. Overall coordination will be the responsibility of the PPD.
- 98. Collaboration with other Federal Line Ministries. Lead Ministry MoA will coordinate closely with other technical ministries and agencies whose responsibilities intersect with those of MoA. These include, but are not limited to: Ministry of Trade (MoT); Ministry of Industry (MoI), Ministry of Water Resources and Energy (MoWRE); Federal Cooperative Agency; Ministry of federal Affairs and Environmental Protection Authority. Ministry of Finance and Economic Development will play a central role in overall coordinator of national budgets and donor assistance.
- 99. **Programme and project approach.** The CAADP study identified 36 major programmes at Federal level compared to the 56 cost-centred programmes listed in the budget registry. The Civil Service reform process will undertake further consolidation and arrangement of programmes and projects under the four SOs identified here. The Participatory Monitoring and Evaluation (PM&E) system will require strengthening in order to improve coordination, planning, monitoring and evaluation. Capacity gaps occur at all levels and will have to be remedied, but the weaknesses are greatest at *woreda* level. The Government has already embarked on the task of rectifying these problems through the Civil Service Reform BPR process.
- 100. **Role of the RED&FS.** Pursuant to the Paris Declaration of Aid Effectiveness, improved donor coordination, results-based management, and mutual accountability, the RED&FS Sector Working Group with its Executive Committee, three Technical Committees⁶, Platform and Secretariat will be the principal mechanism for dealing with issues related to (1) harmonization and alignment of investments with the PIF; (2) executing elements of the Roadmap (Annex 6); (3) resolving technical, policy and operational constraints; and (4) identifying financial resources to support implementation. The RED&FS Executive Committee membership will be expanded to also include the Agriculture Transformation Agency, Ministry of Trade, Ministry of Industry and Ministry of Finance and Economic Development. The RED&FS technical committee and platform membership will be expanded to include private sector representatives and other relevant non-state actors.

⁶ Namely: Agricultural Growth; Sustainable Land Management; and Disaster Risk Management and Food Security.

10.2 Aid Modalities

- 101. **Financing Modalities.** There are number of financing modalities to be used for financing the development programmes and projects. As the financing requirement for the PIF will be substantial, there is a need for development partners to compliment the government's commitments of transforming the agriculture sector by providing resources to fill indicated gaps. However, the instruments of the support required from development partners need not to be in the traditional way of financing. The recommended approach is to align the support with the government system and to deliver the support in the most feasible and harmonized way. For the smooth flow of resources from the donor partners to fill the gaps of the PIF, the preferred government modality is a programmatic/sector approach with pooled funding system. This approach will reduce the transaction cost required to accommodate different partners requirements and will also simplify the flow of funds. However, while this is the preferred approach, financing modalities will be sufficiently flexible to maximize both funding and alignment with the PIF.
- 102. **Paris Declaration and Aid Harmonization.** In order to monitor performance of both development partners and Government with respect to Aid Harmonization, the RED&FS will implement a set of monitoring indicators to track: ownership; alignment; and harmonization. The purpose of this effort will be to ensure that development partner support to the PIF seeks to increase its effectiveness over time by pursuing the tenets of aid harmonization.
- 103. **Aid Management Capacity.** Careful attention will be given to ensure that relevant capacities are strengthened in concert with increasing sector budgets, so as to ensure that PIF financing supports efficient and sustainable development actions.

10.3 Monitoring and Evaluation and Mutual Accountability

- 104. **M&E** will be undertaken at different levels to support effective implementation of the **PIF**, maintain its focus and direction, and provide information for addressing constraints and problems. The M&E function will also be critical in ensuring accountability and transparency for funds channelled through national and regional government systems, based on the principles and procedures applied in the multi-donor funded Protection of Basic Services (PBS) programme. This approach is consistent with the CAADP Compact in which Government and the development partners agree to mobilise funds and work together to develop and implement a M&E system including peer review, analytical studies, impact assessments, and information sharing for continuous policy and programme development. The RED&FS working group will also retain a monitoring role by conducting an annual review of the PIF in order to review progress against the milestone indicators shown in the results framework shown in Annex 1.
- 105. MoA's PPD will have primary responsibility for M&E based on the results framework milestone indicators. The strategy will be to establish an iterative process for identifying issues and problems to ensure that the PIF focus is maintained and expected outputs and outcomes are achieved. To augment its existing resources the PPD should engage a M&E Specialist on a full-time basis who will have direct responsibility for aggregating and analysing M&E information from the various programmes and projects which collectively constitute the PIF.
- 106. The M&E system will utilise the Agricultural and Rural Development Database currently being developed with assistance from FAO, UNDP and the World Bank. This database is developed around programmes, sub-programmes and projects and is aligned to the four CAADP pillars. For each programme and sub-programme, fiscal data will be captured directly from the MoFED integrated budget expenditure system (IBEX) and will include: (i) federal, regional and woreda level fiscal data and aggregation to national level; and (ii) approved and adjusted budgets as

well as actual expenditures. The database will generate for each programme and sub-programme at different levels of government: (i) recurrent and capital budget and expenditure data; and (ii) further detail as per the line items within the chart of accounts; e.g. salaries and wages, spending on fuel, capital items and agricultural inputs. In addition to capturing expenditure details, the database will also include indicators on outputs generated under each programme and sub-programme at different levels of Government, e.g. data on the percent of rural households receiving extension services, the number of new crop varieties released, or the number of hectares under small-scale irrigation.

107. **Implementation of the PIF will be subject to independent external evaluation on at least two occasions** over **its ten year life**. This will be done by an expert review panel selected and supervised by the PIF Steering Committee.

11. CONCLUSIONS AND RECOMMENDATIONS

11.1 Summary

108. After decades of stagnation Ethiopia's agricultural sector is beginning to show signs of realising its full potential to provide sustenance and income for its 80 million people. The Government has demonstrated a strong commitment to development of the sector by allocation of a substantial proportion of its budget to agricultural and rural development, matched by funding commitments from the international community. The CAADP Compact sets out a clear roadmap for ongoing development of the sector and confirms Government and donor responsibilities in meeting this challenge. The PIF presented herein represents a further step forward in realising the aspirations of the CAADP Compact and the new FYGTP. The four strategic objectives which are the outline of the PIF provide a framework for the investments needed over the next ten years.

ANNEXES

ANNEX 1: PIF RESULTS FRAMEWORK

Goal: Contribute to Ethiopia's achievement of middle income status by 2020.

Development Objective: Sustainably increase rural incomes and national food and nutrition security.

Country Policy	K	ey Results for Ethiopia Policy and In	vestment Framework	Policy and
Alignment	Strategic objectives (SOs)	Outcome that the PIF is expected to influence	Milestone indicators showing progress towards SO ⁸	Institutional Considerations ⁷
Increase agricultural sector productivity and production.	SO 1: To achieve a sustainable increase in	Production of food, cash crops and livestock increased.	At least 8% increase in annual crop and livestock production levels.	Alignment of policy and budget
(FYGTP, CAADP Pillar IV, and RDPS)	agricultural productivity and production ⁹ .	Agricultural productivity increased.	4% annual change in total value productivity (value outputs/value inputs) per crop and livestock unit.	allocations between disaster risk management/food security and production/productivity initiatives.
Major investment projects: AGP, PSSIDP, RFIP		Qualitative and quantitative post harvest losses reduced.	3% annual reduction in post harvest losses by key commodity (grain).	Post-harvest losses policy within the context of commodity value chains.
		Use of agricultural inputs and improved agricultural practices increased.	Amount of improved seed and fertiliser utilised: total and per hectare.	Need to improve cooperative and private sector participation in supply of
		mereased.	6% annual increment of farmers using agricultural inputs and improved practices.	agricultural inputs.Need for adequately resourced and stakeholder responsive
			Number of new agricultural technologies generated, tested and released.	research and extension institutions.
		Dependence on commercial imports of staple food products reduced.	% of staple food requirements imported.	Balance between food aid and other forms of development assistance.
Increase farmers' incomes from agriculture and rural	SO 2: To accelerate agricultural	Private agribusiness investment increased.	12% increase in annual level of agribusiness investment.	Maintain transparent system of agribusiness investment incentives.
enterprises.			8% annual increase in rural household income, consumption and expenditure levels.	Accelerate implementation of policy framework for agricultural

⁷ May include maintenance or strengthening of existing policies or further modifications to the policy framework as need arises.

⁸ All indicators to be gender disaggregated.

⁹ Agriculture is considered in its broadest definition: to include crops, livestock, fisheries, forestry and natural resource management.

Country Policy	K	ey Results for Ethiopia Policy and In	vestment Framework	Policy and		
Alignment	Strategic objectives (SOs)	Outcome that the PIF is expected to influence	Milestone indicators showing progress towards SO ⁸	Institutional Considerations ⁷		
(FYGTP, ADLI and CAADP	development.			commercialisation (warehouse receipts,		
Pillar II) Major investment projects: RFIP, AMIP		Proportion of agricultural production marketed (versus subsistence utilisation) increased.	10% annual increase of agricultural production entering market channels and % used for subsistence.	other financial services, commodity exchange, contract farming, etc).		
KI II , AIVIII		Diversification into higher value products increased.	5% annual increase of share of high value products in total agricultural production.			
		Raw material supply to the industrial sector increased.	10% annual increase of amount of local agricultural raw materials used by the industrial sector.			
		Farmer access to agricultural inputs and productive assets improved.	5% annual increase of quantity of agricultural inputs supplied through commercial channels.	Policy on commercialisation of input supplies to define the role of commercial		
			• 5% annual increase of number of active agrodealers and cooperatives.	and direct Government supply.		
		Farmer access to rural financial services increased.	10% annual increase of number of rural households linked to financial service- providers.	Review and improve implementation of rural microfinance policy.		
		Agricultural export earnings increased.	• 10% annual increase in agricultural export earnings as a percentage of value added in the agricultural sector.	Maintain competitive trade policy and address sanitary and phytosanitary constraints.		
		Increase value addition in rural areas	5% annual increase in value addition for agricultural commodities	Engage value chain actors to increase efficiencies, remove bottlenecks.		
		Transaction costs in input and output supply chains reduced.	• 10% annual improvement in "ease of doing business" in the agricultural sector	Implement policy and framework for PPPs		
				Food Safety and Quality Improvement policy established and implemented.		
		Households participation in farmer organisations increased.	10% annual increase in number and membership of rural cooperatives.	 Incentives for male and female farmers to engage in lower and higher level farmer organisations. Review and implement policy framework for cooperative development. 		
		• Farm income growth through improved infrastructure and market access strengthened.	8% annual increase of rural communities with minimum acceptable access to rural roads, water, energy and markets.	Implement infrastructure policy and investment framework.		

Country Policy	Ke	ey Results for Ethiopia Policy and In	vestment Framework	Policy and
Alignment	Strategic objectives (SOs)	Outcome that the PIF is expected to influence	Milestone indicators showing progress towards SO ⁸	Institutional Considerations ⁷
		Rural unemployment reduced.	5% annual increase and number of rural labour force employed in rural non-farm enterprises.	Review and implement rural non-farm income generation policy.
Manage, conserve and utilise	SO 3: To reduce	Area under irrigation increased.	8% annual increase of arable land irrigated.	
natural resources sustainably. (FYGTP, CAADP Pillar I and MDG 7).	degradation and improve productivity of natural resources.	Water conservation and water use efficiency improved.	 5% annual increase of total precipitation conserved. 5% annual increase in crop yield per unit of water used. 	Review and effectively implement appropriate NRM policies and instruments.
Major investment projects: SLMP, CINRMA		Arable, rangeland and forest degradation reduced.	3% of degraded land rehabilitated per annum. 5% annual increase in normalised difference vegetation index (NDVI).	Establish and effectively implement Good Agricultural Practice (GAP) policies.
		Soil health in key agricultural landscapes improved.	3% increase in soil organic carbon level.	
		Security of private sector access to land resources improved.	80% of rural households issued with first and second level certificates.	Implementation capacity for improving security of access to natural resources.
		Farmers' ability to respond to climate change challenges strengthened.	Mechanisms in place to support climate change adaptation and mitigation.	Develop and effectively implement policies and instruments for climate change adaptation and mitigation.
Disaster risk management and food security. (MDG 1 and CAADP Pillar III)	SO 4: To achieve universal food security and protect vulnerable households from natural disasters.	Number of chronically food insecure households reduced.	 Number and % of households experiencing food gaps of three months or more. 15% increase in households graduating from PSNP and other safety net programmes annually. 	Effective graduation strategy to reduce the investments targeting chronic food insecurity.
Major investment projects: PSNP, PCDP		Imports of food aid reduced.	 % decline in food aid imports. 20% increase of food reserve stock. 20% increase in domestic procurement of food aid supplies. 	Food aid policy coordinated with major donors. Maintain strategic food reserve.
		Effectiveness of targeted social safety net programme for vulnerable	Number of vulnerable households receiving of transfers to cover basic consumption	Standardise and implement policy framework for disaster risk management

Country Policy	Ke	Policy and		
Alignment	Strategic objectives (SOs)	Outcome that the PIF is expected to influence	Milestone indicators showing progress towards SO ⁸	Institutional Considerations ⁷
		groups improved.	needs.	and household food security.
			• .	Appropriate balance between investment
		Prevalence of child malnutrition reduced.	3% annual reduction in stunted and underweight children in rural areas.	in high potential versus low potential areas.
		Effectiveness of disaster risk management system improved.	Number of households receiving emergency assistance (medium-term trend).	Explore use of innovative risk management tools (e.g. weather index insurance).
			Timeliness and adequacy of emergency response for vulnerable groups	insurance).

ANNEX 2: PIF COST ESTIMATES AND FINANCING PLAN

This Annex presents indicative cost estimates and financing plan for the PIF based on the following key assumptions and estimates derived from the Ten-Year Road Map Report (Annex 11, Tables A11.1 to A11.12).

- Continued GDP growth of 10% per annum over the ten-year life of the PIF as envisaged under the FYGTP.
- Table 1 shows historical budget allocations for agricultural and rural development (including expenses for pastoral issues, medium and large-scale irrigation, etc.) increasing from 5.0% of GDP in 2005/6 to 6.2% in 2008/09
- Table 2 indicates a gradual increase in the funds allocated to the budget for agriculture and rural development from 6.99% of GDP in 2009/10 to 7.50% by the end of the PIF period. This would see the budget increase from ETB 10,408 million in 2009/10 to ETB 28,973 million in 2019/20 and USD11.83 billion over the life of the PIF.
- The lower part of Table 2 also shows how these funds would be allocated amongst programmes on the basis of the percentage allocations over the last three years as shown in Roadmap Table A11.8. On the basis of "business as usual" two thirds of the budget would continue to be allocated to DRMFS.
- Table 3 shows estimated funding commitment to ongoing programmes and projects, from Government and external sources, as presented in Roadmap Table A11.11. Over the first five years this amounts to USD 2.540 billion of which USD 1.805 billion is committed to DRMFS during the first four years of the PIF period through the PSNP.
- Table 4 presents the allocation of USD15.5 billion un-committed funding amongst the four SOs which form the basic architecture of the PIF, with price contingencies estimated on the basis of 2.0 per cent per annum compound, in United States dollar denominated terms.;
- The Table 4 also presents an allocation of USD 1.1 billion to DRMFS/SO4, which assumes a gradual tapering off of expenditure on this item from the USD 1.805 billion allocated for the first four year of the PIF (average USD 451 million per annum) down to about USD 230 million per annum by PIF Year 10, including the disaster risk management part of it. Table 5 shows the rate at which this tapering off is expected to occur.
- Table 5 shows how the USD 15.5 billion allocation of un-committed funds is expected to be disbursed over the life of the PIF. About 23 per cent of the disbursements are expected to fall in the first half of the PIF period and 77 per cent in the second half. This is because existing commitments (Table 3) will fund most of the projected expenditure during the first few years of the PIF.

Table 1: Historical Budget Allocations to Agriculture and Natural Resources as Percentage of GDP

	Unit	Table	Note	2005-06	2006-07	2007-08	2008-09
Agricultural and Natural Resources Budget	ETB m	A11.1		5,027	6,021	7,001	8,417
GDP	ETB bn	A11.5		100.9	112.4	124.6	135.4
Budget Share of GDP	%			5.0	5.4	5.6	6.2

Table 2: Projected Budget Allocations to Agriculture and Natural Resources on the Basis of Current Expenditure Patterns

					Base	PIF Y1	PIF Y2	PIF Y3	PIF Y4	PIF Y5	PIF Y6	PIF Y7	PIF Y8	PIF Y9	PIF Y10	Total	l PIF
		Unit	Table	Note	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	ETB m	USD m
Agricultural and Natural Resources Budget		ETB m			10,408	11,951	13,368	14,803	16,326	17,978	19,784	21,766	23,944	26,339	28,973	195,232	11,832
GDP		ETB bn	A11.5	a/	148.9	163.8	180.2	198.2	218.1	239.9	263.9	290.2	319.3	351.2	386.3		
Budget Share of GDP		%	A11.6	b/	6.99	7.29	7.42	7.47	7.49	7.49	7.50	7.50	7.50	7.50	7.50		
Budget Allocation to Programmes	%		A11.8														
Agricultural Development	9.5	ETB m			989	1,135	1,270	1,406	1,551	1,708	1,879	2,068	2,275	2,502	2,752	18,547	1,124
Agricultural Marketing	2.4	ETB m			250	287	321	355	392	431	475	522	575	632	695	4,686	284
Natural Resources Development	15.4	ETB m			1,603	1,840	2,059	2,280	2,514	2,769	3,047	3,352	3,687	4,056	4,462	30,066	1,822
Disaster Risk Mangt and Food Sec	66.1	ETB m			6,880	7,900	8,836	9,785	10,791	11,883	13,077	14,387	15,827	17,410	19,151	129,048	7,821
Natural Resources and Research	5.8	ETB m			604	693	775	859	947	1,043	1,147	1,262	1,389	1,528	1,680	11,323	686
Support Services	0.8	ETB m			83	96	107	118	131	144	158	174	192	211	232	1,562	95
Total	100.0	ETB m		·	10,408	11,951	13,368	14,803	16,326	17,978	19,784	21,766	23,944	26,339	28,973	195,232	11,832

a/ GDP projected to grow at 10% per annum over the life of the PIF - in line with FYGTP projections.

b/ Agriculture sector budget share of DGP is projected to continue to increase although at a declining rate shown in a linear rate assumption

Table 3: Committed/Allocated Funds for Programmes and Projects During the PIF Period (US\$m) a/

		Budget	Development	Project	PIF Period	%	Start	End
Project/Programme	Note	USD m	Partner(s)	Years	Budget	% Share	Date	Date
Productive Safety Net Programme/DRMFS	Note	2,256	DAG	5	1,805	71.1	2010	2014
Agricultural Growth Programme		2,230	WB, UNDP	5	267	10.5	2010	2014
Sustainable Land Management		283	IDA, GEF, Fin, Ger	5	169	6.7	2008	2013
Food For Work (MERET)		166	WFP	4	103	0.0	2007	2013
Pastoral Community Development Project		135	VVFF	5	81	3.2	2007	2010
Rural Financial Intermediation Programme II		100	IFAD	7	100	3.9	2003	2013
Rural Financial Intermediation Programme I			IFAD, AfDB	7	12.7	0.5	2011	2018
Rural Capacity Building			IDA, CIDA	5	14.2	0.5	2004	2011
Agricultural Sector Support		59.7	ADF	6	10.0	0.0	2006	2011
Participatory SSI Development		58.7	IFAD	7	41.9	1.7	2008	2011
Agricultural Marketing Improvement Programme		35.1	IFAD	7	15.0	0.6	2006	2013
Livestock Development		10.2	EU	5	8.2	0.3	2010	2015
Scaling up PFM			EU	5	7.5	0.3	2010	2015
9 .		4.0	UNEP, UNDP, FAO	3	2.7	0.3	2010	2013
Enabling Pastoral Adopt CC and Range Land Env Organic Banana (Horticultural Agency)		3.6	UNEP, UNDP, FAU	2	1.8	0.1	2009	2012
African Stockpiles Project		2.6	CEE(M/D)	4	0.7	0.07	2009	2011
		1.9	GEF(WB)	1	1.9	0.03	2007	2011
Tree Seed Processing and Storing		1.9	C	3	1.9	0.08	2010	2011
Enhancing Irrigation Efficiency and Management STABEX		0.45	Germany	1	1.3	0.05	2009	2012
					0.17			
Code of Practice (Hort Agency)		0.35		2	0.17	0.01 0.01	2010 2010	2011 2010
Integrated Capacity Building Project (Hort Agency)		0.24		1	0.24			
IPM Project (Hort Agency)		0.20		2	0.10	0.00	2010	2011 2011
Cillic Development Technology		0.11		6	0.02		2006	-
Packaging Pilot Project (Hort Agency)		0.09		1		0.00	2010	2010
Eastern Africa Bamboo Development		0.06	JICA, GEF, UNIDO	1	0.06	0.00	2011	
Economic Empowerment of Women in Afar		0.01	IIRR	1	0.01	0.00	2010	2011
Total Funds Committed: DRMFS (PSNP)		2,256			1,805	71		
Total Funds Committed: Other		1,316			735	29		
Total Funds Committed		3,572			2,540	100		
Total Agriculture Sector Budget for PIF Period b/					18,037			
Total Funds not Committed					15,497			

a/ From Roadmap Report Table A11.11

b/ From right hand column, row 4, Table 5

Table 4: Allocation of Incremental Investments Amongst Strategic Objectives (USD millions)

	Table 4. Alloc			f Table A			_	•		-	ions to P	PIF SOs a/	
Area of Incremental Investment	Incremental Budget	SO1	SO2	SO3	SO4	Cont.	Total	SO1	SO2	SO3	SO4	Cont.	Total
1. Natural Resources	1,891			1,891			1,891			2,115			2,115
2. Irrigation Development	4,570	4,570					4,570	5,921					5,921
3. Ag Production and Productivity													
Research	420	420					420	778					778
Seed	45	45					45	83					83
Livestock	123	123					123	249					249
Agricultural Extension	118	118					118	218					218
Sub-Total	706	706					706	1,328					1,328
4. Other Livestock Development	11	11					11						-
5. Marketing	20		20				20		24				24
6. Cooperatives and Marketing	302		302				302		383				383
7. Private Sector and Marketing	346		346				346		438				438
8. Rural Credit	116		116				116		147				147
9. Climate Change	770			770			770			861			861
10. DRM and Food Sec.	0				0						3,105		3,105
11. Contingencies	1,145					1,145	1,145					1,175	1,175
Grand Total	5,307	717	784	2,661		1,145	5,307	7,249	992	2,976	3,105	1,175	15,497

a/ Adjusted to total USD 15,497 million, including USD 3,100 million spent on DRMFS and contingencies at 2% per annum compound

Table 5: PIF Financing Plan assuming 10% per annum GDP Growth (USD millions)

PIF Year>		1	2	3	4	5	6	7	8	9	10		
Fiscal Year>	Note	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total PII	₹
ARD Budget Trend (ETBbn)	a/	12.0	13.4	14.8	16.3	18.0	19.8	21.8	23.9	26.3	29.0	195.2	
ARD Budget Trend (USDmn)	a/	724	810	897	989	1,090	1,199	1,319	1,451	1,596	1,756	11,832	
ARD Incremental Investment Needs (USDmn)		87	221	370	332	527	737	835	936	1,043	1,118	6,207	
Total ARD Budget Estimate (USDmn)		811	1,031	1,267	1,321	1,617	1,936	2,154	2,387	2,639	2,874	18,039	
Funds Committed to DRMFS (USDmn Funds Committed to other Programmes	b/	540	500	400	365	-	-	-	-	-	-	1,805	
(USDmn)	b/	147	147	147	147	147	-	-	-	-	-	735	
Total Funds Committed(USDmn)		687	647	547	512	147	-	-	-	-	-	2,540	<u> </u>
Total Funds not Committed(USDMN)		124	384	720	809	1,470	1,936	2,154	2,387	2,639	2,874	15,499	
Expected donor funding ¹⁰													
Funding Gap													
Indicative Allocation of Un-Committed Funds	c/												% of
Productivity and Production													Base
Irrigation (USDmn)		34	73	115	172	518	758	878	1,004	1,138	1,231	5,921	38.2%
Agricultural research		4	8	15	20	65	98	110	130	156	172	778	
Extension		3	3	5	5	19	28	32	38	41	44	318	
Seed		1	5	6	8	10	12	15	12	8	6	83	
Livestock development		0	0	0	5	22	32	40	45	50	55	249	
Subtotal (USDmn)		42	89	141	210	634	928	1,075	1,229	1,393	1,508	7,249	46.8%
Rural Commercialization(USDmn)													
Marketing		1	1	1	1	2	3	3	4	4	4	24	6.4%
Cooperatives		2	5	7	11	34	49	57	65	74	80	384	
Private sector and fertilizer supply		2	5	8	13	38	56	65	74	84	91	436	
Credit		0	1	3	4	13	19	22	25	29	32	148	

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 $^{^{10}}$ With the assumption that donors continue to support the agricultural sector at the same level under the PIF

PIF Year>		1	2	3	4	5	6	7	8	9	10		
Fiscal Year>	Note	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total PII	?
Subtotal (USDmn)		5	12	19	29	87	127	147	168	191	207	992	
Natural Resource Management (USDmn)		17	37	58	87	260	380	441	505	572	619	2976	19.2%
Sustainable land management		9	20	28	47	220	330	401	475	552	599	2681	
Land use planning/administration		8	17	30	40	40	50	40	30	20	20	295	
Disaster Risk Management and Food Security		59	243	488	454	412	379	330	280	230	230	3,107	20.0%
DRM		9	13	38	54	62	79	80	100	130	110	675	
FSP		50	230	450	400	350	300	250	180	100	120	2430	
Contingencies		-	3	15	30	77	121	159	203	253	310	1,172	7.6%
Total Indicative Allocation		124	385	720	809	1,470	1,936	2,154	2,387	2,639	2,874	15,499	100%
Allocation to Capital Budget (80%)		99	308	576	647	1,176	1,549	1,723	1,910	2,111	2,299	12,399	
Allocation to Recurrent Budget (20%)		25	77	144	162	294	387	4318	477	528	575	3100	
Funded by Government	d/	74	231	432	485	882	1,162	1,292	1,432	1,583	1,724	9,299	
Funded by DPs' Grants & Loans	e/	50	154	288	324	588	774	862	955	1,056	1,150	6,200	

a/ Total sector budget taken from Annex 4

b/ Funds committed taken from Annex 5

c / From table A.11.11 of Ten Year Road Map Report. Total varies slightly from Table A.11.11 due to difference in the way the contingencies are calculated.

d/ Based on Government funding 60% of the total budget

e/ Assumes development partners finance 40% of total budget

ANNEX 3: ROAD MAP FOR THE IMPLEMENTATION OF THE ETHIOPIA'S AGRICULTURAL SECTOR POLICY AND INVESTMEN
FRAMEWORK