



Support to inclusive and sustainable development in the Zambezi Valley, Mozambique

Formulation of a project to be funded by the Dutch Government to the Zambezi Valley Development Agency and strategic partners

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Final Report



The Centre for Development Innovation, part of Wageningen UR (Wageningen University & Research centre) works on processes of innovation and change in the areas of secure and healthy food, adaptive agriculture, sustainable markets and ecosystem governance. It is an interdisciplinary and internationally focused unit of Wageningen UR within the Social Sciences Group.

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Royal Tropical Institute



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This report is part of a support initiative of the Netherlands government to the Zambezi Valley Agency in Mozambique. Investment opportunities in agricultural value chains in the Zambezi Valley are identified, including opportunities for the Dutch private sector. There are good prospects for agribusiness development in value chains, such as vegetable growing, dairy, poultry, vegetable growing and fisheries. Furthermore, suggestions are provided to support capacity development of the Zambezi Valley Agency.

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Table of contents

Executive summary.....	v
List of abbreviations and glossary	vi
Introduction.....	1
Part A: Context	3
1 Country performance	5
1.1 Socioeconomic development	5
1.1.1 Gross Domestic Product and macro indicators	5
1.1.2 Poverty	6
1.2 The agricultural sector.....	7
1.3 Private sector development.....	9
1.4 Political environment	11
2 Development strategies and policies.....	13
2.1 Mozambicans policies and strategies.....	13
2.1.1 Overall development policy.....	13
2.1.2 Agriculture and agribusiness	13
2.1.3 Access to land	15
2.1.4 Private sector development.....	17
2.1.5 Environment and natural resource management.....	17
2.1.6 Decentralization	18
2.2 Development policies of the Dutch Government	19
2.2.1 Priority areas	19
2.2.2 Mozambique: partner country in Dutch development cooperation.....	20
3 Agro-ecological and socioeconomic conditions of the Zambezi Valley	23
3.1 Drivers of development.....	23
3.1.1 Uneven development in the Lower Zambezi Valley	23
3.1.2 Coal as driver of development in the Lower Zambezi Valley	24
3.1.3 Opportunities and risks from the mining boom	24
3.1.4 Infrastructure and access	27
3.1.5 Availability and quality of human resources	29
3.2 Natural resources	30
3.2.1 Availability and quality of natural resources	30
3.2.2 Environmental issues and climate change.....	33
4 Agribusiness models and investment opportunities.....	37
4.1 Inclusive and sustainable agribusiness models.....	37
4.1.1 Inclusive and sustainable business models.....	37
4.1.2 Value chain approach.....	37
4.1.3 Most common model: the outgrower scheme	38
4.1.4 Alternative and complementary models	40
4.1.5 Financial models	43

4.2	Portfolio of investment opportunities	44
4.2.1	Potential and criteria for selection of priority value chains	44
4.2.2	Involvement of Dutch private sector	45
4.2.3	Agribusiness investments in Zambezi Province.....	46
5	Institutional analysis of the ADVZ	51
5.1	Origins and history	51
5.2	Objectives and mandate	53
5.3	Structure and organization.....	53
5.4	On-going activities.....	55
5.5	Assessment of available capacities.....	56
5.6	Financial systems, processes and resources.....	57
Part B: Programme proposal		61
6	Support to inclusive and sustainable agricultural development in the Zambezi Valley	63
6.1	Introduction	63
6.2	Rationale	63
6.3	Objectives and results	65
6.4	Programme intervention approach.....	66
6.4.1	Focus on multi-sector planning and agribusiness development.....	66
6.4.2	Long-term partnerships with Dutch knowledge institutes	66
6.5	Programme components	68
6.6	Beneficiaries, stakeholders and areas of collaboration.....	68
6.7	Sub-component 1.1 Strategic studies and planning	71
6.8	Sub-component 1.2 Technical and financial assistance to agribusiness	74
6.9	Sub-component 1.3 Promotion of investment and securing finance.....	76
6.10	Sub-component 2.1 Skills development for agribusiness.....	76
6.11	Sub-component 2.2. Provision of Business Development Services (BDS).....	78
6.12	Sustainability	78
6.13	Cross cutting issues.....	79
6.14	Main risks and mitigating measures	80
6.15	Operational instruments and administrative arrangements.....	80
6.16	Monitoring and Evaluation	81
6.17	Duration	81
6.18	Programme cost and financing.....	82
Appendices		87
	Appendix 1 – Terms of reference	89
	Appendix 2 – Logical framework	95
	Appendix 3 – Persons met.....	97
	Appendix 4 – Detailed budget	103
	Appendix 5 – Documents consulted.....	105
	Appendix 6 – Suggestions for a visit of ADVZ and partners to The Netherlands	109
	Appendix 7 – Sustainability matrix	111
	Appendix 8 – Mozambique at a glance.....	119

Executive summary

Mozambique shows an uneven development: despite high growth of its GDP, poverty rates have hardly been reduced since 2003; Mozambique has relative low rankings in international comparisons of human development indices, business environment and good governance. A large number of strategies and policies related to agricultural and business development were developed over the past decades, but these did not have an appropriate follow-up at the field level and were unable to remove constraints and to improve agricultural production and productivity.

Whereas the South of the country is developing fast, the Northern and Central Region (that includes Zambezi Valley) is lagging behind. The very recent sharp increase in the exploitation of coal in Tete Province provides new opportunities, but is also create challenges. Large untapped land and water resources are available in the Zambezi Valley, but infrastructure is limited and qualified human resources are insufficient. The Zambezi River still poses a threat to local people (flooding) as it uncontrolled.

Investment opportunities in agricultural value chains in the Zambezi Valley are identified, including opportunities for the Dutch private sector. There are good prospects for agribusiness development in value chains, such as vegetable growing, dairy, poultry, vegetable growing and fisheries. However, few Dutch firms are currently engaged in production and setting up a farm needs endurance and a long-time perspective. Input supply, processing and transformation and logistics, engineering and consultancy services are areas in which the Dutch private sector may become active more easily.

The choice for the Zambezi Valley Development Agency (ADVZ, or “Agency”) as the proposed key recipient for the support programme is fully justified. The ADVZ is in its very early stage of establishment and in need of capacity building to fulfil its mandate that is to promote sustainable socioeconomic development.

The capacity building for the ADVZ will focus on strategic planning, facilitation of agribusiness development and promotion of investment/mobilization of funds. The capacity building will be mainly provided by Dutch knowledge institutes through institutional partnerships. Potentially successful inclusive agribusiness and financial models (outgrower and ingrower schemes, financial models and other innovative models) could be applied in Zambezi valley with support of the proposed programme. In addition, the programme includes strategic partners in skills development and business development services related to agribusiness

The risks involved are manageable. Socioeconomic and environmental sustainability is fully addressed in the programme.

The support programme is proposed for a period of 7 years (10.6 million EUR) that comprises an inception year (1.8 million EUR), a first phase of 3 years (7.1 million EUR) and a second phase of 3 years (1.7 million EUR). The Dutch Government will finance 8.7 million EUR (85%), and the ADVZ 3.3 million EUR (15%).

The report contains a number of annexes, such as, the logical framework (logframe) for the proposed programme, a detailed budget and suggestions for a mission to The Netherlands to be undertaken by the management of the ADVZ and key partners.

List of abbreviations and glossary

ADVZ	Zambezi Valley Development Agency (<i>Agencia de Desenvolvimento do Vale do Zambeze</i>)
Agency	Refers to the Zambezi Valley Development Agency (ADVZ)
AgDevCO	African Agricultural Development Company (manages the catalyst Fund of the BAGC, and also invests itself in agricultural development)
AGRA	Alliance for a Green Revolution in Africa
AGRIFUTURO	Project funded by USAID, focusing on agribusiness service provision, producer cooperatives and access to markets, implemented by Technoserve
APAC	Association of Agricultural Producers <i>Associação de Promoção de Agricultura Comercial</i>
ARA	Water Board (<i>Administração Regional de Agua</i>)
BAGC	Beira Agriculture Growth Corridor (PPP to Beira Corridor Development)
BDS	Business Development Services
BoP	Bottom of Pyramid
CB	Capacity Building
CEP	Provincial Private Sector Council (<i>Centro empresarial provincial</i>). The CEP typically consists of Associations and Enterprises
CEPAGRI	Centre for the Promotion of Agriculture (<i>Centro de Promoção da Agricultura</i>)
CF	Catalyst Fund
CORE	Training centre for SMEs, established by IPEME (<i>Centro de Orientação ao Empresário</i>)
CREP	Reform of Vocatioal Training (<i>Reforma da Educação Profissional</i>)
CPI	Centre for the Promotion of Investment (<i>Centro de Promoção de Investimentos</i>), falling under the Ministry of Finance
CSER	Corporate Social and Environmental Responsibility
CTA	Confederation of Enterprises. (<i>Confederação das Associações Económicas de Moçambique</i>)
DGIS	Directorate-General for International Cooperation (Ministry of Foreign Affairs, the Netherlands)
DNA	Directorate of Water Resources (<i>Direcção Nacional de Águas</i>)
DNAIA	Environment Impact Assessment unit of MICOA
DPA	Provincial Department of Agriculture Agency (<i>Direcção Provincial da Agricultura</i>)
DPIC	Provincial Department of Industry and Commerce (<i>Direcção Provincial da Indústria e Comércio</i>)
DPPF	Provincial Department of Planning and Finance (<i>Direcção Provincial do Plano e Finanças</i>)
DSU	Dutch Sustainability Unit (part of NCEA)
DUAT	Land Use Right (Direto de Uso e Aproveitamento da Terra)
EKN	Embassy of the Kingdom of the Netherlands
ELI	Ministry of Economy, Agriculture and Innovation of the Netherlands
EUR	Euro (European currency)
FAO	Food and Agriculture Organisation of the United Nations
FARE	Fund for support and restructuration of Enterprises (<i>Fundo de Apoio à Reestruturação Empresarial</i>)
FDA	Fund for Agricultural Development (<i>Fundo de Desenvolvimento Agrário</i>), this is a Foundation, chaired by Graca Machel, wife of the former president.
FRELIMO	Liberation Front of Mozambique (<i>Frente de Libertação de Moçambique</i>)
GAZEDA	Office of Economic Zones of Accelerated Development (<i>Gabinete das Zonas Económicas de Desenvolvimento Acelerado</i>)
GDP	Gross domestic product
GOM	Government of Mozambique

GON	Government of the Netherlands
GPZ	Bureau for the Promotion of the Zambezi Valley <i>Gabinete do Plano de Desenvolvimento da Região do Zambezi</i> (Predecessor of the ADVZ)
GRS	Green Revolution Strategy
HCB	Hydropower Cabora Bassa
IAC	Agriculture Institute of Chimoio (<i>Instituto Agrário do Chimoio</i>)
IBRD	International Bank for Reconstruction and Development (World bank Group)
ICA	Investment Climate Assessment
iDE	NGO working in sustainable and inclusive models, based in USA
ICM	Cereal Institute of Cereals. (<i>Instituto de Cereais de Moçambique</i>)
IFC	International Financial Corporation
IAM	Agricultural Research Institute of Mozambique (<i>Instituto de Investigação Agrária de Moçambique</i>) of MINAG
INE	National Statistical Institute (<i>Instituto Nacional de Estatísticas</i>)
INEFP	National Institute of Vocational Training (<i>Instituto Nacional do Emprego e Formação Profissional</i>)
INGC	National Disaster Management Organization (Instituto Nacional de Gestão de Calamidades)
INRM	Integrated natural Resources Management
IPEX	Export Promotion Organization (<i>Instituto de Promoção das Exportações</i>)
IPEME	Institute for Support to Small and Medium Enterprises (<i>Instituto de Apoio às Pequenas e Médias Empresas</i>)
ISPM	Higher Politechnical Institute of Manica (<i>Instituto Superior Politécnico de Manica</i>)
ITC	Community Land Initiative (<i>Iniciativa de Terras Comunitárias</i>)
IWRM	Integrated Water Resources Management
LOLE	Law of Local State Organ
MAE	Ministry of Public Administration
MASP	Multi-annual Strategic Plan 2008-2011 of the Netherlands development cooperation in Mozambique
MCT	Ministry of Science and Technology (<i>Ministério da Ciência e Tecnologia</i>)
MF	Ministry of Finance (<i>Ministério das Finanças</i>)
MIC	Ministry of Industry and Trade (<i>Ministério da Indústria e Comércio</i>)
MICOA	Ministry for the Coordination of Environmental Action (<i>Direcção Nacional de Auditoria e Impacto Ambiental</i>)
MINAG	Ministry of Agriculture (<i>Ministério de Agricultura</i>)
MOP	Ministry of Public Works (<i>Ministério da Obras Públicas</i>)
MOZLINK	Mozal linkages programme, financed by the IFC- PEP Africa. Business links with Mozal the large aluminium producer of Mozambique evolved into a model with a strong contribution to SME development in Mozambique
MPD	Ministry of Planning and Development (<i>Ministério do Plano e Desenvolvimento</i>)
MT	Metric Ton
MTEF	Medium-term expenditure framework (<i>Cenário Fiscal do Médio Prazo</i>)
MZN	Meticais (Mozambican currency)
NCEA	Netherlands Commission of Environmental Assessment
NEPAD	New Economic Partnership for Africa's Development
NGO	Non-Governmental Organization
ORIO	Dutch Facility for Infrastructure Development
PAD	Project Appraisal Document
PAPA	Action Plan for Food Production
PARP	Action Plan for the Reduction of Poverty
PEDSA	Strategic Plan for the Development of the Agricultural Sector

PEOT	Special Landuse Plan (<i>Plano Especial de Ordenamento Territorial</i>)
PIREP	Technical and Education Training Project (World Bank funded)
PNDA	National Agribusiness Plan (<i>Plan nacional de Desenvolvimento do Agronegocio</i>)
PPP	Public Private Partnership
PROIRRI	Sustainable Irrigation Project of World Bank implemented in Nacala (Inhambane) and Zambezi Valley
RAMSAR	Treaty for the protection of Wetlands (1971)
SADC	South Africa Development Corporation
SDI	Spatial Development Initiative
SEA	Strategic Environmental Assessment
SDAE	District Department of Economic Services
S-E-CC	Sustainability, Environmental and Climate Change issues
SIMA	Market information System(Sistema de Informação de Mercados Agrícolas)
SMEs	Small and medium enterprises
SNV	Netherlands Development Organization
SPGC	Provincial Services for Geography and Cadastre (<i>Serviços Provinciais de Geografia e Cadastre</i>)
SPI	Investment Holding Company of the FELIMO Party (<i>Sociedade de Participações de Investimentos</i>)
SRHR	Sexual and Reproductive Health and Rights
TECHNOSERVE	NGO working with the private sector, based in USA
UN	United Nations (<i>Nações Unidas</i>)
UNIDO	United Nations Industrial Development Organization
UNIZAMBEZE	Zambezi University (<i>Universidade do Zambeze</i>)
USAID	United States Agency for International Development
WB	World Bank
WWF	World Wide Fund for nature
ZAMCOM	Zambezi Watercourse Commission Agreement

Introduction

Background

DGIS 's "Project group for embassy support on food security & private sector development" has decided to field a formulation mission for a technical and financial support mission to the Zambezi Valley Development Agency in Mozambique (Agência de Desenvolvimento do Vale do Zambeze, ADVZ).

Four team members of the formulation mission (John Belt, Anne Locke, Marco Machado, Jan Douwe Meindertsma (Team Leader) have been contracted by the DGIS project group through the Stichting Landbouwkundig Onderzoek / Centre for Development Innovation (CDI) of Wageningen University & Research centre (Wageningen UR). A fifth team member (Niek Bech) has been added to the team through the Netherlands Commission of Environmental Assessment (NCEA) through their "Dutch Sustainability Unit" (DSU). He is a full team member with specific TOR from NCEA, see Appendix 1.

From July 15 – August 4 a field mission was undertaken to Mozambique, during which all four provinces of the Zambezi valley were visited and interviews were held with stakeholders at the national level. See Appendix 3 for the list of persons met.

Objectives

The overall objective of the Mission will be the formulation jointly with the Agency and in large consultation with stakeholders, a programme to:

- i. identify opportunities for sustainable investment/business developments in in the Zambezi Valley, covering the priority value chains, such as horticulture, cereals (rice and maize) livestock (cattle and goats for beef and dairy), fisheries (small scale aquaculture) and poultry.
- ii. build capacity of the Agency to manage and implement identified projects. Support to local government institutions and private sector, through the Agency, should also be considered for capacity building, within the mechanisms being established in the program.

Whereas the main task of the mission is: *"to design and present a programme proposal that addresses technical and financial support to the Agency for submission to the Government of the Netherlands"*, the mission is also charged with the task to identify: *"opportunities for investment / business development in the priority value chains"*.

These identified opportunities for investment a mission will be a main input for a mission of the management of the ADVZ and CPI and CEPAGRI to The Netherlands to present these to attract investors. Appendix 6 presents some ideas for the visit programme.

Content of the report

The report has two parts. Part A contains the context, whereas part B forms the actual programme proposal.

The reader interested in the programme proposal and conversant with Mozambican conditions may go directly to the programme proposal (chapter 6 –Part B, and eventually chapter 5 institutional analysis of the Zambezi Valley Development Agency (ADVZ) that is envisaged as the primer recipient of the support programme.

Part A has five chapters.

The first chapter briefly pictures the **context at country level**.

Chapter 2 reviews Mozambican **major policies** and strategies related to doing business in agriculture, including environmental aspects.

The third chapter focuses in on the socioeconomic and agroecological **conditions in the Zambezi Valley**.

Inclusive models and investment opportunities are being explored in chapter 4.

The fifth chapter provides **an institutional assessment of the Agency**, that will be the first recipient of the proposed support programme.

Part B has only one chapter that describes the various elements of the proposed support programme.

A number of appendices are included that provide information on the TOR, sources of information used by the Formulation Team (persons met and documents consulted).

It also contains the logical framework, the detailed budget, an extensive assessment of the sustainability of the proposed programme, as well as some suggestion for an envisaged visit of the Agency and partners to The Netherlands.

Acknowledgments

The team thanks all directly and indirectly involved stakeholders that provided the team with valuable information and in sharing ideas on how to best shape and structure the Technical Support Programme.

Disclaimer

This report reflects the independent views of the consultant and, therefore, in no way represents the official opinion of the client. If any mistakes or misinterpretation are made this falls under the full responsibility of the Formulation Team.

During all contacts with the Mozambican Authorities, local stakeholders, or any other project or organisation, the consultants clearly identified themselves as independent consultants and not as official representatives of the Government of the Netherlands.

Part A: Context

1 Country performance

1.1 Socioeconomic development

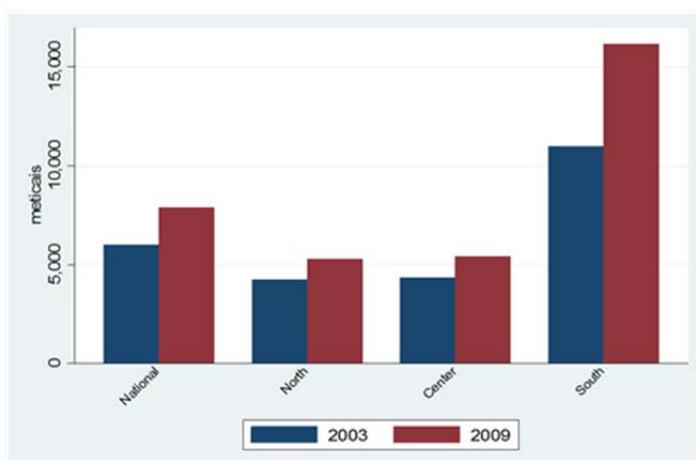
1.1.1 Gross Domestic Product and macro indicators

Mozambique has achieved impressive growth rates for more than a decade and Mozambique's economy continues to grow strongly, at rates above those of sub-Saharan Africa and developed economies. Annual growth has averaged 7.2% over the last decade, with projected growth rates of 7.5% and 7.9% in 2012 and 2013.¹ The country's high economic growth rates have largely been driven by capital-intensive projects, particularly in extractive industries. This growth has not been translated in lower poverty rates: more than 50% of the population still lives below the poverty line.

Growth over this period was concentrated in urban areas and in the south of Mozambique; inequality had increased, particularly between regions and growth has been non-inclusive (with the exception of the area around Maputo).

Figure 1.1 shows that the growth is realised mainly in the South of the country, with the lowest growth in the Northern and Central Regions (including Zambezi Valley) of the country.

Figure 1.1 Growth per region



Source: Azzarri and Molini, 2012

In the past years there has been a significant increase in domestic revenue. The majority of this revenue comes from taxes on goods and services; however, an increasing proportion is now coming from taxes on income, profits and capital gains. As a result, the share of aid inflows in the budget is decreasing from about 50% (2000) to around 36% (2011).

The current account deficit remains high, driven mainly by the trade deficit. The export base has also continued to be narrow, with more than half of exports being aluminium. Only 15 products registered annual exports higher than one million USD, such as cash crops cashew, shrimp, copra, sugar and cotton. Coal

¹ African Economic Outlook 2012 – Mozambique Country Report; Revilla, 2012 – Mozambique: Economy Overview, DPG Meeting, July 5, 2012.

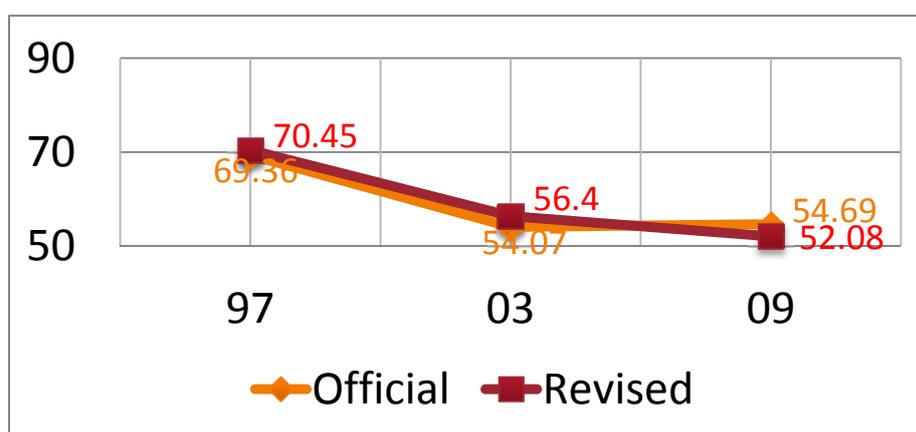
export, which started in 2011, is expected to soon overtake aluminium as the main single export item. Natural gas given the prospect for a liquefied natural gas (LNG) plant to be ready in 2018 will be another main export product. Mozambique is vulnerable to movements in the prices of a few commodities, which so far have offered little prospect of adding significant value internally or promoting substantial backward and forward linkages.

Inflation continues to slow down, falling from 12.7% in 2010 to a projected 7.2% in 2012. Other data on key economic macro figures, such as government finance, external debt, trade, balance of payments and socio-economic data are provided in the Appendix (the World Bank Mozambique at a glance, March, 2012).

1.1.2 Poverty

There has been some controversy about the trends in poverty in Mozambique, that officially would have increased slightly since 2003.² However, analysis and revision of the results to iron out some of the biases in the respective surveys conclude that poverty was reduced over the period, albeit at a slower rate, with poverty falling from just over 70% of the population (revised figures) in 1997 to 56.4% in 2003 and then to 52% in 2009³ (see Figure 1.2).

Figure 1.2. Official and Revised Poverty Percentages from Three Household Surveys, 1997, 2003 and 2009



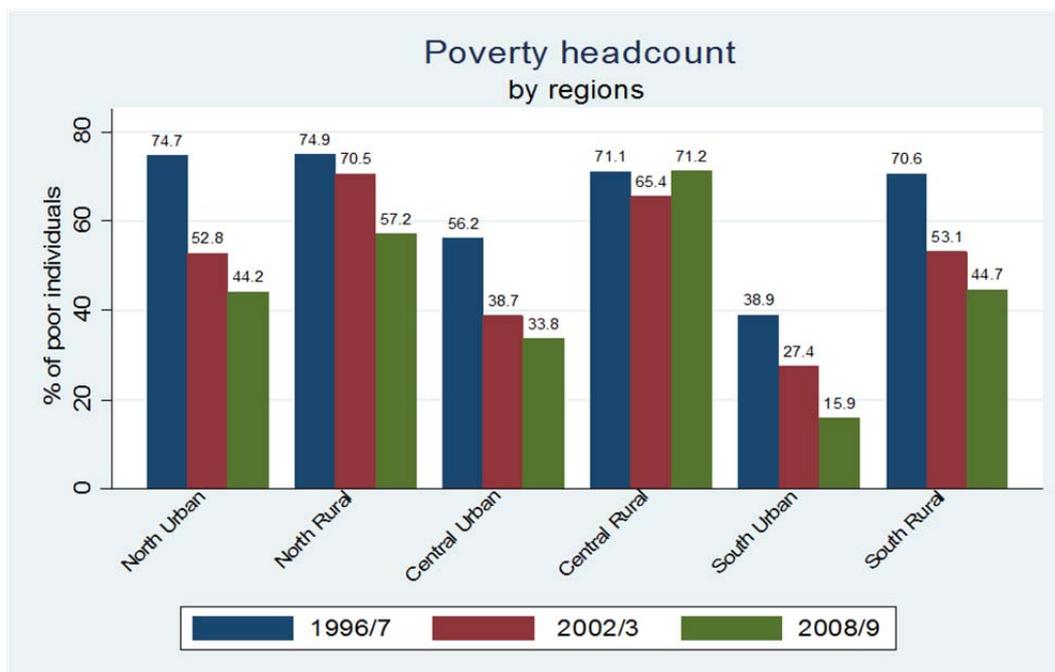
Source: Azzarri and Molini, 2012

Figure 1.3 demonstrates the disparity in poverty (head counts) among regions. Whereas all other regions made progress in combatting poverty, the situation in the Central Region (mainly composed of the Zambezi Valley) in the rural areas remained stagnant.

² Hanlon, J. 2012. Mozambique News Reports and Clippings, 199, July 30, 2012.

³ Azzarri, C. and Molini, V., undated, Evidence from Three Household Survey Rounds: 1996-2009.

Figure 1.3 Urban and rural poverty levels by region



Source: Azzarri and Molini, 2012

The UNDP international indicators on education show a very low performance of Mozambique. The country is ranked at 184 out of 187 countries (2011). Box 1.4 presents some key indicators on education.

Box 1.4 Educational indicators

	Value
Public expenditure on education (% of GDP)	5.0
Expected years of schooling (of children under 7) (years)	9.2
Adult literacy rate, both sexes (% aged 15 and above)	55.1
Mean years of schooling (of adults over 25) (years)	1.2
Education index (expected and mean years of schooling)	0.222
Combined gross enrolment in education (both sexes) (%)	58.8

Source: UNDP, International Development indicators, 2011

1.2 The agricultural sector

Mozambique is one of the most land-abundant countries in Africa with around 36 million hectares of arable land, of which over three million hectares have potential for irrigation. A land zoning exercise undertaken in 2007 identified around 12 million hectares as being available and suitable for agriculture, livestock and plantation forestry⁴ indicating substantial untapped potential.

⁴ MINAG, 2007. Zoneamento Agrário de Moçambique, November 2007.

Currently only around five million hectares are being cultivated, 99% by small and medium-scale producers on rainfed agriculture under traditional systems. About 92% of small and medium scale farms in Mozambique has no access to extension services; 95% use no fertilizers or pesticides; about 90% do not irrigate their crops, and 97% do not have access to credit. Fertilizer use per hectare is one-third of the average for all Sub-Saharan African countries, which itself is much lower than other regions.⁵ As a result, average agricultural yields are very low and cereal yields per rural capita have remained essentially steady over the past 10 years.⁶ Only 12% of producers use animal traction.

Mozambique's food crop output has been stagnant over the last decade. The crop production index, the agricultural production index and the food production index have not risen significantly above the levels reached in the late 1990s (FAOSTAT, 2008).

This lack of progress has been mirrored by trends in Mozambique's agricultural export: while agriculture contributed 31.5% of the country's GDP in 2009, only 20% of the total export value in 2009 originated from the agriculture sector, mostly through the export of fish (mainly shrimps and prawns), timber, copra, cashew nuts and citrus, cotton, coconuts, tea and tobacco.

Several factors have contributed to Mozambique's inability over the last decade to realize its considerable potential to increase yields, output and agricultural exports. Agriculture and rural development have received between only 5% and 7% of total government expenditure in Mozambique since 2002,⁷ and spending on rural secondary and tertiary roads has lagged as well, substantially raising the costs of agricultural transport and marketing in a context where rural population densities are extremely low and only about 11% of the rural population has reliable year-round access to the sparse road network.⁸

Outside of government spending, the agriculture sector has also had access to fewer resources than other sectors. Credit to agriculture has declined as a proportion of all credit to the economy (5-6%) and within that, 47% of total agricultural credit is conceded to the cotton and sugar sectors. Lack of access to affordable finance (see also section 4.1.5) is cited as one of the most important constraint by agricultural producers.⁹

Commercial banks tend to see small-scale agriculture as high risk. This is a risk they have been very reluctant to share. The Mozambican Land Law of 1997 (*Lei 19/97*) confirms what is stated in the Mozambican Constitution, that land is state property. For farmers with legal and/or community user rights this means that in practice agricultural land is out of the picture for use as collateral. Therefore, banks are requesting other types of guarantees for loans.

From the early 1990s onwards, the GOM embarked on a liberalization process, replacing state intervention in the agricultural sector (in the form of state companies, marketing boards, pan-territorial and guarantee prices, food security reserves, and numerous subsidies) with more market-oriented policies. Today, GOM has no control over prices at agricultural input or output markets, with the exception of cotton prices.¹⁰ Recently the Cereals Institute (ICM) has been given the task of "being the buyer of last resort" and the Institute manages a number of storage and grain milling facilities (including a maize mill in Tete and a rice mill in Zambezia Province).

⁵ World Bank, 2011. World Development Indicators.

⁶ Columbia University, 2011. Resource-based Sustainable Development in the Lower Zambezi Basin – Consultative Draft, June 1, 2011.

⁷ World Bank, 2011. Analysis of Public Expenditure in the Agricultural Sector, February 2011.

⁸ Access is defined as living within 2kms of an all-season road.

⁹ CEPAGRI-MINAG, 2011. PNDA – Plano Nacional de Desenvolvimento do Agronegócio, Versão Final, 2011.

¹⁰ World Bank, 2006. Project appraisal document for a market-led smallholder development project in the Zambezi Valley project, Report No: 35466-MZ, May 23, 2006.

International companies produce, process and market crops, such as sugar cane, cotton, cashew, tea and tobacco under a closed geographical concession system. With these regional monopolistic marketing structures, prices have not been liberalised. Tobacco concessionaires, for example, control pricing and grading effectively administering fixed prices. For the remaining crops marketing has been liberalised. Private traders have entered agricultural markets and restrictions on product movements across districts within and across provinces no longer exist.¹¹

Input markets are liberalized and GOM stresses the role of the private sector in input supply. Agricultural inputs such as fertilizer and agrochemicals are exempt from trade tariffs. In practice smallholders use few inputs due to limited access and largely subsistence production patterns: only about 4% of rural households currently use fertilizers, and 5% uses pesticides, most of them cash crop growers. The lack of input traders and extension agents, and the lack of access to credit are all important barriers to an increased use of productivity-enhancing inputs by smallholders.¹²

The performance of agricultural input and output markets are strongly interrelated. The poorly developed end markets and value chains, especially for food crops, imply that farmers are unsure whether purchased inputs will generate profits. If this situation does not change farmers will continue to use rudimentary production practices including limited use of inputs. So far agricultural growth in Mozambique has been achieved by increased labour and expansion of area, not by increased productivity.

Market efficiencies are mainly hampered by: (i) weakly developed or absent infrastructure (such as roads, electricity, storage techniques and facilities etc.), (ii) very limited market participation of smallholder farmers, (iii) absence of a level playing field in which competition is fostered in a transparent way, and (iv) limited skills in linking businesses.¹³

A huge number of agricultural strategies and policies were developed over the past years (see section 2.12), but these did not have an appropriate follow-up and **were unable to remove most constraints and to improve agricultural production and productivity.**

1.3 Private sector development

The Mozambican private sector can be characterized by two distinct types of enterprises, i.e. a small number of foreign-owned companies that are export oriented and capital intensive (“mega-projects”) and a large group of small and medium enterprises that sell mostly to the local market, facing severe resource constraints.

According to the National Statistics Institute, there were 1,735 private enterprises employing 310,000 people in 2002. The data breakdown reveals that almost 90% of these firms were small, employing less than 10 employees and 9% were medium firms employing 10-99 workers. Additionally, with the exception of the mega-projects, the export performance of Mozambican firms has been weak with only 7% of manufacturing output in 2003 exported. Expanding manufacturing output, improving quality of produce, and tapping into international markets, are all essential if Mozambique is to diversify its exports and lessen its dependency on mega-projects.

Additionally, developing linkages between SMEs and large investments would also help in expanding the benefits of these investments. While there has been increasing linkages between the mega-projects and

¹¹ Ministry of Agriculture, 2011. Economics Directorate, Mozambique SAKSS, Monitoring Agricultural Sector Performance, Growth and Poverty Trends in Mozambique, 19 August 2011.

¹² World Bank, 2006. Project appraisal document for a market-led smallholder development project in the Zambezi Valley project, Report No: 35466-MZ, May 23, 2006.

¹³ MDF, 2011. Report of Support Mission Food and Nutrition Security Strategy, Maputo: 6-10 June 2011.

smaller firms, new mega-projects are coming to Mozambique and there is still much work to be done to expand linkages between SMEs and mega-projects.

Reforms remain incremental in crucial areas such as labour, land, trade facilitation and business licensing and inspection. Furthermore, legislative reforms and administrative decrees are only a first step in the reform efforts. Equally important is awareness of the private sector of these reforms and strengthening public sector capacity to implement the reforms - aspects that are not fully captured through the World Bank's Doing Business reports.

The 2008 Investment Climate Assessment (ICA) data reveal that the most prominent obstacle that firms mention are the practices of informal competition. Specifically, the ICA found that 78% of firms compete against unregistered or informal firms. Nevertheless, informal firms have made a major contribution to job creation and poverty reduction in the past ten years'. A strategy that seeks to further understand the dynamics of informality, distinguishes between rural and urban informality, and points the way to bringing in the informal sector to the formal sector is crucial to broaden the base of the private sector. Simultaneously, it should be recognized that informality is not likely to go away completely.

The second major constraint identified by the ICA survey was lack of access to finance (it was the first constraint in the 2003 survey). The ICA revealed that, for small enterprises, only 1% of working capital and 1% of investment in fixed assets were bank financed whereas for medium enterprises it was at only 4% and 5% respectively. Obstacles to access to finance include continued high interest rates, limited risk appetite by banks, weak credit information systems, a weak collateral registration and enforcement system, and limited business and financial management skills in SMEs. While there are some indications of increased bank competition and interest in lending to smaller firms, lack of financing remains a major bottleneck for SME development.

A long list of constraints continue to inhibit private sector competitiveness, including shortage of skills, inadequate access to land, burdensome customs and tax administration procedures, and lack of standards and certification for exports.

Despite some modest efforts at reform, Mozambique's business environment remains restrictive and it ranks low in international comparisons (10th out of 14th in SADEC) and 139th out of 183 economies in the World Bank's 2012 Ease of Doing Business report, which was seven positions lower than the previous year. Procedures for obtaining construction permits have only marginally been eased, as illustrated by an improvement of 3 positions (from 129 in 2011 to 126 in 2012¹⁴). Obtaining credit has comparatively worsened the most, dropping 20 positions (from 130 in 2011 to 150 in 2012). Procedures for starting a business, paying taxes and clearing customs remain moderately difficult in some sectors.¹⁵ There have also been administrative improvements that should streamline business licensing, facilitate tax administration, and accelerate contract enforcement. Efforts are under way to improve business closure and reform customs procedures. However, as shown above, these reforms have not yet resulted in a fundamental shift in the regulatory business environment as evidenced by recent ranking in the Doing Business report.

Lack of infrastructure is a key constraint for SMEs, such as electrical grid, good access roads, irrigation, storage facilities.

¹⁴ 2012 Doing Business index "Dealing with Construction Permits.

¹⁵ <http://www.doingbusiness.org/reports/global-reports/doing-business-2012/>

1.4 Political environment

Mozambique has seen political and electoral stability in the country, and there has been considerable progress in the process of consolidating democratic rights. However, since independence the political landscape is dominated by one political party, i.e. FRELIMO (Liberation Front of Mozambique). The continued dominance of FRELIMO has also led to a strong overlap between party, state and the economic elite: the boundaries between state and private interests are blurred.¹⁶ One area highlighted is that of private investment, where in many cases the FRELIMO party's holding company SPI (*Sociedade de Participações de Investimentos*) or FRELIMO politicians are involved in new investment projects.¹⁷

Mozambique does not have anti-monopoly legislation or specific regulations. In the course of privatization, the government pursued a policy of opening the market to a limited number of competitors for certain services (e.g., cell-phone communications or import of fuel). Other industries, especially water, electricity and land-based telecommunication remain entirely state-owned. The consequence of limited privatization is not genuine competition, but a market that favours either government-owned enterprises, certain large foreign investors (mining, sugar, tobacco) or appears to create a cartel-like arrangement (e.g., fuel import).

Indications of social unrest have emerged over the past five years, particularly in urban areas, associated mainly with rises in food and transport prices.¹⁸ On February 5, 2008, the increase in the price of transportation, following increased basic food prices, triggered riots in Maputo and other cities. On September 1 and 2, 2010 protests escalated once more to full-scale riots after the Mozambican government increased the bread, electricity and water price simultaneously. The government reacted with plans to introduce temporary, targeted subsidies on bread and fuel. However, it was not possible to implement these.

Mozambique faces challenges with its governance and anti-corruption framework. Government accountability (executive, legislative, judicial) and the civil service are all rated as weak. This is backed up by Transparency International's *Corruption Perceptions Index*: after an increase of ten places in 2010, Mozambique's rating in the Index in 2011 fell by four places, and Mozambique now sits 120th out of 180 countries, with corruption perceived as widespread.¹⁹

According to the Doing Business parameters, property rights are poorly protected and the judiciary is perceived as corrupt. There is a shortage of qualified legal personnel, and the case backlog is substantial. Enforcement of contracts and legal redress through the courts cannot be assured, leading to most commercial disputes being settled privately.

However, there have been improvements in the functioning of Supreme Audit Institutions. Cabinet approved the revision of the Anti-Corruption Law 6/2004 in July 2011, and the laws 4/1990 and 7/1998 on the declaration of assets are due in 2012 as part of a new package of anti-corruption legislation.

¹⁶ Bertelsmann Stiftung, BTI 2012. Mozambique Country Report. Gütersloh: Bertelsmann Stiftung, 2012.

¹⁷ Ibid.

¹⁸ African Economic Outlook 2012. Bertelsmann Stiftung, BTI 2012.

¹⁹ http://archive.transparency.org/policy_research/surveys_indices/cpi/

2 Development strategies and policies

2.1 Mozambicans policies and strategies

2.1.1 Overall development policy

Three key documents govern Mozambique's government strategy: (1) the government's five-year plan (2010-2014);²⁰ (2) the Action Plan for Reducing Poverty (PARP 2011-14);²¹ and (3) the Medium-Term Financial Strategy. These have the central aim of reducing poverty and promoting "the culture of work".

The new Action Plan for Reducing Poverty (PARP 2011-14) aims to operationalize the government's five-year plan. The PARP focuses on:

- Increased agricultural (including fisheries) production and productivity, with emphasis placed on food production, through increasing access to inputs and markets, and improving natural resource management;
- Promotion of employment linked to the development of small and medium-sized enterprises (SMEs); and
- Investment in human and social development, improving access to high quality health and education services combined with social protection programmes.

Social safety nets were strengthened with the broadening of the direct cash transfer mechanisms to the most vulnerable groups coupled with the maintenance of subsidies to urban public transportation and productive public works programmes, in a bid to minimize the negative effects of the rising cost of food and fuel prices on the poor. Budgetary allocation to priority sectors increased in 2012 by 6.8%, to 66.7% of the budget.²²

Emphasis is placed on supporting the national private sector, mainly through improving the investment climate, promoting national products and implementation the development strategy for micro, small and medium enterprises. Private investment continues to be seen as an important vehicle for development, highlighting the need for balanced national development and linkages between large, medium and small companies along the value chain.

Spatial planning is identified as a key instrument for improving natural resource management, with a focus on mapping, agricultural zoning and strengthening the land cadaster.

2.1.2 Agriculture and agribusiness

The 2007-2011 period was characterized by the formulation of a large number of strategic and policy documents in the agricultural sector:

- Agriculture Sector Priorities ("documento de prioridades do sector agrário", 2006), which was closely related to agriculture commodities and not to areas of interventions as such;
- Agrarian Intensification and Diversification Program ("Programa de Intensificação e Diversificação");

²⁰ Republic of Mozambique, 2010. Programa Quinquenal para Moçambique, 2010-2014, April 2010.

²¹ Republic of Mozambique, 2011. Plano de Acção para Redução da Pobreza (PARP), May 3, 2011.

²² African Economic Outlook 2012 – Mozambique Country Report.

- In 2006-2007, MINAG embarked on efforts aimed at the promotion and production of bio-fuel crops, particularly Jatropha);
- ECA II, 2006-9, (Agriculture Commercialization Strategy, *Estratégia de Comercialização Agrária*), MIC/2005), aimed to revitalise the commercialization of agriculture products;
- PRONEA, 2007-2014 National Extension Policy, “*Política Nacional de Extensão Agrária*”), aimed to contribute to develop the public and private extension services provided mainly to smallholders;
- Action Plan for Food Production (PAPA, 2008) which was approved by the Council of Ministers in 2008. PAPA’s objective was to increase the production and productivity of selected food crops and livestock;
- ESAN II and PASAN, 2008-15 Food Security Strategy and Plan of Action (*Estratégia e Plano de Acção de Segurança Alimentar e Nutricional*);
- Green Revolution Strategy (GRS, “*Estratégia de Revolução Verde*”, 2008). The GRS was submitted in October 2007 to the Council of Ministers for approval. The GRS is a concept that provides general policy orientation to increase agriculture production and productivity;
- National Irrigation Strategy (MINAG/ENI, 2010) aimed to contribute to revitalise the irrigation subsector in the next 10 years;
- Rural Finance Strategy, (MPD, 2011), aimed to improve access to finance services in rural areas, particularly to credit through the adoption of an integrated model linking credit institutions and products with value chain actors;
- Strategic Plan for IIAM (MINAG, 2010), 2011-215, aimed to establish the strategy for agriculture research;
- PEDSA (“*Plano Estratégico de Desenvolvimento do Sector Agrário*”. PEDSA 2011-2020) was approved by the Mozambican Council of Ministers on May 3, 2011. The overall objective of the Plan is to contribute towards food security and the income of agricultural producers in a competitive and sustainable way, guaranteeing social and gender equity (PEDSA 2011:vii).
- Agribusiness Development Strategy (Plano de Desenvolvimento de Agronegócio, PNDA 2011-2010), 2012 (final version still to be approved by the Cabinet of Ministers).

Some critical issues related to the conceptualization and implementation of PAPA, which is exemplary for most policies and strategies developed over the past decade include:

- Overambitious expectations on achieving production targets for commodities such as rice, wheat, and Irish potato in a very short time period (3 years);
- Weaknesses in providing technology options for targeted crops in different agro-ecological environments;
- Limited research and extension expertise and experience in dealing with selected crops such as
- The Irish potato and wheat, respectively;
- Market constraints throughout the rural areas led to delayed access to inputs and high transaction
- Costs in marketing both inputs and crops;
- Financial, technological and social constraints in expanding and using effectively available irrigated land;
- Lack of clearly defined roles and responsibilities of the different stakeholders.

Below the mission and priorities of the most recent and far reaching policies PEDSA and PNDA are briefly highlighted:

PEDSA seeks a balance between several objectives, where the principle of secure access to sufficient quantities of nutritional food as a fundamental human right is combined with the need to develop commercial agriculture to promote development through internal economic growth.

PEDSA seeks to promote private initiative and emphasises the different actors’ accountability and responsibilities [*responsabilização dos actores*], especially in public-private partnerships.

The public sector will, on its part, seek to create favourable conditions for small, medium, as well as commercial producers, and provide services, such as agricultural research and extension, as well as specialised services in seeds (PEDSA 2011:61).

PEDSA defined four key 'pillars' or areas targeted for action: (i) Agricultural productivity; (ii) Access to markets; (iii) Sustainable use of natural resources; (iv) Institution building.

Box 2.1: Main elements of PEDSA

- Highlights general goals related to agricultural sector growth and strategic activities by sub-sector;
- Emphasizes the broadness of the agriculture sector highlighting the role of other related sectors, such as industry and trade, rural infrastructure, energy, financial services, etc.;
- Highlights the key role of inter-sectoral coordination;
- Provides comprehensive inclusion of agriculture sub-sectors into a logical framework (interrelated areas of the entire agriculture sector);
- Includes categories of agriculture sector performance indicators and key subsector performance indicators (to be updated over time);
- Emphasizes the need for programmatic interventions in the agriculture sector (planning and investment options);
- Emphasizes the value chain developing approach for the main agriculture commodities;
- Highlights the role of MINAG in delivering core services and its coordination role within agriculture sector.

The National Agribusiness Plan (PNDA) sets out the objectives, strategy and target for the promotion of agribusiness. The objectives are to: (i) increase the contribution of agribusiness in the national agricultural production; (ii) increase the added value of agricultural products and its share in the GDP; (iii) increase and diversify agricultural export; (iv) reduce the dependence on imports of agricultural products, in particular food crops; and (v) promote biofuels. The documents sets out a large number of conditions that needs to be in place for this to happen, such as access to finance, infrastructure, flexibility and simplification in obtaining the right to use land, availability of high quality inputs, access markets, quality standards and CB to CEPAGRI. PNDA also seeks to establish Agribusiness Centres. In the setting of limited possibilities for national equity investments in agro-business, international development funds have an important role to play to develop commercial agriculture in Mozambique.

2.1.3 Access to land

Acquiring land use rights

Since Mozambican independence in 1975, property in land has been vested in the state. Despite the political and economic shift to a multiparty system and market economy since the 1990 Constitution, this underlying principle has remained in place, and no land may be sold, mortgaged, or otherwise alienated.

In 1995 a new National Land Policy (NLP) was approved, expressed in the Land Law of 1997 and its Regulation.²³ The policy aimed to establish a clear rights-based approach to guaranteeing land for the poor while acting as a development instrument designed to promote new investment in the country.

The *Direito de Uso e Aproveitamento da Terra* (state-granted land right, or DUAT) is currently Mozambique's only form of land tenure right. The Law established the conditions to acquire a DUAT, which can be acquired in three ways:

²³ Law no. 19/97 of October 1 and its Regulation, approved by Decree no. 66/98 of December 8.

- *Customary (traditional) occupation*: the occupation of land by individual persons and by local communities, in accordance with customary norms and practices, as long as these do not contradict the Constitution;
- *Good faith occupation*: the occupation of land by individual national persons who have been using the land in good faith for at least ten years;
- On a concessionary basis of new rights to land, awarded with the authorization of an application submitted by an individual or corporate person (renewable 50-year state leasehold).

The rural poor obtain access to land mainly through customary and good faith occupation. While these acquired rights enjoy full legal recognition as being equivalent to the state DUAT, they do not have to be registered unless circumstances demand. However, there have been some moves to formalize community rights in order to make them more robust (Community Land Initiative, ITC). Those requesting new rights must carry out a consultation with local communities to ensure the land is free or determine the conditions by which local rights are given up in favour of the newcomer. Awarded rights must be registered.

With the heightened interest in large-scale land acquisition by international investors, concerns have also been raised about the need to ensure that community consultations are carried out in a thorough, participative and unrushed manner with full understanding by the communities of the impact of ceding their rights to such investors. On the other hand, the private operators mentioned access to land as the fourth most important barrier to investment²⁴: 45% of operational firms complained that (i) it is a cumbersome process with unclear criteria; (ii) it is not always clear whose engagement is required/who the community representatives are; (iii) there are overlapping/inadequately documented conflicting land claims.

Land rights can be transferred between third parties, but only when linked to the sale or transfer of physical assets standing on the land. The Constitution recognizes the right to private property and that any improvements and constructions made on or to land over which a private person or firm has a DUAT are the private assets of that person or firm. These assets can be bought and sold, while the underlying DUAT is administratively transferred to the new asset owner, subject to authorisation by the government.

Land law and mining law – which one takes precedence?

The Mining Law establishes the precedence of mining activities over any other economic activity “wherever economic and social benefits related to these operations are higher”.²⁵ This has raised some concerns, particularly in Tete Province, where Angónia, one of the country’s richest districts in terms of agricultural potential, contains many identified potential coal deposits and a large area of which is already licensed for prospection and eventual mining.

If the land in a designated area for a mining pass is declared or a mining concession or mining certificate is issued on a land subject to land use rights, the mining concession will be given priority and the existing land user will be compensated with a “fair and reasonable indemnity”.²⁶

In the case of Tete Province, this will result in the resettlement of large numbers of people displaced from their original landholdings, often in areas with less productive soils and poor access to infrastructure and markets.²⁷

²⁴ Proceedings Stakeholder Workshop Stimulating Private-Sector Agribusiness Investment in Mozambique, July 16, 2012.

²⁵ No 2 of article. 43 of Law no. 14/2002, of June 26 – Mining Law.

²⁶ No 4 of article. 43 of Law no. 14/2002, of June 26 – Mining Law.

²⁷ Mosca, J. And Selmane, T., 2012 (to be published in *Desafios 2012*). Mega projectos no meio rural, desenvolvimento do território e pobreza: o caso de Tete.

2.1.4 Private sector development

The GOM acknowledges the need for a strategy that focuses on economic diversification, export promotion and SME development to broaden and sustain Mozambique's growth.

The Business Environment Strategy contains the following four pillars: (i) Legal Reform, which aims to improve the business environment through reforms covering business registration, licensing, inspection, and closure; labour law; competition law; import-export facilitation; property registration; simplification of tax administration; (ii) Fiscal and Financial Sector Reform: aims to improve the fiscal environment and promote access to finance for SMEs; (iii) Infrastructure: aims to reduce costs and increase access for private sector to basic infrastructure services, such as electricity and telecom; and (iv) Governance and Implementation Mechanisms: covers the capacity building needed to implement the reforms and establishes a mechanism for overseeing and monitoring the strategy implementation.

The SME strategy is supposed to complement that overall business environment strategy and focuses on specific areas of support, through promoting access to finance, improving SME management and technical capacity, and ensuring that reforms are supportive for SME development. The GOM has also been working on sector-specific strategies in agriculture, tourism, as well as an overall approach to dealing with trade integration.

While these strategies can signal an understanding of the challenges and strength of commitment, it is not clear what the level of consultation has been both within Government and with the private sector at large in the strategy development process and whether the capacity will exist to implement the far-reaching reforms envisaged in some of these documents. It is also important for policy development to be coupled with results on the ground for them to be validated by the public, gain credibility in the eyes of investors (whether large or small), and establish a virtuous cycle of reforms yielding results that spur on more reforms.

A Private Sector Working Group, including main donors active in this field, government representatives, and the local private sector represented by CTA (Confederation of Enterprises²⁸) that recently launched provincial representations (CEP) seek to enhance consultation and business linkage mechanisms all over the country. Several studies have also been carried out to identify obstacles in the business environment and trade, or obstacles to the growth of certain sectors (tourism, horticulture, textiles, etc.). Support has already been mobilized to improve certain key barriers (e.g. modernization of the customs office by DFID).

The SME support organization IPEME was created in 2008 and is based in and runs operations from Maputo and Gaza. It offers a pack of services to MSME's, developing business linkages, establishing training centers (CORE, Centro de Orientação ao Empresário, Centros de Transferência de Conhecimento, and incubators (for a description of incubators, see section 4.1.4).

2.1.5 Environment and natural resource management

The Ministry of Environment (MICOA) has prepared an Environmental Strategy for Sustainable Development in 2007 that states: "the major challenge is to make better use of the huge potential and opportunities of

²⁸ CTA represents the concerns and suggestion of the private sector. Recently the Provincial Private Sector Councils (CEP) were launched at provincial level.

the natural resources that are available in Mozambique, with the main objective to achieve socio-economic development that reduces poverty and without harming the environment”²⁹ .

A vicious circle exists between poverty and environment, in which poor subsistence farmers act both as victims and actors: the prevalence of poverty in rural areas, maintains unsustainable agriculture and causes environmental degradation.³⁰ The main causes of rural poverty are the aftermath of the war, climatic events (droughts, floods, cyclones), land degradation, lack of basic infrastructure and poor education levels.³¹

The environmental strategy emphasizes equitable benefit distribution and good governance in line with the principles of the Declaration of Rio (1992), the World Summit in Johannesburg (2002), the Implementation Plan of Agenda 21 and NEPAD. Furthermore, the Strategy strongly advocates an integrated approach (as opposed to a sectoral approach).

In total 24 strategic intervention objectives are defined in 4 categories: ecosystems and natural resources, urban environment, air pollution and climatic change, and population. Integration of these strategies must be achieved by good governance at all levels. Considering the large number and scope of the proposed interventions compared to the limited available resources, the participation and commitment of all stakeholders is required (Government, private sector and society).

In the governments’ 5-year programme 2010-2014, the following main environmental priorities are mentioned:

- Sanitation and water supply (in rural and urban areas)
- Land use planning (decentralized at district level)
- Land degradation (soil erosion, salt intrusion)
- Natural resources management (deforestation, hunting, water, uncontrolled fires)
- Institutional (environmental impact assessments, environmental education & awareness)
- Pollution (air, water and soil)

2.1.6 Decentralization

Since 1992 a wide range of legislative, policy and administrative measures have been put in place to promote decentralization in Mozambique with the stated aim of involving local citizens in the resolution of community problems, promoting local development and deepening democracy.³² As a result, 43 urban municipalities have been established with administrative and financial autonomy, with legislative and executive bodies directly elected by local communities. Since 1998, municipal elections have been held every five years.

In 2003, the Law of Local State Organs of 2003, which defines local administrative units of state, gave the districts powers to plan, budget and implement local initiatives, defining the district as a “budgetary unit”. In the 2006 budget, each district was allocated a budget of approximately 300,000 USD (“sete milhões”) a practice that has continued each subsequent year. This was initially for infrastructure projects and later included support to local economic development. Such projects have to be prioritised through a

²⁹ MICOA, 2007. Environmental Strategy for Sustainable Development.

³⁰ MICOA, 2011. Report on the status of the environment in Mozambique.

³¹ PARPA II, 2006. Action Plan for the Reduction of Absolute Poverty 2006-2009.

³² Cuereneia, A., 2001. The Process of Decentralisation and Local Governance in Mozambique: Experiences and Lessons Learnt. Presentation in Capetown, March 2001. Mugabe, J. 2012. UNDP’s Decentralisation and Local Development Programme in Mozambique: an Evaluation. UNDP, January 2012.

participative planning process and approved by District Consultative Councils made up of community representatives.

Decentralization has had some significant results: participatory planning has been introduced in districts and some municipalities; in some districts, service delivery has improved; and the country has legislative instruments and a national programme for decentralized planning and finance. However, there are concerns that decentralisation has not had a significant impact on the establishment and development of political space at local level. The development of a participative, open and transparent government capable of responding to local needs face some challenges:³³

- There are many State and non-State institutions involved in decentralization and local development in Mozambique, which have tended to take a sectoral approach to planning and practices. Coordination of their activities is one of the key challenges in the decentralization of planning and local development in Mozambique.
- There continues to be a strong pull from the centre in terms of defining priorities.
- Municipalities and districts suffer from weak technical capacity and lack of adequate infrastructure.
- There is a lack of transparent procedures in municipalities and concerns about corruption.
- There are some overlapping functions, particularly in area of land allocation, creating uncertainty and lack of clarity between the roles of Provincial Geographic and Cadastral Services and municipalities.³⁴
- There needs to be a clear link between District Development Plans and District Land Use Plans.³⁵

As a central institution working at regional, provincial and district level, the ADVZ is in a unique position to strengthen the connection between these different levels of government. This offers a good opportunity to support the process of decentralisation, acknowledging the priorities and needs at local level. However, it will also necessitate a delicate balancing act between government representatives at different levels, with the Agency potentially being vulnerable to conflicting pressure, particularly between provinces.

2.2 Development policies of the Dutch Government

2.2.1 Priority areas

The Netherlands government has chosen four priorities ('spearheads') in its development cooperation policy: (i) security and the legal order, (ii) food security, (iii) water and (iv) Sexual and Reproductive Health and Rights (SRHR). Each priority forms a bridge between global problems and Dutch expertise. Food security and water have been explicitly chosen to dovetail with the economic sectors in which the Netherlands excels. Mozambique is among the 15 partner countries included in the Dutch development cooperation policy.

Food security

The Food Security priority has four main pillars: (i) increased sustainable agricultural production; (ii) access to better nutrition; (iii) more efficient markets; and (iv) a better business climate. Activities under this priority are expected to show intensive collaboration between public and private actors and strategic use of Dutch knowledge and expertise. The total annual direct expenditure on food security will rise from 160 million EUR in 2011 to 435 million EUR in 2015.

³³ Mugabe, J. 2012. Forquilha, S., 2007. "Remendo Novo em Pano Velho": o Impacto das Reformas de Descentralização no Processo da Governação Local em Moçambique. Conference Paper no. 10; Inaugural Conference of IESE, September 2007.

³⁴ Personal communications.

³⁵ Norfolk, S. and Tanner, C., 2012. Vision for support to land administration and land management in Mozambique. July 2012.

Central to the Dutch approach to increase food security is a market-driven approach focused on innovation and scaling up successful programmes. Driven by local demand in developing countries, interventions reflect strengths and unique expertise of Dutch companies, institutions and organizations, especially in the agrifood sector and the water sector, including experience with sustainable value chains, agri-logistics and financial services.

Water

The water programme focuses on three objectives: (i) efficient, sustainable use of water, especially in the agriculture sector; (ii) safe deltas and better management of river basins, including in the context of climate change; and (iii) better access to safe drinking water and sanitation.

The Netherlands possesses a large body of knowledge on the management and planning of river basins and coastal areas, cross-border water management, sustainable irrigation and drainage technologies and water and waste-water treatment. Also strong areas are adaption to climate change, urban areas' protection against flooding and user involvement in planning and implementing water projects.

Support is mainly provided through to Public-Private Partnerships (PPPs) and partnership programmes especially in drinking water and sanitation sector. Another line of support goes to activities improving water management and adaptation to climate change, with a view to sustainable food production and safe deltas.

Private sector development

Support to private sector development is a key element in all priority areas of the Dutch development cooperation policy.³⁶ Inclusive economic growth is required to reduce poverty in a sustainable manner to create jobs and generate resources for countries to solve their own problems. That requires a strong private sector. Improvement in business climate and collaboration with private sector are top priorities, paying specific attention is given to support small enterprises and smallholders.

The Dutch development cooperation strongly intensifies its partnerships with private businesses. To maximize the positive and to mitigate possible negative impacts related to private sector activity, such as environmental degradation or exploitation of workers, social and ecological factors are receiving ample attention in all initiatives. Partners need to subscribe to international standards of Corporate Social and Environmental Responsibility (CSER).

2.2.2 Mozambique: partner country in Dutch development cooperation

Arguments to include Mozambique as a partner country are: (i) very low income per capita (440 USD); (ii) eminent opportunities in water, food security; SRHR and security;; (iii) the Netherlands is a reasonably large donor with a sizable programme; (iv) reasonable score for governance (vigorous donor-government dialogue on corruption and democratisation); (v) reasonable contribution to own development via taxation; (vi) economic base still limited, while important from an economic perspective.³⁷

Central to the Multi-Annual Strategic Plan (MASP) of the Netherlands Embassy in Mozambique³⁸ is supporting an inclusive economic development process, leading to broad-based social development through sustainable use of the country's enormous natural resources whilst respecting the rights and benefits of the population.

³⁶ DGIS, 2011. Kamerbrief ontwikkeling door duurzaam ondernemen, 4 November 2011.

³⁷ DGIS, 2011. Letter to the House of Representatives presenting the spearheads of development cooperation policy, a publication of the Netherlands Ministry of Foreign Affairs.

³⁸ Netherlands Embassy Maputo-Mozambique Multi-annual Plan 2012 – 2015, 2011.

The food security priority concentrates on capturing opportunities in four areas: (i) new drive in policy for inclusive agricultural development; (ii) access to inputs; (iii) access to business development services and capital; (iv) access to nutritious food. The EKN specifically wants to act as a broker between Dutch knowledge institutes and private sector initiatives that support this Mozambican development agenda.

In the food security agenda, the EKN continues its long-standing work on access to land, focusing on the empowerment of the communities to secure their land rights. It will step up its investments to support smallholders, especially women farmers, considering this provides the best return in terms of poverty reduction and growth. While doing so it will pursue a value chain approach to tackle issues like lack of inputs, technologies, finance, human capital, markets etc. Several inclusive business models will be supported such as: large commercial investors involving small and medium sized entrepreneurs, business-oriented farmers associations and cooperatives, value chain investments for specific crops. Involvement of key Dutch knowledge and expertise will be deployed in water management in agriculture, strategic environmental impact assessment and agro-finance (specifically innovative financial mechanisms for commercial and small-scale farming). Water being a key input for farming, strong attention will be given to water management systems for irrigation.

In the water priority area Mozambique and the Netherlands have been engaged in a long-term relationship promoting the sustainable use of water resources for economic and pro-poor development. For the coming years, the EKN focuses on (i) institutional development and reform in the water sector; (ii) rural and urban water supply and sanitation; (iii) integrated (trans-boundary) water resource management; and (iv) inclusion of Dutch actors involved in river basin management, delta technology, water supply and sanitation, and water for agricultural production.

3 Agro-ecological and socioeconomic conditions of the Zambezi Valley

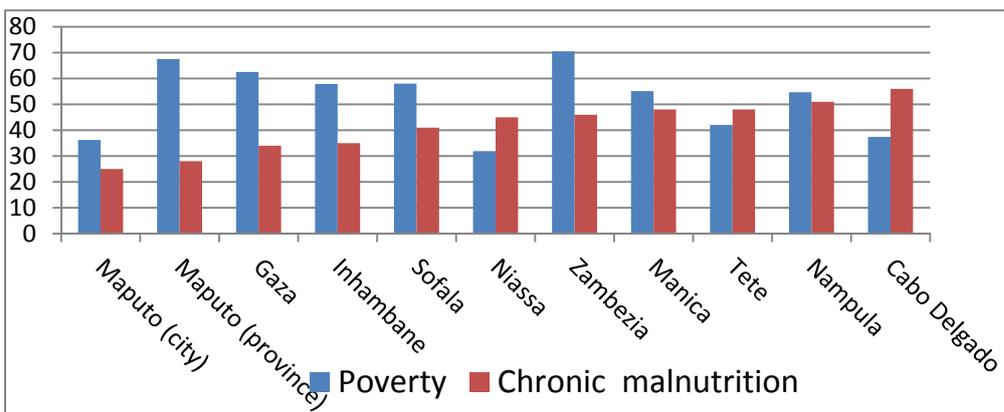
3.1 Drivers of development

3.1.1 Uneven development in the Lower Zambezi Valley

The four provinces that comprise the Lower Zambezi Valley together contain 43% of Mozambique's total population. Within that, over 40% of the Valley's population is concentrated in Zambézia.³⁹ However, population is increasing rapidly in Tete as people are drawn there from other provinces in search of employment opportunities.⁴⁰

Within the Valley, there are differences between the level of development and poverty in the provinces. Zambezi, with some of the country's greatest agricultural potential, lags behind the rest of the region in terms of GDP and poverty indicators. Zambezi province is calculated to have the highest level of poverty in the country, although it only has the fifth highest incidence of malnutrition (see Figure 3.1). Within the Zambezi Valley, Sofala has the second highest proportion of population under the poverty line while Tete has the lowest.

Figure 3.1 Official poverty and chronic malnutrition levels, 2009



Source: Azzarri and Molini, 2012

TIA (*Trabalho de Inquérito Agrícola*) data record that in 2002-08, about 15% of small and medium-scale producers in Tete province used irrigation, with smaller but significant proportions in Manica (12%) and Sofala (11%). In Zambézia, the proportion was less than 5%.

Even in areas of relatively low poverty, such as Tete, some indicators show progress lagging behind that of the national average, particularly in terms of access to basic services (improved water and sanitation) and primary school attendance and completion. Overall, "the body of recent evidence indicates that progress towards reducing rural poverty and malnutrition has stagnated in the Zambezi Valley, along both the Beira and Nacala growth corridors.

³⁹ <http://www.countrystat.org/moz/>

⁴⁰ Concept Outline of the Proposed Mozambique Integrated Growth Poles Project (P127303).

This reflects generally slow progress in improving agricultural productivity and wider lack of access to education and health services. Inadequate rural infrastructure, both roads and electrification, hamper improvements in agriculture, while poor access to clean drinking water and sanitation affect food utilization.”⁴¹

The Zambezi Valley houses some of the country’s largest extractive projects, particularly mining in Tete and logging in Sofala. There is incipient commercial agricultural activity within the Valley’s districts, while agricultural production is carried out mainly by smallholder farmers. Farming constitutes the key activity for many rural households; fishing is also important in selected areas, including the Cabora Bassa district and areas bordering the Zambezi river. Hunting and wildlife reserves are prevalent in some districts in Sofala and Manica that fall within the Lower Zambezi Valley’s boundaries. Tete province also holds the bulk of the 12.5 gigawatt of power generation potential in Mozambique.

3.1.2 Coal as driver of development in the Lower Zambezi Valley

Over the past ten years, Mozambique’s coal production output has been relatively stable, hovering between 15,000 MT and 40,000 MT per year. Total coal production dropped sharply to 3,400 MT in 2005 following production, equipment supply and infrastructural challenges. However, coal output increased sharply from nearly 26,000 MT in 2009 to nearly 1 million MT in 2011,⁴² with Mozambique’s coal production projected to grow to 20 million MT per year by 2015. Brazilian mining giant Vale’s Moatize coal operation and global miner Rio Tinto’s Benga and Zambezi coal mine projects will account for the bulk of the increased production.

The area is considered to be the largest untapped coal reserve in the world, containing a mixture of approximately 30% thermal and 70% metallurgical coal, aiming to supply the expanding Indian, Brazilian and Chinese markets, amongst others.⁴³ Mozambique’s coal production is projected to further increase to 110 million MT per year when projects by other mining companies such as Mozambi, Jindal Steel, Nippon Steel, Eurasian Natural Resource Corporation, Eta Star and Coal of India become fully operational.⁴⁴

3.1.3 Opportunities and risks from the mining boom

The mining boom in Tete presents enormous potential for economic development and poverty reduction through direct employment effects and opportunities for spillover effects through backward and forward linkages, as well indirectly by tax revenues collection. However, it also entails several risks:

- There is limited potential for broad-based growth and poverty reduction. So far, Mozambique’s impressive GDP growth has not promoted commensurate impacts on poverty reduction and the efficiency of GDP growth in poverty has fallen: from 1997 to 2002, a 1% increase in GDP reduced poverty by 0.27%; between 2003 and 2008, each 1% rise in GDP reduced poverty by only 0.13%.⁴⁵ This reflects a concern that the mega projects that are the basis of Mozambique’s growth have contributed little to poverty reduction and highlights the need to encourage greater spillover effects in the economy through the promotion of backward and forward linkages (see Box 3.2).

⁴¹ Columbia University, 2011. Resource-based Sustainable Development in the Lower Zambezi Basin – Consultative Draft, June 1, 2011.

⁴² African Economic Outlook, 2012 – Mozambique Country Report; www.miningweekly.com, December 2011.

⁴³ Columbia University, 2011. Resource-based Sustainable Development in the Lower Zambezi Basin – Consultative Draft, June 1, 2011; African Economic Outlook, 2012 – Mozambique Country Report.

⁴⁴ www.miningweekly.com, December 2011.

⁴⁵ Castel-Branco, C. 2010. Economia Extractiva e Desafios de Industrialização em Moçambique. Cadernos IESE, No.01/2010.

- The elevated potential value of coal output runs the risk of inflating Mozambique’s currency, undermining the competitiveness of the rest of the economy, mimicking the experience of the Dutch economy in the 1970s (so-called “Dutch disease”). One possible solution to this is to focus attention on developing the domestic market, prioritizing products that have strong domestic demand. However, this may not be an option for all areas.

Much discussion has centered on the possible use of funds generated from the mining industry, from which the Agency could potentially receive several hundred million US dollars. The challenge for the Agency will be to judge how to apply these funds, in the 20-25 year window offered by the mining revenues, to address the needs for balanced and inclusive development within the Lower Zambezi Valley.

Experience in other countries highlights the need for revenues to be managed transparently, with the benefits shared among the population, and resources strategically invested in line with the PARP priorities and MTEF expenditure lines.⁴⁶ Several principles are important to bear in mind in deciding how best to allocate revenues:

- The population of the host country should benefit from the extraction of resources owned by the state, either directly or as beneficiaries of a public investment program;
- As resource prices and markets are highly volatile, revenues from extraction should be used to smooth consumption and ensure fiscal stability in the short and long terms; and
- Given that the resources are non-renewable, the benefits of resource extraction should extend to future generations.

In some countries, revenue streams from extractive industries are deposited in the central treasury account and distributed in line with other central revenues. In other cases, part of or all of the revenue streams are managed separately: either allocated back to the region of production, transferred to the population in the form of cash transfers or managed separately in a resource fund.

⁴⁶ This section draws on the discussion presented in: Columbia University, 2011. Resource-based Sustainable Development in the Lower Zambezi Basin – Consultative Draft, June 1, 2011.

Box 3.2: Promoting Business Linkages in the Lower Zambezi Valley

In order to maximize the spillover effects from the mining activity in Tete and promote economic diversification, it is important to think about how to promote the emergence and increased sophistication of local businesses, widening the scope for local procurement, and potentially allowing mining firms to reduce costs. Anecdotal evidence from the mission team's field trip indicates that backward and forward linkages with the mining industry are very limited, focusing mainly on construction and transport infrastructure. Local agricultural producers report very limited success of organizing supply of produce to the catering company responsible for supplying the principal mining companies, with these opting for importing meat, fish and vegetables.

Several experiences exist that could serve as useful points of reference, including the Mozal linkage programme and the development of the sugar industry. However, it must be recognized at the outset that the mining and catering companies main business is to produce and supply rather than develop local producers. This is an important role for government and requires "an industrial policy focused on investing in human resources and improving the investment climate... based on a value-chain approach, and constantly engaging with the mega-projects on possible collaborative actions."⁴⁷

Mozal

From 2002 to 2009, annual local purchasing from Mozal-affiliated SMEs increased from US\$5 million to US\$22 million and companies were trained and received a supplier contract.⁴⁸ This resulted in part from the government's linkage programme, which registered firms with potential to bid for contracts with Mozal, facilitated contacts between local and foreign firms, and provided training in contract management and performance improvement.

The Mozal experience highlighted several issues:⁴⁹

- A large firm, as Mozal, may create the potential for linkages, but these can only take effect if other firms invest in learning, upgrading, seeking contracts, developing networks, etc.
- It would be impossible to replicate the degree of interface with Mozal to deal with all investment projects of some significance, as the level of responsiveness developed for Mozal is not necessarily sustainable from the point of view of existing institutional capacities.

The Mozambique sugar industry

An evaluation carried out by CEPAGRI following the rehabilitation of the domestic sugar industry indicated that linkages with local suppliers had been limited. Several factors played a part in this, including:

- The impact of central purchasing strategies of multi-national companies and existing client-supplier relationships;
- Insufficient economies of scale to warrant development of local capacity;
- Issues of quality and reliability of local suppliers.

⁴⁷ Columbia University, 2011.

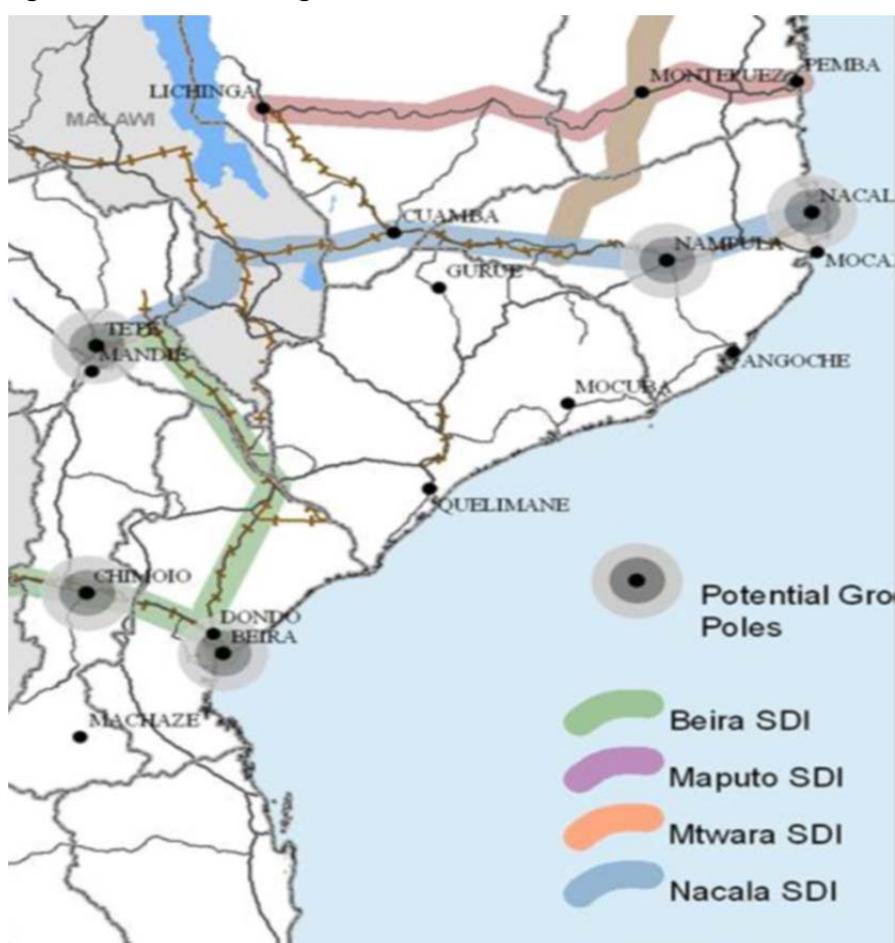
⁴⁸ Columbia University, 2011.

⁴⁹ Castel-Branco, C. and Goldin, N., 2003. Impacts of the Mozambique Aluminium Smelter on the Mozambican Economy.

3.1.4 Infrastructure and access

After the end of the war (1992) up to the middle of 2000, infrastructure development (roads, telecommunications and energy) was carried out principally along the spinal column (North-South) of the country. More recently, from around 2005, infrastructure development has been driven mainly by mineral-energy mega-projects: transport infrastructure is more developed transversally, west-east, connecting mining and agricultural clusters inside Mozambique and in neighbouring countries along corridors to exit ports. Less developed are connections between parallel corridors, linking urban and economic clusters or rural production areas with markets, and there is insufficient coordination with national infrastructure development plans, missing the opportunity to take advantage of potential synergies and scale economies.⁵⁰ As seen in Figure 3.3, the Lower Zambezi Valley is flanked by the Beira and Nacala corridors, which represent the main infrastructure in the region.

Figure 3.3 Beira and Nacala growth corridors.



As a consequence, the northern provinces of Mozambique, which are the most densely rural populated provinces, have the lowest share (33-35%)⁵¹ of the population within 2 km from any all-weather road.

⁵⁰ Castel-Branco, 2010. Columbia University, 2011. Dominguez-Torres, C. and Brecken-Garmendia, C. 2011. Mozambique's Infrastructure: a Continental Perspective. AICD Country Report, June 2011.

⁵¹ Uwe Deichmann, Use of GIS in Road Sector Analysis, DECRG, Transport Forum and Learning Week 2007, Transport Measurement Matters: Indicators of Performance and Impact, March 30, 2007.

Because of the poor condition of the network, which is impassable in the rainy season, the percentage of the rural population that has reliable, all-year access is much smaller: 11% according to 2007 estimates.⁵² Tertiary and vicinal roads are not asphalted and benefit from much less public and donor support than the main national road network. Trunk roads and feeder roads connecting villages to the main road network significantly influence transport costs: the poor road network raises the costs of production and distribution, reduces the profit margin on produce sales, and limits production yields to levels below their potential, impeding the transition from subsistence agriculture to a more market-led agriculture.⁵³

Beira Corridor.⁵⁴

The Beira Road Corridor links Beira to several different destinations, including:

- Beira–Mutare–Harare–Chirundu–Lusaka;
- Beira–Tete–Blantyre (the “Tete Route”); and
- Beira–Nhamilabue–Nsanje–Blantyre (the “Sena Route”).

The Tete and Sena routes suffer bottlenecks since most road traffic to and from Malawi uses these routes. The situation is eased now that Tete’s Zambezi River bridge has been rehabilitated and that another bridge is being built further downstream. The Beira Corridor contains long unpaved sections.

The corridor contains two rail lines of unequal quality and volume of activity:

- The 317km Machipanda line linking the Beira Port to the railway network in Zimbabwe at Mutare station; and
- The 670km Sena line including the link from Beira Port to the Moatize coal mines and the diverging branch from Dona Ana to the Malawi Border.

The Sena line (excluding the branch from Dona Ana to Malawi) has been under a rehabilitation plan with support from the World Bank and European Investment Bank for an upgrade up to 6 million MT per annum capacity by the end of 2011 (14% of Rio Tinto/Riversdale and Vale’s joint capacity) and 12 million MT per annum in 2014. The plan was stalled for termination of the concession agreement but Vale is now operating the line, with the infrastructure owned by CFM. Alternatives are being considered to using the Beira Corridor railways to transport coal from Tete, including barge transport from Tete or Mutarare to Chinde, or by railway to Quelimane.

Only small feeder vessels can enter the Port of Beira: due to limited channel depth, currently only feeder services mainly from Durban are available at this port without any transshipment. Since May 2009, the Government of Mozambique, the European Investment Bank, and the Dutch and Danish Governments have invested in the development and dredging of the Beira port. Vale and Rio Tinto/Riversdale are rehabilitating the coal terminal.

The region has extensive hydro and thermal potential, yet extremely low access to electricity. The bulk of Mozambique’s generation capacity (the 2075MW Cabora Bassa Hydropower (CBH) station) and the bulk of the thermal and hydropower potential are in Tete province. Despite this potential, most of the households along the Beira corridor do not have access to electricity (access rates are 4.7% of the population in Tete, 10.2% in Sofala, and 6.4% in Manica). The most significant project to realize this potential is the planned 2.5 billion USD Power Transmission System (CESUL).

⁵² 2007 World Bank Proposal for Roads and Bridges Phase 2.

⁵³ Jacoby, Hanan G. & Minten, Bart, 2008. “On measuring the benefits of lower transport costs,” Policy Research Working Paper Series 4484, The World Bank.

⁵⁴ This description draws on Columbia University, 2011; Dominguez-Torres, C. and Brecken-Garmendia, C. 2011; Rio Tinto Coal Mozambique 2012. Proposta de Investimento para o Corredor de Transportes Integrados, 12 de Março de 2012; and Vale 2012. Conselho de Investimentos, June 2012.

Nacala Corridor

The trunk route to the port currently serves low traffic volumes: roads cover over 1,700 km and two one-stop border posts connecting the Nacala port with Malawi and Zambia. The route is not currently functional especially because of the poor condition of the Mozambican road sections from Nampula to inland countries. Under the Nacala Road Corridor Project, AfDB and MCC are funding rehabilitation work.

The Nacala Rail Corridor encompasses the Nacala–Nkaya–Chipata and Blantyre–Nkaya lines. The potential throughput is 1 million MT per annum but the railway suffers from low railway operation speed and capacity due to track deterioration. Vale, as a majority shareholder of the railway line, plans to invest 2 billion USD in upgrading 906 km of the corridor, including construction of a new railway link from Moatize to the border of Malawi, rehabilitation of the railway link in Malawi and the existing railway link from the Malawi border to Nacala. Once this is complete, capacity should rise to 18 million MT per annum, with work expected to be completed by 2014/2015.

The Nacala port is a natural deep-water port without need for regular dredging, and with potential handling capacity beyond the expected future coal exports of 48 million MT per annum by 2017. The port is currently used mostly for international trade to and from Mozambique with a relatively low volume of transit cargo (950,000 MT per annum) due to the undeveloped road corridor and inefficient railway. The Government of Japan has funded a feasibility study for the rehabilitation of the Port and its integration with the Nacala railway (feasibility study and funding).

Internet and telecommunications

Internet and telecommunications supply and access are variable along both corridors. Mobile services have far outgrown the fixed-line network, reaching more than 6 million subscribers in 2009, up from 12,000 in 1999. The global system for mobile communications (GSM) voice signal covers most of the stretch from Nampula to Nacala on the Nacala corridor and the main cities on the main roads of the Beira corridor. The Internet user rate is very low and the international Internet bandwidth is very slow. Service quality for telecoms and Internet is weak overall in Mozambique outside Maputo.

3.1.5 Availability and quality of human resources

Most information on the availability and quality of human resources in Zambezi valley is available for Tete Province. This information is mainly reviewed below. The conditions in the other three provinces is similar.

According to a study conducted in 2008⁵⁵, the workforce in Tete province (and in Mozambique in general) lacks high-quality, market-relevant technical skills. Nearly 50% of the economically active population has either no education or basic literacy skills. More than 75% of the population has 5 years or less of school attendance, and 8.5% has achieved secondary or tertiary education. For example, the pupil-to-teacher ratio increased from 46 in 1998 to 70 in 2005 in Tete province. One per cent of those enrolled in school pass through the technical school system.

The public technical and vocational education and training system, comprising courses offered by the Ministry of Education and Culture and the Ministry of Labour, is unable to respond to the growing demand for skills. The key issues facing the system include poor quality of training, low market relevance, and a lack of social demand compounded by issues of access and equity. With student failure rates of 50%, drop-out rates of 30% and high percentages of repeat learners, only 25% of graduating students seek

⁵⁵ Falkov, L and S. Surianarain (2008), "Skills for Work: A Framework to Guide Mega Project Investments in TVET", prepared by Resolve Group, October 2008, The Republic of Mozambique.

employment. Increasing private-sector participation and addressing immediate skills needs are the main challenges.

Tete province has a limited local pool of educated people and the expatriate workforce is growing fast. Demand is not only strong for professionals but also for workers in the transport, catering, cleaning, retailing, banking and construction sector to name a few. But local education systems fail to produce the skills that companies need.

The province has recently established a number of higher education institutions, but observers note that these schools generally focus on social sciences rather than educating the people that commercial enterprises need most. DANIDA has, for example, been financing the construction of institutions of higher education, including a college for teacher training in Tete town. The Ministry of Education and the African Development Bank are financing the construction of two technical schools. Yet, the output of graduates from institutes for vocational and technical education is low in Tete province, and the training is mostly at a basic level⁵⁶.

Given the long-term time horizon for the mining and energy projects—70 years are mentioned for the coal mines, and there is no end date for the hydro-electric power stations—the public authorities have strong incentives to adjust their supply to projected demand in these sectors. For example, Vale is sending Mozambican staff to Brazil for training, and has also established an alliance with a Brazilian institute (SENAI) to train people in Mozambique. The company is particularly interested in the establishment of specialized technical schools in Tete since, in the long run, this would be a more sustainable solution. The company will employ 900–1,500 people of which only 5% will be foreigners.

The private sector and business associations also mention labour skills and productivity as one of its major constraints. The ICA 2009 confirms that Mozambique's average labour productivity is one of the lowest among the groups with which it was compared⁵⁷. The public TVET system is unable to respond to the growing demand for skills and of these only 6% are engaged in the formal sector⁵⁸. One of the consequences is that many services have to be contracted from Maputo. But not all training programmes are available in Mozambique, for instance for truck drivers. Zimbabwe and South Africa offer a two-year course that includes not only training in driving trucks but also mechanic training, a much needed skill for the transport companies.

Creating qualified employable labour for the commercial sector would have a significant impact on growth, reducing poverty and bringing down unemployment.

3.2 Natural resources

3.2.1 Availability and quality of natural resources

International perspective

The Zambezi river basin covers an area of 1,39 million km² that is shared by 8 countries (Zambia, Angola, Malawi, Namibia, Botswana, Zimbabwe, Malawi and Mozambique). The basin is home to 32 million people, 80 per cent of whom depend on agriculture, whilst communities living on the Zambezi's shores rely heavily

⁵⁶ www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/02/18/000334955_20100218013141/Rendered/PDF/509930PADOP111101OfficialUseOnly1.pdf

⁵⁷ Ministry of Education and Culture (2008), "Education Statistics: Annual School Results – 2008", August 2009.

The ICA 2009 p.30 – comparative countries: Angola, Malawi, South Africa, Zambia, Thailand and Vietnam.

⁵⁸ COREP (2008) 'Skills for work' A framework to guide Mega project investments in TVET p.6.

on fishing. The basin is sub-divided into 13 sub-basins, of which 2 are in Mozambique (Tete and Zambezi Delta), forming together the lower Zambezi basin.⁵⁹ The lower Zambezi basin is the recipient of water and suspended material that mostly originate from the upper catchment areas outside Mozambique. Upstream development activities and climate change are therefore directly impacting the lower Zambezi basin, since water is the primary carrier. International dialogue is arranged for to regulate river flow, coordinate development activities and stimulate Integrated Water Resource Management (IWRM), in which SADC and ZAMCOM play a key role.

The description further below on the natural resources and their utilization, is based on the 4 Provinces⁶⁰ that make up Central Mozambique.

Central Mozambique

About half of the land is covered with forests and one quarter with rangelands and bush/scrublands. Only 6% is used for permanent agriculture, while about 15% is used for itinerant agriculture (shifting cultivation), see Figure 3.4. for details by province.

Figure 3.4. Population and use of land Central Mozambique, by province

	Tete	Manica	Sofala	Zambezi	Total
Population (pp) ⁶¹	1.832.339	1.418.927	1.654.163	3.892.854	8.798.283 pp
Pop. density (pp/m ²)	14	23	13	37	26 pp/km ²
Poverty (%) ⁶²	42	55	58	71	60 %
Districts	14	10	13	17	54
Land area (km ²)	100.646	62.324	67.704	103.076	333.750 km ²
Main land use (%) ⁶³ :					
- Forests	42	55	49	49	48 %
- Agricultural fields	4	4	6	9	6 %
- Shifting cultivation	10	19	8	22	15 %
- Rangelands	21	12	13	3	12 %
- Bush/scrublands	18	5	10	6	10 %

Source: several, see footnotes.

Land resources

A large part of the Central Region is characterized by a wide and flat coastal plain (below 200 masl), with many large rivers and deltas, a dynamic sediment-rich muddy and sandy coastline, and wide coastal flats. Soils consist mostly of fluvisols that are highly fertile. More inland, the land is moderately undulating (200-1.000 masl), with the occurrence of mountains in northern Tete and western Manica up to 1.800 masl. Here the soils consist mostly of ferrosols and lithosols, that are less fertile, more rocky and more prone to soil erosion. The floodplains of the Zambezi river consist mostly of rich alluvial soils.

Climate

Four zones can be distinguished⁶⁴. The coastal belt enjoys a wet semi-arid tropical climate with 1.000-1.200 mm precipitation, concentrated mostly in the period November-March, and a mean annual average temperature of 24-26 °C. The interior of the basin has a dry semi-arid tropical climate, with a precipitation of 800-1.000 mm. Most parts of Tete have a very dry semi-arid climate, with precipitation less than 600

⁵⁹ WB, 2010. The Zambezi River Basin – A Multi-sector Investment Opportunity Analysis.

⁶⁰ The data in the table cover the entire province, and not those strictly speaking in the watershed.

⁶¹ INDE, 2009. Atlas de Mocambique (census 2007).

⁶² PARPA, 2006. Poverty trends in Mozambique.

⁶³ MICOA, 2011. Report on the state of the environment in Mozambique.

⁶⁴ MINAG, 2007. Agro-ecological zoning of Mozambique.

mm, and an evapo-transpiration that exceeds precipitation by a factor 2. The elevated areas in the west of Manica and the north of Tete enjoy a tropical semi-arid mountainous climate, with a precipitation of 800-1.200 mm. Most parts of the Central Region are suitable for growing maize and cassava, while the dryer parts are planted with sorghum and millet. Floodplains are often used for rice and sugarcane. Tobacco and cotton are widely planted as cash crops.

The Central Region is most prone to flooding, cyclones and epidemics as a result of climatic change⁶⁵. The severity of the floods is thought to be related to a 10-year cycle of El Niño. Floods have devastating effects on the people and economies of the region, especially the poor and those people who have settled on the flood plains in search of fertile soils. The last years, floods are less severe due to flow regulation and coordinated dam releases of Kabira and Cabora Bassa. There are significant positive trends of increasing temperatures and duration of heat waves. No conclusions could be drawn indicating diminishing trends in rainfall due to the high inter-annual variability. However, the rainy season tends to start later and dry spells to last longer.

Water resources

The Zambezi river produces a mean annual discharge of 4,134 m³/sec, equivalent to 130 km³/year. Hydropower is the main water use. The Cabora Bassa Dam produces 2.075 MW and thereby regulates the flow of the Zambezi river downstream. Preparations have started for a new run-of-the-river-dam at Mphande Nkuwa several kilometers downstream of Cabora Bassa, that should produce 1.300 MW in 2020. Despite the huge potential, water is only scarcely used for irrigation, with a current command area in the basin of 7,413 ha. The World Bank identified 96,205 ha of irrigation projects and 300.000 ha more in a high-level scenario.⁶⁶ The fresh water flow of the Zambezi is essential for the ecological functioning of the coastal ecosystems. Recently, WWF has proposed an experiment with an ecological flow to increase the fresh water flow in the Salone distributary river, feeding the Marromeu reserve⁶⁷.

Mineral resources

Tete province holds large reserves of coal. Recently, the exploration and exploitation of these coal resources has suddenly exploded, especially with the installation of two large companies (Rio Tinto and Vale). Almost three quarters of the area has been issued with licenses for exploration. The related socio-economic impacts, resettlements, and land use planning, pose huge challenges for Tete province. Gold is also mined in the region.

Forest resources

The forest resources are vast (about half of the area) and consist mostly of Mopane forests, Miombo forests and Acacia/Cobretum. Mangroves are found in the delta where fresh and salt water meet. Long term concessions are issued for timber extraction, while logging of individual trees outside the concessions is based on issuing individual licenses. The high demand for hardwood timber, especially from China, increases the pressure on the forests. The forests provide important products and services for the subsistence farmers. Although there are no exact figures of deforestation, the widespread occurrence of uncontrolled forest fires and the slash and burn practice of itinerant agriculture is posing a serious threat to the forests.⁶⁸

Biodiversity

The biodiversity values in the Central Region are high, because of the presence of a large variety of habitats, mountains, plains, rivers, deltas and coastal ecosystems. There are 3 protected areas:

⁶⁵ INGC, 2009. Study on the impact of climate change in Mozambique.

⁶⁶ WB, 2010. Multi-sector investment opportunity analysis.

⁶⁷ WWF, Delta Alliance, 2011. High potential in the lower Zambezi.

⁶⁸ MICOA, 2011. Report on the status of the environment of Mozambique.

Gorongosa National Park (5.370 km²), Gilé Reserve (2.100 km²) and Marromeu Reserve (1.500 km²) which has recently been declared a RAMSAR site and contains the largest mangrove complex along the entire Eastern African coast. The presence of wildlife is widespread, although at low densities. Human-wildlife conflicts are often mentioned as environmental problems, mostly related to crocodile, elephant and hippo. In Sofala and Manica provinces, a total of 10 hunting concessions are issued covering an area of 35.000 km². Poaching is widespread.

Fisheries

All along the coast, fisheries resources are abundant, especially at the estuary of the Zambezi delta, and provide an important source of nutrition as well as economic activity. Mozambique is renowned for its high quality shrimps. In the region around Lake Cabora Bassa, fisheries provide the primary source of livelihood for the majority of the local population. In addition, some 50 companies are licensed to fish *kapenta* (fresh water sardines) on a semi-industrial scale, most of which is exported to Zimbabwe.

3.2.2 Environmental issues and climate change

General

The huge size of Central Mozambique (10 times the size of the Netherlands), its low population pressure (about 26 persons/km²), the scarce socio-economic development, the high forest cover (50%), the mighty meandering Zambezi River and the presence of wildlife, may give the impression that it is quite a natural area. At closer look, the different ecosystems find themselves in varying conditions ranging from almost pristine to stressed and degraded. Some of the environmental stress is caused by climate change (e.g. drought or flooding), others by accelerated economic development (mining in Tete) and others by unsustainable land use (itinerant agriculture and deforestation). When ecosystems are under stress or degraded, the value chain of the whole range of services offered by them may be effected, consisting of direct services that may be traded and monetized (shrimps), indirect services that often have no market value (coastal protection by mangroves) and intangible non-use services (value for future generations).

Integrated sustainable development

This near natural basin has a large potential for development based on its rich land and water resources that suddenly have attracted the attention of national and international investors and developers. It will be a challenge to combine the demands and claims from different sectors and stakeholders in a sustainable and equitable manner. The need to have an overall view of the current and future direction of development scenario's and their impacts on the environment is recognized by the Ministry of Environment. With support from the Netherlands Commission for Environmental Impact Assessment, an initiative is underway to conduct a strategic environmental assessment for the Lower Zambezi Basin⁶⁹. The assessment will be based on multi-sector agenda setting, involving six sectors: mining, transport, energy, agriculture, water and social. The Agency will play a key role in this. In order not to repeat what has already been written in the scoping advice for the Strategic Environmental Assessment, the environmental issues listed below are a result of field observations, discussions with local people and government representatives and a selected number of reports and documents. For the purpose of this report, the Lower Zambezi Valley may be sub-divided into 3 broad areas, for which key generic environmental issues have been identified.

Upper part (Tete province)

The presence of the largest coal reserves of Africa in Tete Province has suddenly triggered an exponential economic development. Eventually, it is expected that about 100 million ton of coal per year will be exploited and transported to the coast for further shipment. Licenses for exploration have been issued, covering almost $\frac{3}{4}$ of the Province territory, while two international companies have started actual

⁶⁹ NCEA, 2011. Advice on scoping for an integrated multi-sector plan and SEA for the Lower Zambezi Basin.

exploitation. This development may lead to severe socio-economic (resettlement, influx of immigrants) and environmental impacts (air & water pollution, landscape deterioration). The mode of transport (by river, road or train) will influence the lower parts. These issues are key in the above mentioned Strategic Environmental Assessment.

The Cabora Bassa reservoir was formed after construction of the dam and the Hydropower plant in 1984, creating an entire new ecosystem. The fish resources in the reservoir offer a major source of livelihood for the majority of the surrounding population as well as for 56 semi-industrial kapenta fishing companies. The reservoir is a huge water consumer through evapo-transpiration, reducing the total river flow, while dam operations for hydro power generation result in a regulated flow that affect the ecosystems in the lower parts of the basin. A second run-of-the-river hydropower plant, Mphande Nkuwa, will be built 60 kilometres downstream of Cabora Bassa dam. A small reservoir will be created, since it will operate mostly on the release flow of the Cabora Bassa (so called “pondage”). This will further impact on the downstream areas.

Much of Tete Province is characterized by a hot semi-arid savannah climate, with a precipitation of 400-600 mm concentrated in three months from December to February. The area is the second largest producer of goats in the country and only marginally suitable for the cultivation of drought resistant crops such as millet and sorghum. During the field visit, it was reported that the maize cultivation has not been successful in the last three years. This area is susceptible to environmental degradation, as a result of climate change in terms of raising temperatures, the occurrence of extended heat waves and the delayed onset of the rainy season.

Other environmental issues that were observed during the field visits were illegal hunting (there is a large hunting concession in the south west part of Tete), human-wildlife conflicts (mostly related to crocodile, elephant and hippo) and land degradation (soil erosion in the mountains and specifically in Changara District).

Middle part (most of Zambezia, Sofala and Manica provinces)

Itinerant subsistence agriculture is widely practiced in this part of the basin, whereby fire is used as a common practice to clear fields (slash and burn) and to hunt for game. These fires often develop into uncontrolled fires, destroying forests and their biodiversity values. Traditional practices of bee keeping, whereby fire is used to smoke out bee colonies, also contribute to the occurrence of uncontrolled fires. The production of charcoal is a very important economic activity for the local population, with a total economic value that is higher than agriculture⁷⁰. The resource material is obtained at zero cost, no inputs other than labour are required, the market is secure and without risks. In sum, the forests are under great stress from uncontrolled fires and unlimited charcoal exploitation.

Large parts of the extensive forests are issued as forest concessions, whereby a timber company obtains a long term license to harvest defined volumes (annual allowable cut) of timber per year on a rotational basis. The hardwood timbers that are obtained from these Miombo forests are of very high quality because of the slow growth, and are in high demand for export and furniture production. The licensee has the obligation of replanting, and some also involve surrounding local communities in timber processing and beekeeping (e.g. Dallman). There also large scale industrial forest plantations (with Eucalyptus and Pine) that provide ample employment opportunities. Such enterprises have the obligation to set aside 10% of the area for food production, for the benefit of employees and surrounding communities

Illegal logging of the valuable hardwoods inside and outside concessions is a thriving business that involves mostly Chinese timber traders, providing local business people with credits and equipment, and

⁷⁰ Marco Machado, 2012 – verbal communication.

colluding members of government and forest services, in what is described as the “Chinese Takeaway”.⁷¹ The timber is exported as unprocessed logs, undermining local industry and transferring most of its potential benefits from one of the poorest countries in the world, to what is becoming one of the richest. The report warns that these slow growing semi-arid and dry tropical forests are harvested at a rate that could see the resource exhausted in 5-10 years. There is an urgent need to introduce sustainable forest management and stop the illegal timber mining.

Cotton and tobacco are the most common cash crops, providing opportunities for the local population to earn an income, next to their subsistence farming practices. Two large companies provide the farmers with inputs and purchase the produce for further processing. Tobacco and cotton are considered as less environmental friendly crops, because of the use of agro-chemicals and the low ground cover often causing soil erosion and land degradation. It is not known if and to what extent sustainable land management (such as zero tillage or mulching) are practiced to reduce such impacts.

The middle part of the basin used to be very rich in wildlife. A total of 10 hunting concessions are issued in Sofala and Manica, covering a total area of about 26.000 km². Hunting of wildlife by the local population is widespread outside the concessions. Special mention is made of Gorongosa National Park (5.370 km²) that was established in 1960 and famous for its high density of wildlife. During the 1980's and early 1990's the park's surrounding were mined, the infrastructure was destroyed and the wildlife was decimated. The park was rehabilitated and reopened in 1998, but animal numbers are still pale.

Lower part (coastal belt of Zambezi and Sofala province)

Large parts in the lower basin are characterized by lowlands, floodplains, marshes and many cross-cutting annual and seasonal rivers that hamper north-south accessibility. The seasonal flooding of many lowland areas hampers socio-economic development and inhibits investments. Local government representatives consider the lack of a well-functioning system of protective dykes as a major constraint in the development of the region and ask for a “delta plan”. In the colonial times, there existed an extensive system of protective dykes and flow regulation systems. The last severe river flooding occurred in 2008, and remained without casualties because of precautions taken by INGC (early warning and an ongoing programme to resettle people living in flood prone areas). Another contributing factor is improved integrated water resources management, whereby the operating rules of Kariba and Cabora Bassa dams are not only geared to maximize hydropower generation, but also take into account controlled flooding and environmental flows. This cooperation was initiated by SADEC and has been signed by 7 riparian countries participating in ZAMCOM.⁷²

The Zambezi delta deserves special mentioning. The delta is an extensive swamp that forms a triangle of around 12,000 km² and includes the Marrromeu Complex that was designated in 2004 as the first and only wetland of international importance (RAMSAR-site) by the government of Mozambique. The delta is still in a near natural state: most ecosystems are functional, with a free meandering river. The construction of the Cabora Bassa dam, however, has disconnected the Salone River and distorted the Zambezi natural flood regime, that is the driving ecological process supporting riparian habitats and fisheries. WWF reports that since the construction of the dam, the shrimp industry has declined by more than half. Further developments in the upper parts, like changes in water flow and sediment load, new infrastructures, water pollution, etc. will affect the environmental functioning of the delta. WWF has initiated dialogue with local, national and international stakeholders to promote a green development of the delta that ensures economic development in the basin, benefitting local people in an equitable way, while minimizing impact on ecosystem services. Part of the plan, is an experiment to restore a controlled environmental flood in order to re-open the Salone River. There is ample experience in other countries (e.g. the Netherlands) to

⁷¹ FONGZA, 2006. Forest Governance in Zambezia, Mozambique. Chinese Takeaway.

⁷² Zamcom, 2011. Zambezi Watercourse Commission Agreement .

restore regulated and degraded river deltas, but there is little experience with sustainable economic development in a near natural river delta⁷³.

The lower part of the basin is regularly affected by cyclones, causing flooding and damage, sometimes followed by epidemics and even loss of life. The coastal area is very vulnerable to flooding, because the -20m ocean depth contour is at its widest along the coast of Central Mozambique, thus allowing tidal waves associated with cyclones to accumulate up to 8m height. There appears to be a trend of increasing occurrence of cyclone events since the 1970's. The World Bank is considering an investment in a programme, to protect the country against the impacts of climate change.

The coastline is relatively densely populated, with most people depending on the rich fish resources, especially shrimps that find good breeding grounds in the mangroves. The mangroves are however under pressure by human exploitation, and the area is decreasing every year⁷⁴. In the absence of irrigation infrastructure, many local people practice low input rice cultivation on flood plains (recession agriculture) and lowlands. Because of insufficient drainage, several agricultural areas suffer from salt intrusion and/or salinization. There are ample opportunities to establish irrigation schemes for rice production, provided the design and management are sound. Another environmental issue concerns the coconut disease, a virus that kills the trees. Coconut is an important food and fibre for the local population in the coastal zone.

⁷³ WWF, 2012. Green Economic Development in times of rising land and water claims. Lower Zambezi case study.

⁷⁴ MICOA, 2011. Report on the state of the environment in Mozambique.

4 Agribusiness models and investment opportunities

4.1 Inclusive and sustainable agribusiness models

4.1.1 Inclusive and sustainable business models

A business model is the way by which a business creates and captures value within a market network of producers, suppliers and consumers. It refers to what a company does and how it makes money from doing it. The basic elements of an inclusive and sustainable agricultural business model are:

- It refers to a way to do business where poorer segments of society have a direct benefit, typically smallholders but also agricultural workers (possibly landless labourers);
- Businesses working with small-scale producers mainly focus on securing supply and reducing costs;
- Engagement with smallholders can be completely led by commercial drivers or triggered by corporate social responsibility or 'shared value' concepts. Also, more negative drivers like avoiding conflict with local communities or fear of negative consumer response, can be behind such business behaviour;
- Nowadays, inclusive business models are positioned in a value chain context – the way the flow from production to consumption is organized influences whether certain business models can work.

Who is to be included need to be specified in order to sustain the claim an investment is inclusive, i.e. smallholders, women, landless labourers, small enterprises, youth, disabled people, the urban poor etc. In inclusive investments the position of those that are aspired to be included and therefore to directly benefit from an investment need to be reviewed from four main angles⁷⁵:

- Ownership: who controls the business and key assets related to the enterprise;
- Voice: who takes what decisions and how;
- Risk: who carries what risk;
- Return: how are costs and benefits shared among stakeholders.

4.1.2 Value chain approach

Applying a value chain approach to pursue specific economic opportunities is nowadays close to undisputed. To improve the functioning of food value chains in developing countries there are a couple of priority areas which request specific attention⁷⁶:

- Focus on opportunities available in domestic markets: the bulk of agricultural production in developing countries is for domestic use while food demand is on the rise and international food markets are becoming increasingly volatile;
- Experience in Mozambique has shown that with secure market access and addressing key technological issues, such as improved seed and better post-harvest handling, small holder production can double and incomes increase with 50% to 100%;
- Pay attention to indirect effects, not only increased sales from smallholders: also consider creation of employment for unskilled workers and increased availability of lower costs, better food for poor consumers;

⁷⁵ IIED, 2012. Farms and funds: investment funds in the global land rush.

⁷⁶ Inspired by Gómez et al., 2011. Research priorities for developing country food value chains, *Science*, Vol 332, 3 June 2011, page 1154-1155.

- Enhance market channel efficiency: reducing the difference between on-farm and retail price to unsure both poor producers and poor consumers benefit (dealing with the food price dilemma: higher farmer prices is bad news for poor consumers; lower food prices bad news for farmers);
- Pay attention to post-harvest losses: post-harvest losses is estimated to be between 15% to 50% in developing countries, especially burdening poor consumers who lack food preservation and safe storage;
- On-farm natural resources conservation can enable and benefit from smallholder participation: increased output required to meet growing food demand can only be sustained with increased labour, energy, land and water productivity;
- Certification appears necessary, but is insufficient: certification is required for export, but it is costly and thereby excludes smallholders in high value markets.

4.1.3 Most common model: the outgrower scheme

The most common inclusive business model the mission team encountered during their field work was the outgrowers scheme or contract farming. The business case in favour and against procuring from small-scale producers is presented below⁷⁷:

In favour:

- Smallholders have some comparative advantages (premium quality, access to land)
- Secures supply in volatile markets, spreading portfolio geographically, reducing risk of undersupply, as well as localised pest and disease problems
- Creates new businesses and clients for other products and services (Base of Pyramid, BoP)
- Makes new technologies available (efficient low scale processing equipment, information technologies for coordination and lower cost traceability)
- Capacity to ramp up or ramp down production without incurring fixed costs (contract farming)
- Less staff and labourers to manage
- Provides access to donor assistance
- Responds to corporate responsibility, gaining goodwill from community

Against:

- Costs and risks in organizing supply from dispersed producers: varying quantity, quality, and consistency;
- Risks of unsafe production (misuse of chemicals, traceability, compliance with rising standards)
- Risks of disloyalty and in fulfilment of commitments by farmers (side-selling);
- Long negotiation time and consequent costs

The following outgrower schemes / contract farming models are operating in Mozambique:

Cotton

About 10 cotton processing firms use outgrowing schemes in concession areas to secure the raw material (this model was adopted after independence and during the civil war) enrolling about 300,000 smallholders (less than 10% are emergent entrepreneurs). Smallholders receive inputs, some technical advice and are secured of selling their product. Recently the model has been improved by introducing crop diversification (soya, corn, others) and improving extensions services, so as to compete with other crops. The international company OLAM obtained a certificate of BCI (Better Cotton Initiative) and is planning to spread its experience to other companies. In Zambezi Valley two companies are operating with this model, i.e. “China Africa” based in Dondo (Sofala) and OLAM based in Morrumbala (Zambezi).

⁷⁷ Vorley et al., 2009. Business models that are inclusive of small farmers.

Tobacco

One firm is processing tobacco in Tete (MLT), and buying from smallholders in outgrower schemes (around 120,000 outgrowers) and some few commercial companies. MLT has been introducing crop diversification (soya, corn, others), developing models that partner with commercial banks (e.g.: BOM), input suppliers

Vegetables

A recent experience, in Gondola District (Manica Province), promoted by “MozFoods”, with an increasing scheme now with around 300 outgrowers, producing green peppers and green beans to export markets. In Marracuene (Maputo Province) “PPEM” is producing bell peppers for export markets (NANDO’s and TOBASCOS), with 100 outgrowers in a pilot phase (partnering with a local microfinance institution, government extension services, input suppliers and iDE (an international NGO)). In Inhambane Province “Mozambique Organics” is producing bell peppers and vegetables for Maputo supermarkets and South Africa, with about 100 outgrowers with technical support of Technoserve.

Sugar Cane

In the last 10 years sugar cane processing with fully integrated businesses, because of land limitations, and need to have access to more sugar cane, started partnering with emergent local farmers and local and South African commercial farmers, with excellent results for both parties. The companies (e.g.: Mafambisse and Xinavane Factories) invest in land preparation and infra-structure, provide or facilitate credit for inputs, provide technical assistance and buy the sugar cane from the producer.

Mango

A commercial farm in Dombe District (Manica Province) owned by a South African-based company, with production in both countries and access to markets and technologies (varieties, etc.) has been providing inputs and training to local emergent farmers and bought their produce. This inclusive model is working very well, but local emergent farmers are constrained by lack of access to credit to install irrigation systems. In addition, production is affected by the fruit fly.

Cassava

The company CLEANSTAR in Dondo District (Sofala) is processing cassava into ethanol for domestic use (cooking and heating) and is promoting “agroforestry outgrowing model” (1 hectare of cassava, native trees, pigeon and cow peas, soya bean) in an area with poor soils. Nurseries are being installed, research is conducted on appropriate cassava varieties, partnerships with local banks and input suppliers are being developed. The business is fully integrated in the value chain from inputs supply and production (outgrowing) via processing to consumers, i.e. bottle gas and stove factories (in Maputo) and shops to sell final products (gas bottles and stoves) to consumers. The aim is to achieve in a three year time about 3,000 outgrowers using the “agroforestry model”.

The beer factory CDM is securing the market for cassava on an off-take contract basis, quantities and prices are set prior to the crop season. Cassava is used to produce the IMPALA beer brand in Nampula Province and Barrue District (Manica Province). Another partnership is in place in Maputo Province, where CDM and PPEM are partnering to implement a pilot outgrower scheme of 200 hectares of cassava by small holders, where iDE will provide technical support.

Multi-cropping

ECA a private company supported by BAGC, is managing outgrower schemes in Barrue District (around 1.000 outgrowers, in the pilot phase 2011-12), producing cassava (partnership with CDM), beans, corn and wants to produce barley and vegetables. The company looks for secure markets with local and export companies, facilitates access to inputs, advisory services, etc.

Poultry

In Maputo province several companies, such as UGC (Cooperative), HIGEST and others tried outgrowing schemes to produce broilers with small farmers during several years. In general the inclusive models have not proven to work well, and firms are downsizing this model. Several justifications can be raised, such as side selling, problems with access to and quality of inputs (feed, D-o-C), low prices, etc.

Rice

Several experiences in outgrower rice schemes over the last two decades were not successful, particularly in Chockwe and Xai-Xai districts in Gaza Province. Factors that played a role were “side selling”, i.e. farmers, who received seeds and other inputs sold part of their produce to others, so the suppliers were losing money, problems with access to water, seeds quality, lack of man power or mechanization for harvesting resulting in low profitability. Recently the MIA company is engaged in several partnerships, but decided to downsize its support, providing only good seeds and technical assistance on credit under contract farming, securing quantity and price before the crop season. This is working reasonable well, albeit for a smaller group of farmers.

4.1.4 Alternative and complementary models

Ingrower and incubating schemes

The concept of in-growers is as follows:

A commercial farmer with at least 100 hectare farm has the following infrastructures and facilities: (i) Training room; (ii) Mechanization, agricultural inputs, nursery, access to water/irrigation; (iii) Management and agronomic advice; (iv) Energy from the grid, storage (silos, cool rooms, packing house, processing plant; (v) Secure access to the market; (vi) Access to credit.

The commercial farmer produces a small quantity of the products for demonstration purposes, eventually multiplying seed using all the technologies and inputs available. Farmers produce on their own land under contract, whereas the commercial farmer brings in all available technology.

In an ingrower scheme the commercial farmer can overcome the disadvantages of an out-grower scheme, while the in-growers can have more benefits (a “win-win’ situation).

The ingrowing/incubating scheme is a variation, where internships facilities are created for young technicians from medium and high schools, who can practice technologies that are not available in the schools and not affordable to students. By the end of one or two years the student has three options for his future: (i) to become an agricultural entrepreneur running his own farm, buying and installing basic facilities and technologies, and with more experience and own capital expand his farm; (ii) join a large commercial enterprise as qualified staff; or (iii) to become a private extension worker, providing advice and inputs (seeds, veterinary products, etc.) to smallholders and other emergent farmers, and providing

Examples of ingrower schemes and incubators:

- CZ – Companhia de Zembe, in Gondola, Manica Province, started an ingrower-incubator pilot, with three students and 40-60 hectares, since 2009; The Facility will be improved through financial support of BAGC and technical assistance from iDE.
- Maputo EU delegation, food security unit: experiences in coconut and sugar cane production;
- PPEM plans to start a vegetable production pilot in their 300 hectares farm, in Marracuene District;
- Standard Bank agriculture regional director referred the utilization of a similar model in Zambia.

AgriHubs

This is a cluster concept bringing together in a particular area, such as a district all the players necessary for fully integrated value chains (input suppliers, advisory, commercial, emergent and small producers, processing, warehousing, logistics, research, etc.) sharing knowledge, experiences, infra-structures etc.

The concept is being implemented in Nampula Province (lead by UCODIN a provincial government agency in charge of integrated development (*Unidade Coordenação do Desenvolvimento Integrado de Nampula*), through an initiative called “Maqui Centros”, for grain production in Monapo and being prepared for vegetables in a different district. AGRIFUTURO is promoting a similar approach in Nampula province, working together with UCODIN and commercial companies.

The BAGC Model “3 Tier irrigated Farm Block”

A combination of commercial, emergent (> 5 ha each), and small farmers (0,5-1ha each) producing food crops and horticulture are sharing a natural resource (water), infra-structure (irrigation, energy, road) and facilities (processing, logistics). Larger sizes of the smallholders plots are required in case of rice production.

Involvement of catalyst funds

IFAD is developing a project (PROSUL) that promotes innovative inclusive partnerships in the Maputo and Limpopo Corridors engaging commercial, emergent and small farmers. The project, yet in a formulation phase, will use outgrowing schemes and IFAD’s fund as seed capital to start-up commercial companies crucial to have fully integrated value chains. The project will hire value chain private organization facilitators at an outsourcing base.

PROIRRI

This programme uses an innovative approach where private organizations are contracted to promote and facilitate outgrowing schemes for rice, horticulture and others crops. Irrigation Service Providers (ISP), one for rice and another for vegetables will be contracted to facilitate (under an outsourcing base) all the activities necessary to make sure that fully integrated and sustainable value chains are in place. It is based on a clear business orientation and participation of commercial farmers and processing and logistic companies. There are doubts about the standard plot dimension for rice farmers, where 0,5ha is described in project documents.

Cooperatives and associations

Both successful and unsuccessful cases are found. The success cases have in common that they engaged emerging and/or commercial farmers. The unsuccessful cases exclusively worked with stallholders.

Successful examples are:

- Copoleite. The cooperative consists of mix of large, medium and small local producers of milk in Dondo, Sofala that holds around 2,000 milk cows. The members share the collection fresh milk transport, processing, packaging and distribution facilities. They were not supported by any donor, government agency or NGO (sic!).
- Association Mbatila Mukene, whose members are young agriculture technicians, provide services on a business base, of mechanization, trading, processing, restaurant and goods shops, produce vegetables and cattle. They were supported by international NGOs and a Mozambican foundation of Graca Machel.

Unsuccessful examples are:

Many associations of smallholders, due to lack of common interest of its members, lack of governance and management skills, poor leadership and lack of a business-orientation and non-engagement of emergent or commercial farmers (APAC, visited in Zambezi is an example).

OLAM – jointly managing/benefitting from irrigation systems

A large international company plans to run a rice farm of slightly less than 10,000 hectares in Mopeia district. OLAM plans to install a rice mill, once their rice farm is fully in operation. The company is temporarily managing a smallholder association owned irrigation scheme. Members of the association are receiving on-the-job training. OLAM is rehabilitating the irrigation scheme that will be handed over after six years to the association. Two other models of inclusive partnership are being developed, in which communities benefit from irrigation systems of OLAM. This investment was seen by the enterprise as part of the initial investment cost for the 10,000 hectare rice farm, for which the company is in the process of obtaining a lease (DUAT).

Other models of inclusive and sustainable partnerships

A partnership between a commercial company (V&M) in charge of processing and marketing of honey and a smallholders organization, ECOMICAIA that support honey production at community level, supported by SNV (Dutch NGO), started-up in 2009-10, in Manica and Sofala Province.

- Mining + Catering + Collection Center (Private) with Demo Plots + Linkages with SHF Associations, partnerships. An example was visited in Tete;
- An initiative of SOLIDARIDAD (Dutch NGO) and ABIODES (local NGO) to promote eucalyptus, native tree varieties and bamboo, and collection of by-products from agro industries (rice, cashew nut, maize husks and shells, sugar cane meal, sub products of sawmills), and farming (sticks/wood material from cassava, pigeon pea, forestry extraction sub products), to supply a processing plant (Torre faction and pyrolysis technologies combination) of charcoal briquettes for local traditional charcoal substitution. A commercial company is invited to be shareholder and managing the processing plant, which will have as shareholder a smallholder's organization (Cooperative).

Agrarian Vocational Schools (public) and Development Farming Company (private)

An example was visited in Caia, with 50 students in internships, a 3 years program, theory and practice. Most of the students obtain jobs after completion the study.

Networks of private extension services and agricultural input sales:

(i) *Cashew trees sprayers and embedded advisory services (individuals and firms) in Nampula.* spraying smallholder cashew trees against oidio disease, on the basis of an in-kind success fee paid at harvest time. Started in 2002-3, supported by a French and Incaju program, and achieved sustainability until today. The model improved, the sprayers became advisors (taking care of their success fee) and traders. Several small business were developed around, repair and maintenance of sprayer equipment, diesel station, etc.

(ii) *Private Farm Business Advisors (FBA) Network linked to suppliers of agricultural inputs and technology:* The model developed in Cambodia and Zambia by a non-profit business oriented organization (iDE) is being promoted as a pilot in Maputo Green Zones. Advice is provided on new technologies, such as agricultural inputs, micro irrigation technologies and others tools and goods, sales are promoted, and output trading (high value vegetables) and microfinance access is facilitated. FBA's are linked to an input supplier specialized in BoP (Base-of-Pyramid) products, private companies are starting up (owned by a business-oriented smallholder organization, a non-profit organization as temporarily partner that invest some seed capital and private equity and the input supplier, who leads and manages the company. In Zambia the model is able to allow the microcredit organization "SatZam" to reach 100% of loans provided to smallholder producing vegetables.

Agrodealers Network supported by private BDS

A new model promoted by AGRA in Nacala Corridor. AGRA and CEPAGRI selected a BDS private local company (HUB Ltd based in Beira) to implement the promotion of a agro dealers network, on a for profit base, where AGRA's money is used to support the start-up of the business, considering that at the first

years the company will not have enough market to achieve sustainability, given the very low (if any) current use of agriculture inputs by smallholders.

It is envisaged that the support programme to the ADVZ (see Chapter 6) enables the Agency to facilitate the use of these models and good practices in the Zambezi Valley.

The Formulation Mission points out that in the above list only indications are given of the successfulness or unsuccessfulness of models; a more thorough assessment is needed of their institutional setting, actual outreach and sustainability of these approaches. There may be gaps between actual practice and reality in the field and the projected results and outcomes in project publications.

4.1.5 Financial models

The financial sector (banks, microfinance and others) in Mozambique is not very interested to engage in agriculture. The credit share of the agriculture sector dropped from about 20% to less than 6% in 2010; traditional cash-crops, such as tobacco, cotton, sugar, cashew nut take the majority of loans. Financing schemes involving smallholders, directly providing working capital to SMEs involved in agriculture are rare. Alternatives provide better deals for the banks. It will be a major effort to convince banks to do business in agriculture. Even microfinance institutions supported by FARE, provided only 17% of total funding to agriculture between 2006 and 2011. About 90% of this credit registered for the agriculture sector, is actually used for rural trading of crops and fish, not for production.

Requirements of collateral, even from supposedly agriculture specialized institutions, such as Banco Terra and others make it impossible to have access to credit at current stage of agriculture development in Mozambique, and the practice of interest rates between 3%-10% per month drastically undermines the ability of smallholders to be profitable and repay their debts.

The Agriculture Development Fund (FDA) from MINAG has been providing credit to agriculture, but without using proper criteria, with lack of governance and management abilities. There was no political support to apply strict rules to the beneficiaries. The general background of donations instead of loans that need to be recovered makes it very difficult to develop a sustainable funding model to farmers.

Since 2007-08, the GOM with support some donors and through CEPAGRI has created funds to finance agriculture (PRESP I and II, Commodity Aid I, II and III) on a value chain basis (vegetables, poultry) and providing warranty funds (AGRA – Standard Bank). Commercial banks are implementing these schemes with good results. This shows that even in such a difficult agribusiness environment it is possible to implement sustainable models to finance agriculture with an integrated approach. Partnerships between public, donors and private organization, a business orientation, a participatory process and engagement in implementation and monitoring makes these schemes successful.

Since 2008-9 a number of micro-credit institutions that developed into commercial banks, such as PROCREDIT, BOM, Banco Tchuma, SOCREMO and ABC have been developing financing models for agriculture production activities. They capacitated their staff and established branches at provincial and district level. Credit managers are permanently monitoring and supporting their customers. Some provide mobile banking services and establish partnerships with commercial companies using outgrowing schemes.

In addition, in the past 2-3 years, the government owned financial institution GAPI, civil society organizations and private investors have been implementing the same approach as described above, i.e. starting up micro-banks in several districts in the Northern, Central (Sena in Caia District, Sofala Province) and Southern Region.

A development bank or regional investment firms (e.g. Zambezi Valley) could follow the “GAPI- model”. It is important that social objectives do not affect the commercial sustainability of the bank/investment firm: lending money to non-bankable projects is a very quick way to get out of business.

The perception that a loan from government is actually a grant is a potential danger to set-up a sustainable financing model. Financial discipline is key for the survival of such an initiative. Nevertheless, when an appropriate institutional environment can be set-up, including a smart mix of balancing financial and social/development goals, such a financial institution could work, complementing a commercial banking sector that focuses on high returns only. The proposed development finance institution should not engage itself in retail finance, but should act as a broker and participate in the formulation of finance products, raise funds from international finance institutions, donors, foundations and the Government. The institution could manage PPPs, holding shares in strategic businesses that are crucial for agribusiness development. Private shareholders participation and/or private management concessions are crucial. FARE, a microfinance intermediary and facilitator is a public owned institution that has been developing a model to support private organizations at urban and rural level, but only with 2-3% of its portfolio for agriculture production. Their funds can eventually be leveraged with funds from the development bank/investment firm to improve their outreach.

Loans and equity provide a potentially more sustainable model since it follows business principles, enhances market-orientation and follows commercial principles; invested resources will be re-paid and will be available to be invested in other companies.

In conclusion, models that may be pursued and can be improved further are:

- GAPI and BAGC Investment firm;
- Agvance Africa Fund, an international PPP managed by a private Swiss finance specialized firm, that implement funds raised for several development finance institutions and donors;
- FUNDAGRO: developed in 2010-11 by CEPAGRI and DANIDA.

4.2 Portfolio of investment opportunities

4.2.1 Potential and criteria for selection of priority value chains

Cash crops such as tobacco, cotton and sugar cane traditionally served export markets. Cash crop producers (the traditional ones and also producers of oil seed crops and fruits, forestry plantations) increasingly produce food, often in combination with small-holder production. Regional markets (South Africa, Zimbabwe, and Malawi) already play an important role, for crops, such as vegetables, maize and fish (kapente). Rice has a good perspective to serve regional markets as well, although the domestic market has a high unsatisfied demand.

The high investment in coal exploitation in Tete creates a high demand for all kind of agricultural products, which are currently mainly imported. A factor that negatively affects export and that favours imports is the strength of the metical - which can be expected to continue as government policy is not likely to change.

Concerns expressed at policy levels, national private sector actors and the general public alike creates room for import substitution and requires investments in food production targeting the domestic market. However, the large distance to be covered between highly suitable agricultural production areas in the Central and Northern parts of the country and the main consumption center in the South – the capital Maputo – combined with the difficulties of infrastructure that does not prioritize linkages between production centers and local markets, puts pressure on competitiveness vis-à-vis neighboring South Africa.

There is ample room for increase in any economic activity and there definitely is a large need to increase economic activity in rural Zambezi. The Formulation Team prepared a preliminary list of priority investment opportunities, in the Zambezi Valley, considering the following elements:

- Agro-ecological potential and natural resources available in Zambezi Valley;
- Following a market orientation, including an import substitution focus and looking closely to regional and Asian market opportunism;
- Using a value chain approach: establishing fully integrated business or partnerships that ensure down and upstream and transversal activities necessary to reduce business and financial risks are being undertaken;
- All the production and some processing investment opportunities require to include in their business plans investments in basic infra-structure, as they are usually not available, such as access roads, irrigation and drinking water, access to power from the grid or generated from fossil fuels or renewable energies. This implies that only large companies or those entrepreneurs with partners that bring in capital will start up businesses in the more remote districts of Zambezi Valley (for example OLAM in Zambezi district). In some cases it is possible to obtain support from government and donor programs.
- Need for improved nutrition and increased food security favour crops such as vegetables, fisheries and small livestock;

Priority investment opportunities in agribusiness in the Zambezi Valley are presented in Table 4.1 in section 4.3.3. The opportunities are indicated at district level in the respective provinces. Districts mentioned are indicative and not exclusive, as many identified opportunities can be successfully undertaken in other districts as well. The list of opportunities needs to be further detailed. For most opportunities a detailed analysis of the gross and net margins in the various chains need to be made, to assess where investments are most effective.

4.2.2 Involvement of Dutch private sector

Figure 4.1. in the next section include investment opportunities for the Dutch private sector (they are indicated by a yellow colour). Whereas it is not expected that a huge influx of Dutch agribusiness into Mozambique will occur in the short-term, there are sufficient opportunities for Dutch investors.

Few Dutch entrepreneurs are currently operating in the country and those who do are not concentrated in a particular line of business, so they do not create a “pulling factor”, as is the case in countries like Ethiopia, Kenya and Tanzania. Setting up a farm needs endurance and a long time perspective. It takes several years before the farm will be actually in production, due to long red tape and procedures to arrange for the land lease arrangement (DUAT), having installed the necessary infrastructure (electrical power, irrigation) and having established the necessary networks for input supply and output market. The language barrier might scare potential Dutch investors, but this is not considered to be a determining factor, as the Dutch are known being able to communicate fast in foreign languages.

An important barrier (but that applies for all investors) is the lack of skilled manpower; ample investment will need to be made in agricultural work force. Investors need to take care of support services (inputs, technical advise and possibly (partially) pre-financing to enable agricultural production by partnering with small holders and emerging farmers).

One Dutch entrepreneur remarked that those Dutch investors who show interest in Zambezi Valley opt for too ambitious plans, for instance searching for large pieces of land. All the ambitious plans have fallen flat already in the early stages. He sees opportunities for farming activities when the investors start slowly and expand gradually, for instance by taking a lease of 500 to 1,000 hectares while directly engaging with

outgrowers. In conclusion, although overall business conditions are not favourable, the Formulation Mission believes that direct Dutch investment in productive activities is feasible, particularly when actively supported by ADVZ and its partners.

There are good perspectives for companies operating in the field of knowledge and advisory/consultancy in Mozambique. The strong Dutch water engineering sector would be a logical choice for both public and private operators to assist in areas as river basin management and irrigation infrastructure and management. Logistics, seed production and supply (including seed potatoes), poultry equipment, animal feed, food processing are other possible areas where Dutch enterprises can make a difference.

4.2.3 Agribusiness investments in Zambezi Province

In this section Figure 4.1 describes the investment opportunities along the value chain for single or a group of several investors in selected districts in Zambezi Valley. In addition, the strength and weaknesses are briefly indicated. The opportunities that are underlined are considered to be of specific interest to potential Dutch investors, however, it is not excluded that they may become involved in the other opportunities, as well.

Figure 4.1 investment opportunities in the agricultural value chains in Zambezi Valley

VALUE CHAIN S= Strength W= Weakness Underlined: opportunity Dutch investors	Investment opportunities (single or several investors)	Districts/Province M= Manica S= Sofala T= Tete Z= Zambezi
<p>1. Rice (2 Crops)</p> <p>S = Huge local increasing market; import substitution opportunity (more than 400,000 MT/ year), only Mozambique and Tanzania can address SADC countries that are fully dependent on imports; best agro-ecological conditions in Zambezi Valley, year-round conditions; more than 65% of country water resources in the Valley; smallholders traditionally produce rain fed rice without any inputs (from 0,7-1 MT/ha, so easy to double yields) with advice and improved seeds; significant investment is underway; milling capacity available; logistics cost to deliver imported rice to Zambezi population are big; local varieties with preferred flavor can be develop to reach niche aromatic markets;</p> <p>W = Commercial production is almost non-existent; Strong competition from imported rice; Need for investment all over the rice value chain stream (irrigation, extension, inputs, processing, logistics, etc.).</p>	<ul style="list-style-type: none"> - Input Suppliers (seed, fertilizer, etc.) - BDS in the following areas: Irrigation; Service Providers; Agriculture Practices; Post-harvest; Certification. - Commercial Farmers with own production and partnerships with Emergent and Smallholders - Storage, Processing (milling, packaging), (break-fast cereals, cookies/chocolates, milk); Marketing and distribution 	<p>Z: Nicoadala, Inhasongue, Chinde; S: Caia, Marromeu</p>
<p>2. Vegetables (potato, tomato, onion, garlic, french beans, cabbage, others)</p> <p>S = Vegetables are essential in local people diet, and WB projects a total formal domestic market for 2021 around 100 million USD; The three largest vegetable crops are tomato, potato, onion, that represent a local supply deficit of 310,000 MT; recent entrance of</p>	<p>Same activities as number 1, and following additional investments in:</p> <ul style="list-style-type: none"> - <u>Post-Harvest handling</u>, <u>Cool Storage, Packing House (Fresh), Processing (cool, dry, boiled, fried)</u>, 	<p>Z: Mopeia, Nicoadala, S: Marromeu; T: Guro, Angónia, Tsangano</p>

<p>supermarkets (Game, WallMart, SPAR, GAME, Pick&Pay) all over the country and mining operation in Tete, Cabo Delgado, Sofala, potentially provide larger buyers; Opportunity to export vegetables for Southern Africa and Potatoes for all over SADC countries; great agro ecological conditions and water availability, that for example make feasible to produce potato 3 times a year in Angonia, Tsangano, Barrue, Milange in the Valley; Recent commercial investment demonstrate the success of right models and investments in the sector.</p> <p>W = High initial investment. Diverse agro-ecologies make production and logistics; competition for export to EU from Kenya, SA, Zambia and Zimbabwe; Metical valorization lowers competitiveness</p>	<p><u>Logistic (cool, frozen distribution fleet), improved nutritious products</u></p>	
<p>3. Rice &Vegetables</p> <p>S = The combination of rice and vegetables make both crops highly feasible and risk reduction about market competitiveness; Inclusive models reduce risks and increase feasibility for both parties</p> <p>W = Need for higher investment and increased business complexity</p>	<p>Same activities as No 1 and 2; additional investment in:</p> <ul style="list-style-type: none"> - Processing high value products, like break-fast cereals, cakes, milk, pop-corns; improved nutritious products. 	<p>Z: Chinde; S: Caia, Chemba, Marromeu; T: Guro, Cabora Bassa, Moatize</p>
<p>4. Maize (white, yellow)</p> <p>S = Increasing demand, both local and regional, for feed for poultry and aquaculture; already exporting for Malawi and Zimbabwe from Zambezi Valley farms; potential answer in increasing yields from rotation with crops nitrogen fixing like soybean; 71% of all farms in Mozambique produce maize, so a inclusive model of own production and outgrowing can have huge benefits.</p> <p>W = Low use of all agri inputs and tremendous low yields (0,6-1 tone/ha), one of the lowest in Africa and stagnated over the last 40 years; lack of all kind of harvest, post-harvest and storage facilities and technics, from small-mid-large size, cause inability to store grains and; a high volume of grain is lost (up to 50% of produced grains); high volatility in prices; higher prices to consumers in low season.</p>	<p>Same activities as No 1, but with the following additional activities that need investment:</p> <ul style="list-style-type: none"> - Processing to beer factories, animal feed plants, etc. - Processing high value products, like break-fast cereals, cakes, pop-corns; improved nutritious products etc. 	<p>Z: Milange; S: Caia Changara, Chemba, Gorongosa</p>
<p>5. Fruits (Pineapple, mango, citrus, passion fruit)</p> <p>S = High local demand for fruit base refrigerants and juice; high potential to take advantage of two months agroclimatic conditions advantages compared with S.A (a market window of around 2 months with access to higher prices in the year).</p> <p>W = Same as vegetables; additional difficulties to obtain finance to invest in production given long-term payback period; export is complicated due to high sanitary requirements, pest residues detection, but banana and citrus production had ever high competition advantages. Diseases: Banana is affected by fruit fly.</p>	<p>Same activities as No 1 and 2; additional investment in:</p> <ul style="list-style-type: none"> - Processing high value products, like break-fast cereals, cakes, pop-corns, natural and blended juice, jam; improved nutritious products. 	<p>Z: Mopeia, Nicoadala; M: Barrue, Guro; T: Angónia, Tsangano</p>

<p>6. Cassava</p> <p>S = Easy to grow and harvest so huge potential to use in inclusive models; strong local, regional and international demand as food crop; substitution of wheat in bread production up to 25%, at 55% of cost; beer production already being sourced; animal feed, alcohol brewing, ethanol</p> <p>W = Grown almost entirely for subsistence, so huge lack of research, seedlings, farming knowledge; almost inexistent capacity of processing; distance to market</p>	<p>Same activities as Number 1;additional investment in:</p> <ul style="list-style-type: none"> - <u>Mobile or fixed Processing (Beer, Ethanol, Domestic Ethanol, Starch, Chips).</u> 	<p>Z: Morrumbala; S: Cheringoma, Maringue; M: Tambara, Macossa; T: Mutarara,</p>
<p>7. Cattle dairy</p> <p>S = Good land and feed possibilities available; high local potential demand in a youth and growing population; huge demand for several types of cheese and potential import substitution; international big players are starting operations in central provinces; good experiences in Manica and Sofala with full integrated and inclusive business models; in the past Mozambique exported cheese to Europe;</p> <p>W = Has to start up almost from scratch</p>	<ul style="list-style-type: none"> - <u>Commercial farms and partnerships with emergent and smallholders</u> - <u>Artificial insemination</u> - <u>Cold Storage, Processing (Pasteurized, UHT, Yogurt, Cheese),</u> - <u>Logistics (cool distribution fleet)</u> 	<p>Z: Milange; M: Barrue; T: Angónia, Tsangano</p>
<p>8. Cattle (Beef), Goats</p> <p>S = Increasing internal demand and import substitution potential; extensive areas of land available; opportunities to inclusive models improving species and stock owned by population</p> <p>W = Few commercial companies; complete absence of infra-structures; hard to get finance given medium-term payment time; hard control of diseases and constant trade constraints between the country</p>	<ul style="list-style-type: none"> - Inputs Suppliers - BDS: “Tanques Carracidas” - Producer: Comercial, Emergent, Smallholders - Training cattle for animal traction - Feedlots - Processed; Logistics 	<p>T: Tete, Tsangano, Angonia; M: Changara, Guro; S: Caia, Chemba; Z: Quelimane, Inhasongue</p>
<p>9. Aquaculture (Tilápia)</p> <p>S = High demand from local and regional population and animal feed factories; excellent combination in agro-feedstock and agro-forestry models, to reduce fertilizer cost and improve yields</p> <p>W = (1) competition wild tilapia; (2) high cost of (imported) feed, need for own feed production</p>	<ul style="list-style-type: none"> - Fisheries: Comercial, Emergent, Smallholder - Cold Storage, Processing (Frozen, packaging, fishmeal), Logistic (cold and frozen fleet) 	<p>T: Cabora Bassa, Angonia; Z: Mopeia, Inhasongue, Chinde, Nicoadala</p>
<p>10. Poultry (Chicken meat, eggs)</p> <p>S = High/unsatisfied and increasing local and regional demand; import substitution for chicken meat and eggs; high potential of eggs has the cheapest animal protein accessible to poor people; close to raw materials (represent more than 60% of a chicken total cost); increasing internal production of soybean; cow peas and pigeon easy to produce by smallholders, use will decrease cost of feed;</p>	<ul style="list-style-type: none"> - <u>Breeders, Hatchery</u> - <u>Broilers and Layers: - Comercial, Emergent, Smallholder</u> - <u>Mill;</u> - <u>Processing (Fresh meat and eggs, Frozen, “Poloni”, Sausage, Burger)</u> 	<p>T: Angónia; Z: Mocuba</p>

W = High competition from informal imported chicken and eggs (Nacala and Beira Port and Malawi ground border); no tradition on eggs production by small, medium and large producers	- <u>Logistics and cold and frozen distribution</u>	
11. Tree plantations (Eucaliptus, Pinus, Bambu, fast growing species with botanical properties of soil improvement: <i>Azelia and Albizia, gliricidia, Faindherbia, A. Polycantha, Leucaena</i> S = Gigh/unsatisfied demand; high potential to agroforestry integrated models W = Any tradition on this business; huge investment with medium and long term payback; starting from the scratch; land conflicts	- Nurseries - Commercial (employment, collection NTFPs) - Saw Mill - Furniture, wood products - NTFP, such as honey	T: Angónia, Tsangano; Macanga, Chiuta
12. Coal Briquettes (Bamboo; eucalyptus; husk from rice, coconut and cashew; sawmill sub-products; forestry waste/cuttings; sugar cane meal; other) S = Huge potential for traditional charcoal substitution (a huge market of hundreds of millions USD a year); high potential to use sub-products and waste at a free of charge cost (only collection and transport); potential to inclusive models W = Huge completion from current traditional traders; no tradition and starting from the scratch; transport cost; no market proof technologies available at commercial level	- Commercial plantation and agroforestry models - BDS: Production process, enterprise development - Collection centers - SME (employment) - Processing (Pyrolysis and Torrefaction) - Logistics	S: Caia; T: Moatize, Z: Quelimane
	Public investments and Public-Private Partnerships	Province, districts
1. Input supply network (agriculture, livestock, poultry, aquaculture, forestry) S = Increasing local demand as a result of recent stream of investment from international and local enterprises; Inclusive models can and actual low level of yields can motivate increasing demand with fast and big returns; Government and donors consider this sector as higher level priority so access to finance and subsidized interest rates are expected. W = Almost starting from scratch; complete absence of culture to pay for inputs and for advise (even embedded); market volumes in first years are low	- Research & Development (public) - Trials plots - Nurseries - Warehouse and funds on hand to have inventory previously to the season - Agro dealers/FBA's network, which hold demo plots and provide advise - Logistics - Training and extension service to smallholders (mix of public and private)	For each province, and/or a cluster of districts with similar production
2. Logistic hubs S = Increasing demand from emergent farmers, which are the critical vector to reach smallholders on a sustainable base; Commercial farming create higher demand and economies of scale;	- Traditional Silos or Silo Bags - Mechanization Parks and Road Maintenance; - Equipment (to lease and	One hub per district, except Angónia, Milange, Caia, Changara, Chemba, Gorongosa

<p>rural development requires access to technologies; young technicians and entrepreneurs create higher demand;</p> <p>W = Huge investments are need in capex and training; need for huge capacity building and skills development for smallholders and young entrepreneurs and employees; lack of culture on maintenance, contracts enforcement; short-term mindset</p>	<p>sell, spares, workshop);</p> <ul style="list-style-type: none"> - (Micro)-Finance Institution (mix of public and private) - Transport (2, 4, 20 MT) -Ware House receipts system (mix of public and private) 	
<p>3. Agribusiness incubators for young technicians</p> <p>S = Increasing demand from commercial farms, market development, availability of technologies and increasing availability of finance motivate young people to look for training in agribusiness; business and employment opportunities</p> <p>W = High dependence on external funds</p>	<ul style="list-style-type: none"> - Farms fully equipped for crops, livestock and aquaculture - Internship facilities (public) - Training rooms with equipment 	<p>One per district, starting with priority districts</p>
<p>4. Franchise network of agribusiness and management training centers</p> <p>S = Increasing demand from big enterprises all over the value chain stream;</p> <p>W = Transport, housing and logistic incur high costs</p>	<ul style="list-style-type: none"> - Training rooms with equipment - Facilities to practice - Partnerships ensure demand for students - Curricula development. 	<p>One per district, starting with priority districts</p>
<p>5. Labs for soil, fertilizer, seed, outputs quality, sanitation requirements, certification etc.</p> <p>S = With commercial farming, processing investments, supermarkets, mining canteens, hotels and restaurants, growing power of purchase, and growing elites, demand for this services is growing fast;</p> <p>W = Lack of skills availability; starting from the scratch</p>	<ul style="list-style-type: none"> - Set-up labs with proper equipment; - Training and TA; - - Certification/accreditation under ISO 	<p>M: Chimoio; S: Beira; Z: Quelimane; T: Tete</p>

There are several options for ADVZ to promote and/or develop together with implementing partners complementary environmental sustainable projects and programmes in the Valley, such as:

- Sustainable forest management. Awareness and reducing deforestation, sustainable charcoal production, sustainable timber harvesting, reducing uncontrolled forest fires. Forestry is a profitable business, but current practices lack sustainability. This could include natural forests as well as forest plantations, while considering the opportunities of carbon credits.
- Sustainable fisheries – along the coast line (shrimps) and along the Cabora Bassa Reservoir.
- Sustainable land management - zero tillage, mulching, ecological cotton production, improved tobacco cultivation methods.
- Supporting biodiversity conservation and eco-tourism. The exponential development in Tete will increase the demand for (weekend) tourism, for which natural destinations can be developed (Gorongosa NP, Forest Reserves. Marromeu wetlands complex (RAMSAR, WWF), linked with beach tourism in the surroundings of Beira.
- Apiculture: environmental friendly, especially using the Kenyan Top Bar Hives, that are placed on the ground, and as such also contribute to forest conservation and the reduction of forest fires; facilitate marketing.

5 Institutional analysis of the ADVZ

5.1 Origins and history

Hydropower – the galvanizing force in the Zambezi Valley

The Bureau for the Promotion of the Zambezi Valley (GPZ) was established in August, 1995⁷⁸ with the objective of “promoting, directing, planning, coordinating and supervising the process of implementing programmes and projects to develop the Mozambique portion of the Zambezi River Basin,⁷⁹ as well as coordinating the inventory of the Basin’s resources”.

The rationale given for the creation of GPZ was the need for a relatively autonomous government institution to coordinate, direct and plan integrated development in the Valley, an area identified by the government as being a region of high potential with opportunities for rapid social and economic development.

GPZ itself evolved from previous institutions and approaches to developing the Lower Zambezi Valley in the colonial era. Modeled on the experience of the US Tennessee Valley development strategy (see Box 5.1), the colonial administration began to focus on the potential for the Zambezi Valley to act a launch pad for greater economic development of Mozambique. In 1957, Portugal created the Mission for the Development of the Zambezi (*Missão de Fomento e Povoamento do Zambezi*). The main focus of this mission was to use the Zambezi river to generate hydropower, resulting in the construction of the Cabora Bassa Dam.

Once the contract for construction of Cabora Bassa was awarded, the colonial government created the Bureau for Planning the Development of the Zambezi Region (*Gabinete do Plano de Desenvolvimento da Região do Zambezi* – GPZ) which had the dual mandate of supervising the contractor to build the Cabora Bassa Dam and promoting economic development of the area. However, after independence, responsibility for hydropower generation and distribution was given to a company *Hidroelétrica de Cabora Bassa* (HCB) and GPZ effectively folded, putting development efforts to one side.

Such institutional changes were compounded by the war, which posed huge obstacles for development efforts in the region. Only once peace was achieved was GPZ reactivated with a development mandate.

⁷⁸ Decree no. 40/95 of August 22, 1995.

⁷⁹ Hereby designated the Lower Zambezi River Basin.

Box 5.1 The US Tennessee Valley Authority (TVA)

The TVA is a federally owned corporation in the United States established by Congress in 1933 to provide navigation, flood control, electricity generation, fertilizer manufacturing, and economic development in the Tennessee River Valley, a region that was particularly affected by the Great Depression. TVA was envisioned not only as a provider of low-cost electricity but also as a regional economic development Agency that would use federal experts and electricity to rapidly modernize the region's economy and society.

Even by Depression standards, the Tennessee Valley was in a difficult situation in 1933: much of the land had been farmed too hard for too long, eroding and depleting the soil; crop yields had fallen along with farm incomes; and the best timber had been cut. TVA built dams to harness the region's rivers, controlling floods, improving navigation and generating electricity. It developed fertilizers, taught farmers how to improve crop yields and helped replant forests, control forest fires, and improve habitat for wildlife and fish. The most dramatic change in Valley life came from the electricity generated by TVA dams. Electric lights and modern appliances made life easier and farms more productive. Electricity also drew industries into the region, providing desperately needed jobs.

<http://www.tva.com/abouttva/history.htm>; http://en.wikipedia.org/wiki/Tennessee_Valley_Authority

Refocusing on development objectives

During its mandate, GPZ worked to assess the potential in the Valley, looking mainly at prospects and existing initiatives for hydropower, agriculture and mining, as well as existing and necessary infrastructure and human resources for developing the Valley.⁸⁰ This was translated into concrete proposals for investment opportunities, with information on project costs and returns for promotion with potential private investors. Planning activities were undertaken, including the production of the Angônia Master Plan, funded by JICA.

One of its functions was the provision of business development services, where GPZ (through parastatal companies integrated in SOGIR⁸¹) was working with the private sector. However, the parastatal companies were highly inefficient and ineffective. The planned establishment of Industrial Technology and Information Resource Centers to provide information on production technologies and markets, as well as promote linkages and exchange of information between different companies did not go beyond the proposal stage.

Through "Development Node Facilitating Units" the GPZ sought to undertake local level development planning with local government and communities; "de-bottlenecking" of constraints and business linkage programmes with some attributes of a "one-stop shop" was part of the concept.

In 2010 the GPZ was extinguished after an external audit⁸². In response to GOM 's policy to give a higher priority to the development of the Central Region, of which the Zambezi Valley forms the core part, after the extinction of the GPZ, a new Agency was established: the Zambezi Development Agency (ADVZ)⁸³.

⁸⁰ Zucula, P. (undated). Business Opportunities in the Zambezi Valley: a Contribution to the General Scheme for the Development of the Zambezi Valley in Mozambique. GPZ.

⁸¹ According to the GPZ document authored by Zucula, SOGIR was set up as a separate arm of GPZ to deal with business development and project management.

⁸² Decree No. 22/2010 of June 30, 2010.

⁸³ Decree No. 23/2010 of June 30, 2010.

5.2 Objectives and mandate

The overall objective of the Agency is to promote the socio-economic development of the Lower Zambezi River Basin,⁸⁴ with the stated mission of: “Forming strategic partnerships for the accelerated, integrated and inclusive development of the Zambezi Valley”⁸⁵.

The Agency is mandated to act in three areas:

- Undertake studies and present strategies for the socio-economic development of the Lower Zambezi River Basin.
- Provide technical and financial assistance to socio-economic development initiatives in the Lower Zambezi River Basin, including mobilizing funds for such initiatives and channeling them to beneficiaries.
- Provide support to local governments in local land use planning and socio-economic development.

5.3 Structure and organization

The Agency is a central/national institution having the mandate to focus specifically on the Lower Zambezi River Basin. The Agency’s Statutes⁸⁶ define the geographical remit, overall structure and functions of central departments of the Agency, with general provisions about revenue sources.

The basin is defined as including 34 districts in four provinces: Manica, Sofala, Tete and Zambezi. This includes all the districts in the River Basin itself⁸⁷ plus six districts that fall outside the River Basin area.⁸⁸

The Agency has administrative and financial autonomy (Article 2.1) and reports to the minister of MPD (Ministry of Planning and Development), who defines and approves the strategy lines and pluri-annual plans of activities, annual activity plans, budgets and annual progress reports. The Agency is headed by a General Director and Deputy General Director, designated by the Prime Minister and the Minister of MPD respectively. The Board of Directors (Conselho de Direção) consists of the General Director and representatives of key sectors and has a consultative and coordination function.

The Agency’s Internal Regulation⁸⁹ specifies the Agency’s structure and the functions of each department in more detail. The Agency’s proposed organizational structure contains four directorates, including two technical directorates: Studies and Strategic Analysis; and Technical and Financial Assistance, see Figure 5.2.

So far, these Directorates and Departments have not been established.

⁸⁴ Hereby designated the Lower Zambezi River Basin.

⁸⁵ Presentation to the Council of Ministers, July 2012: “Situação Actual e Perspectivas, 2012-2015”.

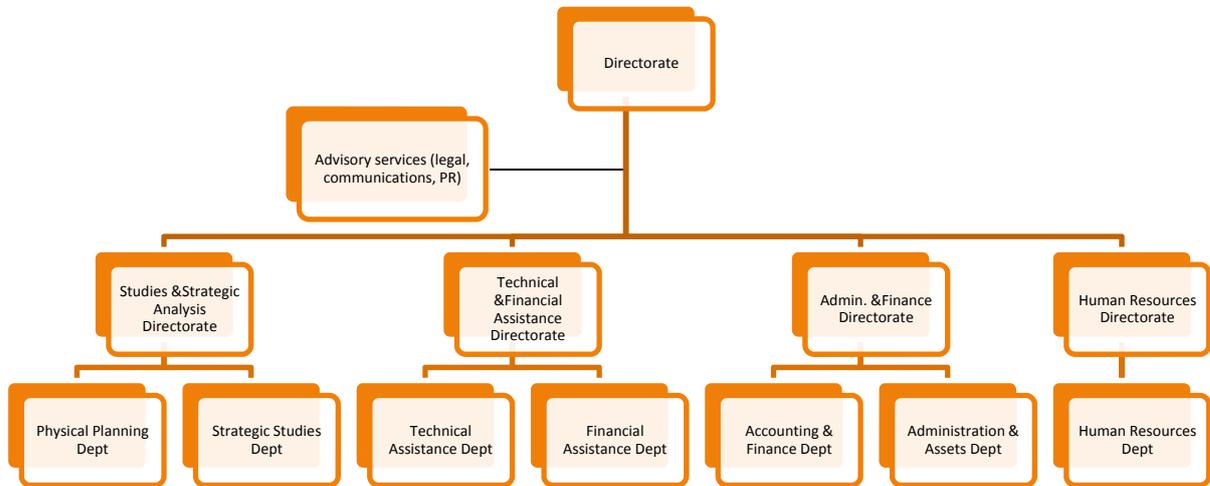
⁸⁶ Resolution No. 6/2011 of May 11 of the Interministerial Commission of Public Administration.

⁸⁷ Hydrologically, the Lower Zambeze Basin consists of: all the districts in the province of Tete; Chinde, Inhassunge, Morrumbala, Nicoadala e Quelimane in the province of Zambézia; Caia, Chemba, Cheringoma, Maringué, Marromeu e Muanza in the province of Sofala; and Guro, Tambara and Macossa in the province of Manica.

⁸⁸ Maganja da Costa, Milange, Mocuba and Namacurra in the province of Zambézia; Gorongosa district in the province of Sofala; and Bárue district in the province of Manica. Appendix 7 provides a map of the region.

⁸⁹ Ministerial Diploma. no. X/2012 of April, 2012.

Figure 5.2. Proposed organizational structure of the ADVZ



The Studies and Strategic Analysis Directorate will have two departments:

- The Physical Planning Department that will aim to:
 - Support the collection and registry of information on the natural resource base, including land and forestry, and the potential of the Zambezi Valley, as well as land use planning carried out by public and private institutions.
 - Gather and register information on the potential in the region, with a particular focus on geographical information, and propose the rational and sustainable use of the region's resources, monitoring environmental management and undertaking physical planning in the river basin.
 - Disseminate geo-physical and socio-economic information and data on the Zambezi Valley, both within and outside of the Agency.
- The Strategic Studies Department will have the following responsibilities:
 - Formulate strategies and plans for the "rational and sustainable" use of the Valley's natural resources.
 - Analyse opportunities for projects, programmes and potential in the Valley and promote a portfolio of development and investment projects and programmes.
 - Propose policies to attract, train and maintain human resources in the Valley.
 - Participate in studies looking at investment in infrastructure in the Valley.

The Technical and Financial Assistance Directorate aims to function as the operational arm of the Agency. While the Planning Department provides the information base for the Agency, and the Studies and Strategic Analysis Department uses this information to analyse what needs to be done and what can be done to develop the region, the Technical and Financial Assistance Directorate operationalizes this and takes it down more to the project level.

This directorate will also be divided into two departments:

- The Technical Assistance Department will:
 - Provide technical assistance to public and private institutions in the region in implementing projects.
 - Participate in the process of monitoring and supervision of projects underway in the Valley.
 - Assess the socio-economic spillover effects arising from implementing projects in the Valley.
- The Financial Assistance Department will:
 - Promote projects to be implemented in the Valley to national and international financial institutions, both public and private, mobilizing funds for project implementation.
 - Prepare the terms and conditions for channelling these funds to agencies responsible for implementing these projects.
 - Monitor and supervise the finances (financial performance and use of funds) of project implementation.

These Directorates and Departments are taken as a reference for the programme proposal (see Chapter 6). In the programme proposal a functional distinction has been made in three sub-components for CB to the ADVZ and two sub-components for CB to strategic partners.

5.4 On-going activities

Since its creation in 2010, the Agency has focused its attention on establishing itself and redefining its public image compared to GPZ, with attention paid to networking with central and provincial government institutions in the Zambezi Valley's four provinces. Meetings have been held with MPD and a series of sectoral ministries relevant to the Agency's work, covering agriculture, trade and industry, fisheries, mineral resources, tourism and science and technology.

So far, the Agency has worked on developing four projects for funding with a total value of approximately 74 million MZN (2.7 million USD), which are due to be launched mainly in the last quarter of 2012:

- Establishment of a service centre, providing agricultural equipment to support land preparation and harvest in Maganha da Costa, Nante, Ulógué and Caia.
- Equipment for maintaining rural roads sanitation in Morrumbala, Maganja da Costa, Caia and Ulógué.
- Television station for the national television station, TVM, in Caia to produce and broadcast local programmes.
- Technology demonstration centres in Morrumbala, Chemba, Ulógué and Guro to disseminate agricultural technology.

The projects mentioned above are mainly "buy-ins" of the Agency to the provincial and district governments. Starting with this kind of projects bears the risk that provincial and districts governments see the Agency primarily as a source for funding of their wish list of projects, instead of seeing the Agency as a strategy partner in terms of capacity building.

The Agency has been involved in the preparation of a three-pronged exercise to formulate the Special Plan for Tete (PEOT), which is combined with the Multi-Sectoral Agenda and a strategic environmental

assessment (SEA) of the Lower Zambezi river basin. It is expected to play an important role during the implementation of this package that will be funded by the Dutch government:⁹⁰

The Multi-Sectoral Agenda will be coordinated by the Agency and MICOA, whereas the SEA will be coordinated by MICOA through its Planning and Studies Directorate (DPE). The PEOT is a special plan that goes beyond the Provincial borders of Tete, as it included the transport means and route of coal extraction⁹¹. MICOA through its spatial planning unit (DINAPOT) is the coordinator at national level and the ADVZ (co-chair) has an important function for the coordination at Valley level. The PEOT focuses primarily on physical aspects of planning, such as the current availability and use of natural resources and infrastructure, driven by demographics and economic activity.

This combined exercise aims to produce:

- A strategic vision of economic and political objectives for the river basin;
- Environmental profiles for the districts in the region, highlighting bio-physical and socio-economic attributes and needs;
- Future scenarios and strategic options for each sector;
- A proposed strategy for the development of the river basin;
- Bottlenecks and synergies between the sectors and socio-economic and environmental impacts.

The ADVZ has also been negotiating a series of financial packages to fund projects and companies with different development partners, including:

- The Initiative for Business Development (IDEA) with USAID; the Agribusiness Fund component envisages to establish a fully functional and operational grant facility. This grant facility will serve SMEs in the Beira and Nacala Corridors, and the Zambezi Valley and will be managed by an international NGO. This INGO will working closely with ADVZ to build its capacity with the aim of transferring grants management duties for SMEs (of about 4 million USD) in the Zambezi Valley to the Agency in year 2.
- Agriculture and Fisheries Development with the World Bank; and The general director of the ADVZ is taking a leading role in coordinating and designing jointly with national directors of involved ministries the Agriculture and Fisheries Project under the Development Policy Operations (DPO) of the World Bank. When triggers of the reform agenda are met, the World Bank will transfer 150 million USD (50 million USD for 3 years) that can be used freely by the GOM. The expectations are that these funds are used to implement projects in the Zambezi Valley.
- The World Bank Growth Project in Tete and Nampula. The World Bank sees the ADVZ as their focal point in Tete with mainly a coordination role (the Agency does not seek to implement projects, but facilitate them). While this project focuses on Tete Province, as far as the agribusiness activities is concerned, these can be developed in other provinces of the Zambezi Valley as well.

5.5 Assessment of available capacities

Current staff

ADVZ is an embryonic institution that is still at very early stages of establishment. In the absence of an approved staffing structure, the Agency is employing both technical and support staff through a combination of government civil servants (eight) and temporary contracts. Government civil servants have

⁹⁰ Draft Operational Plan for the PEOTT, PMT and AAE, 020812.

⁹¹ A Provincial Plan would be a PPOT (Plano Provincial de Ordenamiento Territorial), and for a district a PDUT (Plan Distrito de Uso de Tierra).

been transferred from the former GPZ (two) or from other ministries and some contracted personnel are in the process of moving into the civil service structure. The current staff consist of 12 persons⁹² out of a total foreseen staff of 31⁹³.

Ten of the Agency's technical staff have the equivalent of a Bachelor's degree with one Master's degree and one Doctorate, with areas of specialization of agronomy, veterinary science, geology, law and management. Many of the technical staff have 20 or more years of experience. The remaining staff perform support functions, with basic secondary education.

In geographical terms, staff is distributed fairly evenly with five technical staff based mainly in Tete, four in Maputo and three in Caia. Support staff is spread between the three offices, as well as on existing land of the Agency, looking after livestock and infrastructure that was inherited from GPZ.

Proposed staffing

It is clear that the Agency will need to expand its staff, aiming to recruit highly qualified and proactive staff used to working with both the public and private sectors.

The Agency's proposed technical staffing structure foresees 40 positions for the General Directorate, the two technical Directorates and central services (administration and finance, and human resources). A wide range of technical expertise is envisaged for the two technical Directorates, including: mapping and topography; civil construction; economics; finance; geology and mines; sociology; biology; agronomy; hydrology; and public health.

It is intended that the Directorate of Studies and Strategic Analysis will be based in Tete while the Directorate for Technical and Financial Assistance will be based in Caia. Administrative staff and staff attached to the Director's office will be distributed between Tete, Maputo and Caia,

5.6 Financial systems, processes and resources

Financial Systems and Processes

The Agency was registered in SISTAFE since the beginning, but as a "secondary management unit", because its organic structure was not yet approved. All systems and processes adopted are from SISTAFE. However, the Agency did not have the SISTAFE installed in their office. Therefore, all administrative and financial issues were taken care of directly by the Ministry of Finance.

The Agency has opened three bank accounts, in the Central Bank of Mozambique, BCI and Standard Bank, respectively with three authorized signatures, two of them are mandatory for all payments; the signature of the General Director has to be on all payments. Instead of bank cheques, wires are used for better control.

The approval of its organic structure was obtained in May 2012. Since June 2012 the Agency is registered in SISTAFE as a Special Unit Management. The SISTAFE software is already installed in the Agency office in Maputo and Tete and staff of the Administration and Finance Department (DAF) is being trained.

Projects off-CUT, will be managed by specific financial software developed per project or standard financial software, in order to facilitate utilization auditing and reporting to MPD and MF.

⁹² Two of which perform support functions, as Executive Assistants, with tertiary qualifications.

⁹³ Interview with Ana Santos, Director of Administration and Finance, and Jorge Aquimo, Director of Studies and Strategic Analysis.

Financial Team

The Director of DAF is a high level graduate in law and has a long experience and training in public administrative and finances, obtained in UEM and UNIZAMBEZE universities before joining the ADVZ. The other two members of DAF have high level degrees in Auditing and Accounting (Maputo-based) and Management and Accounting (Tete-based). Currently three executive secretaries support DAF tasks, when needed. Until now, all purchase is done by the Maputo office, but this will be decentralised in the near future.

Revenues

The budget is summarized in Figure 5.3.

Figure 5.3. ADVZ revenues 2011-2013 (x 000 MZN)

Sources	2011	2012	2013
I. Global state budget	45,148	39,833	31,000
Current	27,018	19,833	21,000
Capital	18,130	20,000	10,000
II. Own Revenues	14,016	69,704	148,000
Grand Total -	59,164	109,537	179,000

The revenues are divided in two categories, i.e. the “Global State Budget” (Current and Capital expenses) and “Allocated or Own Revenues”. The revenues category of “Allocated or Own Revenues” was approved on 21-November-2011 by MF (“Oficio nº 279/DNAT-AE/GAB/2011”), transferring the former rights on royalties from land and extraction (mining) of the GPZ to the Agency.

The income components are: the equivalent of 2.5% of the (i) “fee paid from Energy paid by HCB”; (ii) “concession DUAT fee”; (iii) “traffic fee from inspection and re-inspection of agriculture, livestock and forestry products and sub-products”; (iv) “production tax” (includes mining); (v) “superficies tax”. The payment of the first component is suspended, due to unpaid bills of GPZ.

In its activity plan and budget for 2012, the Agency made the proposal to increase the percentage of 2.5% to 25%, which was approved by the Ministry of Finance.

The revenues from “Global State Budget” are fixed, but the “Allocated or Own Revenues” are registered as a forecast, so can be smaller or larger than was budgeted. Whereas the “Current” and “Capital” expenses are expected to be stabilized in 2013, the expenditure for “Development Projects” is expected to raise significantly due to on the one hand the increased income from mining and on the other hand due to the high needs of the population in the Zambezi Valley. The increase of the “Own Revenues” mainly depends on the transport infrastructure needed to export coal, which plans are:

- 2016 – Completion New Nacala Corridor Line
- 2016 – Completion of Renovation of Sena Railways Line
- 2017 – Completion of Macuze Port

The process of the transfer of the revenues from “Ex-GPZ” to the ADVZ is long, because all the delegations in the Zambezi Valley that collect taxes, fees and other revenues need to adjust the official forms. Currently, the Agency lack funds for proper follow-up and guidance of the various tax revenues units.

Expenses

The expenses are split between “Current” (salaries, subsidies, per diems) and “goods and services” (fuel, communications), “Capital” and “Projects Developed in the Zambezi Valley”).

In relation to “Current Expenses”, the Agency obtained the approval to execute its mandate through a team of a maximum of 56 persons. At the standard state careers salaries, this will cost a total of 25,647,265.44 MZN (about 950,000 USD) per year.

Articles 5 and 6 of the Agency’s Statute allow the Agency to have independent professional careers and specific remuneration levels. The Council of Ministers needs to approve by proposal of minister of MPD the Own Careers and Salaries levels. For the timing being, the minister does not approve a higher salary schedule. The ADVZ has to prove first that it is well-functioning well and obtaining outputs and results.

For 2013 the total of “Projects” present in the Activity Plan requires a total amount of 400 million MZN, whereas only 148 million MZN are in 2013 Budget. This means that the Agency needs to raise another 252 million MZN to secure full funding for its approved activity plan. The Activity Plan for 2013-15 has a forecast of fund needs of about 5 Billion MZN.

Part B: Programme proposal

6 Support to inclusive and sustainable agricultural development in the Zambezi Valley

6.1 Introduction

This chapter contains the formulation of a support programme to the ADVZ and its partners. A synopsis of the programme is found in Appendix 2 that contains the logical framework.

Whereas the mandate of the ADVZ is broad and not restricted to specific sectors (see section 5.1.2.) the agriculture sector (including livestock, fisheries and forestry) is the most important sector for the majority of the local population. There are still many untapped opportunities for agribusiness development in the Zambezi Valley. This focus provides a good match with one of the priority clusters of the international cooperation of the GON, i.e. ‘food security and private sector development’. The proposed support programme underpins the Mission Statement of the 2012-2015 Multi-Annual Strategic Plan (MASP) of the Embassy of the Kingdom of the Netherlands (EKN):

“The Netherlands Embassy (EKN) in Maputo will remain focused on the alleviation of poverty by supporting the development of the economic potential of Mozambique for inclusive growth and sustainable development, while actively promoting Dutch (private-sector) innovation capacity and technology based on our strong commitment to Corporate Social and Environmental Responsibility”.

Whereas capacity building is specifically mentioned in the TOR, in discussions with ADVZ, GON and EKN this aspect was highlighted. This implies that besides skills development as part of capacity building to ADVZ, also capacity building in general and skills development in particular for ADVZ’s major partners/implementation agencies and key private sector organizations will be a main part of the programme.

6.2 Rationale

The rationale for a programme to enhance inclusive agriculture in the Zambezi Valley is summarised in the following:

- The Zambezi Valley has high agricultural potential. It has large untapped resources, particularly along Zambezi river and its many tributaries;
- Current development does not reduce poverty, therefore specific efforts are required. The Central region has the highest population (25%), but is the poorest region in Mozambique, whereas it used to be the most prosperous region before independence;
- Agriculture is the determinant factor to decrease poverty, but traditional food security projects focusing exclusively on small-holder agriculture have rarely been successful in lifting the population out of misery;
- In line with the above, the high agricultural potential should be used for sustainable and inclusive development, combining commercial farming with small-holder farming and establishing other linkages with commercial agriculture (i.e. employment, supporting services, marketing);
- Such a programme is fully in line with the policies of GOM (PEDSA, National Agribusiness Plan, private sector policies) and those of the Netherlands Government and EKN on agriculture, food security and private sector as spelled out in the MASP of the EKN.

The choice for an institutional partnership with the ADVZ is justified as:

- The Zambezi basin calls for a supra-provincial organization that operates between local (district, provincial) and national levels and takes care of integrated planning;
- Coordination of sector interventions and stakeholders (economic, public, donor, NGO agents) is required for a participatory development;
- Specific attention is needed to ensure that mining revenues (royalties and taxes) and donor funding are utilized to benefit the entire Valley;
- Capacity development in public and private institutions is key, particularly in planning and preparation of viable projects and investments;
- Skills development in public and private institutions is key, particularly in vocational education and business development services providers; the Agency can play a role in their strengthening and coordination;
- International initiatives, such as the G8 New Alliance initiative, Grow Africa, AGVANCE Africa need an Agency that can assess and support appropriate interventions on the ground.

The Dutch Embassy seeks to support and strengthen the Agency, because:

- The ADVZ has the mandate to steer the socioeconomic development of the Zambezi Valley, but lacks capacity to meet high demands of central government and donors who want to develop the Central region;
- Whereas the legitimacy of the Agency is fully justified, recognition and acceptance of its role by key stakeholders must be earned in practice through showing concrete actual results (see risks);
- The function and role of the Agency directly supports the governments' decentralisation policy; many years of donor support at the national level had limited impact on actual agricultural development. A strategic alliance with the ADVZ to work in a specific geographical area is expected to be more effective and to yield tangible results;
- It enforces other initiatives the Dutch Netherlands are funding in the Valley, i.e. capacity building of ARA Zambezi and MICOA in conduct a SEA for the Zambezi Valley (in strategic alliance with CEIA).

The timing is appropriate, as current important and fast changes are taking place that calls for appropriate planning and steering:

- After many years of neglect, key infrastructures being built, i.e. bridges of Zambezi River (Tete, Caia), Sena railway, irrigation;
- Large scale Anchor projects (mining) are booming and corresponding key infrastructure being built in neighbouring corridors (Tete-Beira and Tete –Nampulo-Nacala);
- Mining investments put pressure on scarce resources and increase demand for food and services; most of which is imported as they are not locally available at the volume and quality required;
- Revenues from coal mining will increase significantly in the coming years that provide funds for complementary infrastructure and development in the Valley.

6.3 Objectives and results

Overall objectives: Poverty reduction and sustainable use of natural resources

Programme Purpose: Inclusive and sustainable agricultural development of the Zambezi Valley

Indicators:

- 1. Increase of income of small holder agriculture*
- 2. Increase of employment generated by commercial agriculture and agribusiness*
- 3. Increase of commercial investment in priority value chains, including Dutch investment (no of commercial enterprises, and investment volume; number of smallholders engaged, all operating more than three years after starting; no of processing companies operating in rural areas)*
- 4. Spreading of public and private investment over the four provinces (balanced development)*

The programme has five expected results:

The Agency conducts effective strategic studies and planning

Indicators

- 1 Regional data base established and regularly updated*
- 2 Strategic policies and plans for Zambezi Valley/provinces/districts formulated (PEOT-Tete, Multi-sectoral Plan, prospects of irrigation, Delta Plan Lower Zambezi),*
- 3 Supported provincial and district strategic and annual action plans*
- 3 An effective platform for dialogue public-private sector and effective stakeholder coordination in place*

The Agency effectively facilitates agribusiness development

- 1. Pre-feasibility studies conducted*
- 2. Investment portfolio developed*
- 3. One shop business development centres effectively functioning*
- 4. Inclusive business models developed and applied*

The Agency mobilizes and channel funds to clients

- 1. Specific and permanent financing mechanisms developed*
- 2. Investment package negotiated with GOM and donors*

Strengthened service providers for SMEs (BDS)

- 1. More private BDS with head office or with installations operating in the Valley*
- 2. Increase agricultural enterprises able to develop profitable business models (% and no)*
- 3. Increase agricultural enterprises able to make profitable marketing plans (% and no)*
- 4. Increase agricultural enterprises with good management and accounting systems (% and no.)*

Strengthened educational centres for skills development

1. *More skilled agricultural and technical workers and staff by category (high, middle and low), (in % and no)*
2. *Better facilities and staff of collaborating institutes*
3. *More young entrepreneurs with vocational and management skills developing activities along the value chain stream (from private extensionists, agro dealers, farming, processing, logistics and distribution, BDS)*

During the inception phase a base-line study will have to be conducted that will serve to formulate concrete targets (SMART) of the above mentioned indicators.

6.4 Programme intervention approach

6.4.1 Focus on multi-sector planning and agribusiness development

This programme will facilitate inclusive and sustainable agricultural development, encouraging and promoting promising agribusiness models as described in Chapter 4.

Whereas the mandate of the ADVZ is broad and not restricted to specific sectors, the programme will have an explicit focus on multi-sectoral planning and the agriculture sector (including livestock, fisheries and forestry). The implications are that the Agency may seek support from other donors, - if needed - to develop other areas within its mandate (for instance improvement of social services, health, basic education).

In contrast to its predecessor the Agency will not implement development programmes and projects, but will fulfil a facilitating and coordinating role. The Agency seeks to establish a lean organization that can fulfil important functions in planning and enhancing socio-economic development in the Zambezi Valley. The Agency seeks to ensure that donor programmes contribute to development objectives of the Zambezi Valley.

The Agency will facilitate the implementation of planned programs of donors, such as the World Bank's Growth Pole project that focuses on Tete and Nacala (a local implementation unit may be placed in the Agency), and possibly the Agency may manage as a trustee for the catalyst fund of the USAIDAgribusiness project, in year 2 after starting with capacity building of the implementing Agency.

The Dutch funded programme is expected to have a positive impact on these parallel functions. Coordination with these donors will be intensified, to ensure that actions will mutually reinforce each other, rather than causing overlap and/or leading to conflicting roles and functions of the Agency.

6.4.2 Long-term partnerships with Dutch knowledge institutes

ADVZ will be supported by providers of capacity development services that have the right set of skills and expertise in each of identified capacity areas.

The Netherlands possesses a wide range of knowledge organizations that operate internationally and that possess relevant knowledge and expertise required to deliver the capacities services the AVDZ needs. These institutes have departments or offices that are in charge of policy preparation and support to externally-financed projects. Most of them have several staffs with working experience in Portuguese spoken countries, who could be mobilized to provide the required capacity building.

It would be difficult for the ADVZ to identify and mobilize these experts. Therefore, it is proposed that the ADVZ establish a long-term relationship with a consortium of 2-3 institutes that can cover training and skills development needs of ADVZ, from their permanent staff and by hiring staff from their networks. Three key institutes are:

- Wageningen University & Research centre (Wageningen UR) possesses relevant knowledge in agribusiness, rural planning, multi-stakeholder collaboration, but also in particular technical areas related to agriculture, livestock and fisheries. Wageningen UR includes institutes that provide TA services worldwide, including CDI (Centre of Development Innovation) and LEI (Agricultural Economics Institute).
- ISS (International Institute of Social Studies) in The Hague, Part of Erasmus University Rotterdam has longstanding expertise in social sciences, particular in regional development planning and participatory multi-sectoral planning processes.
- Technical University Delft (TUD), on physical, spatial and environmental planning

Given its profile (food security, agribusiness development and private sector development), CDI profile⁹⁴ of Wageningen UR could play a central role of secretariat and broker for the proposed consortium. During the inception phase, in a Memorandum of understanding (MoU) between ADVZ and CDI an action plan and procedures needs to be defined which and how training and advice could be provided to staff of ADVZ to achieve the results, directly the results of sub-component 1.1. and 1.2 and indirectly those of Component 2 of the proposed programme. The MoU should clearly indicate that the ADVZ is in the driving seat for deciding on the supports it wishes to receive.

Other institutes that could be called upon by CDI for the delivery of specific support are:

- ITC (Faculty of Geo-Information Science and Earth Observation of the University of Twente) is an international professional education establishment in the field of geo-information science and earth observation with strong expertise in land issue planning.
- KIT (Royal Tropical Institute) is an expertise centre in the area of sustainable development with a strong focus on agriculture offering capacity development services in the area of value chain and business development, agricultural innovation and rural planning.
- The AERES Group including Groenhorst, Stoas, CAH Dronten, PTC+ delivering agricultural expertise and training.
- Technical Agricultural schools, such as Van Hall Larenstein and HAS Den Bosch.
- Maastricht School of Management (MSM) is a business school conducting business-related training programmes in developing countries.

Finally, organizations that can assist CDI in this function are NUFFIC (the Netherlands organisation for international cooperation in higher education), NL Agency (international business desk of the Ministry of Economic Affairs, Agriculture and Innovation) and Agri-ProFocus (network of Dutch organizations promoting farmer entrepreneurship in developing countries).

⁹⁴ The Centre for Development Innovation (CDI) is an interdisciplinary and internationally focused unit of Wageningen University & Research centre. The Centre works on processes of innovation and change through facilitating innovation, brokering knowledge and supporting capacity development. We help to link Wageningen UR's expertise to the global challenges of sustainable and equitable development. CDI works to inspire new forms of learning and collaboration between citizens, governments, businesses, NGOs and the scientific community.

6.5 Programme components

The programme consists of two components, each having a number of sub-components.

The first component refers to the Capacity building of the ADVZ. In line with the mandate and established priorities, three sub-components are distinguished and one supporting unit. These are:

- Sub-component 1.1 Strategic studies and planning
- Sub-component 1.2 Technical and financial assistance to agribusiness development
- Sub-component 1.3 Promotion of investment projects and securing finance

The Capacity Building Unit (for ADVZ and its partners) is not included as a separate unit, as it directly works with all sub-components, i.e. for ADVZ and its partners.

Component 2 refers to Capacity Building of strategic partners of ADVZ. In line with the felt needs and priorities, two sub-components are distinguished:

Sub-component 2.1 Skills development for agribusiness

Sub-component 2.2. Provision of Business Development Services (BDS)

In the following sections these sub-components are further elaborated.

6.6 Beneficiaries, stakeholders and areas of collaboration

Beneficiaries can be distinguished at three levels, direct, indirect and final as follows:

Direct beneficiaries:

- ADVZ,
- Key public and private partners in skills development and BDS related to agriculture

Indirect beneficiaries:

- local government at provincial: Department of Provincial Planning and Finance and Sector Directors
- local government at district level: Administrator, Services of Economic activities (SDAE)
- key collaborative partners, such as CEPAGRI, CPI, MICOA, ARA Zambezi,
- private sector organizations, such as CEP, associations and federations

Final beneficiaries:

- small holder farmers,
- emerging entrepreneurs,
- commercial enterprises involved in agricultural value chains.

To achieve the programme purpose with sustainable outcomes expected by the Government and mainly by the population in the Zambezi Valley, the Agency needs to coordinate and work deeply and permanently with the main stakeholders at different levels, using an inclusive⁹⁵ and sustainable approach.

Below an overview is given of stakeholders that are identified by the Formulation Mission and that are expected to play a role in the respective activities of the respective sub-components, either as

⁹⁵ Not only smallholders with commercial farmers, but with all stakeholders present in the field, including donors and NGOs.

stakeholder, partner or beneficiary. With a number of them strategic partnerships agreements will be signed (MoUs).

At the national level

The ADVZ will focus on their delegations at provincial level, while maintaining liaison with the national level. Most organisations listed below already have on-going activities in Zambezi Valley or they are interested to expand activities to that region:

- CPI: The agency dealing with investment facilitation and investment projects for all economic sectors. It has strong capacity at the national level, but a very weak capacity in its provincial delegations, including all the 4 provinces in the Zambezi Valley. There are plans to develop capacity in the delegations. *Role foreseen in sub-component 1.1 and 1.2*
- CEPAGRI: Agribusiness investment facilitation, support and facilitation on running business making, business linkages promotion, policy making, studies, fund raising, donor coordination, gathering and analysing information and participation in sub-sector working groups, such as horticulture, poultry, rice, sugar cane, private sector working group, tax group) and represents the government in PPPs, such as BAGC, APAC-ORAM. It has strong capacity at the national and at Manica Province level, needs more capacity in Zambezi province, whereas it has no effective presence in Sofala and Tete Provinces⁹⁶. *Role foreseen in sub-component 1.2*
- IPEME: SME's development institute. Established recently, it has a good capacity at the national level, and conducts its main activities (pilots) in Maputo and Gaza Provinces. IPEME seeks to expand its projects and services to other provinces. They already plan incubating and rural industrialization projects in Tete and Zambezi Provinces. *Role foreseen in sub-component 2.2*
- MICOA. Formulate policies and strategies for environmental management; Approve EIAs; Organise/setting norms for/ conduct land-use/spatial planning; Areas of collaboration with ADVZ: Strategic planning (physical planning combined with economic development objectives); Environmental management; Adherence to sustainability issues. *Role in sub-component 1.1 and 1.2*
- INEFP, the National Institute of Vocational Training and PIREP (Technical and education training project). They assist the Labour and Education Ministries' in the reform of the vocational training (COREP) with a mandate to spread vocational training in all the country. PIREP has capacity and funds to develop properly its mandate, and seeks to develop partnerships at the field level. INEFP has delegations in all provinces; some activities are conducted at district level and the organization is in a great need of increasing its capacity. *Role foreseen in sub-component 2.*
- FARE: Scope of work was reviewed a few years ago, when it was decided to focus on financial intermediation, managing warranty funds and exceptionally providing direct finance to the economy. A good capacity has been developed at the national level (since 2006 benefiting from an IFAD/AfDB Project) with an outreach to 80 districts in the country. FARE is a potential good partner in the financial mechanism to be developed by ADVZ in *sub-component 1.3*

At the Valley and provincial level

- DPPF: the Provincial Department of Planning and Finance that coordinates at provincial level Rural Development (at national level rural development (DDNPDR) resorts under the Ministry of Public Administration (MAE). DPPF is the focal point of the ADVZ at the provincial level and *will play a coordinating role in all sub-components, with a focus on sub-components 1.1 and 1.2.*
- ARA Zambezi: Established in 2002, is the regional Water Authority that is responsible for management of the Zambezi river basin in Mozambique. It has administrative and financial autonomy, and falls under the Ministry of Public Works (MOPH) through the National Water

⁹⁶ CEPAGRI's Manica office covers Sofala and Tete provinces also but struggles to do so effectively.

Directorate (DNA).⁹⁷ The Zambezi river basin covers all 13 Districts of Tete province and 14 Districts in parts of Manica, Sofala and Zambezia provinces. The Agency covers the entire river basin including 7 additional Districts. *Key partner and role in sub-component 1.1*

- CEP's: Facilitation and representation of private sector at provincial level, linking CTA with firms at local level. It's a recent concept, with a very important role to develop, but with huge needs for capacity building. *Role foreseen in sub-component 1.1 and 1.2.*
- UNIZAMBEZI: recently established university that started to work in Zambezi Valley; already present in Beira, Chimoio, Tete, Angonia and Quelimane. In Angonia UNIZAMBEZI is starting up a model farm, where agronomy students can gain practical experience; the farm already established strategic partnerships with a national and regional supplier of improved seeds. UNIZAMBEZI needs capacity building to develop its mission. *Proposed as a strategic partner under sub-component 2.1*
- ISPM: The High Level Polytechnic Institute of Manica is playing for a long time a very important role in agriculture related educational areas, with farm and assets to be used in the training provided to the students, has good partners and funders (e.g.: NEPAD Business Foundation, USAID-Agrifuturo), but so far not active in the Central region of the country. Additional support is needed to leverage its strong background and setting up a network in the Zambezi Valley. *Role foreseen in sub-component 2.1.*
- GAZEDA. Responsible for planning and implementation of special economic zones (SEZs) and zonas francas (ZFs); it proposes the creation of SEZs and ZFs in different parts of the country. *Role foreseen in sub-component 1.1*
- Civil society. NGO's working on planning and agricultural development. They are important as service providers or to support local private service providers. They may be instrumental in spreading impact, while having a clear existing strategy. *Role foreseen in sub-components 2.1 and 2.2*
- BDS private organizations. They are almost nonexistent in the rural areas of Mozambique. So far they prefer to work in the urban areas, mainly in the commercial and financial sector. Huge necessity to develop, in order to provide skill and business oriented service, to public agencies, private sector and smallholders. Representation at district level is aimed at. *Role foreseen as beneficiary in sub-component 2.1*

At the district Level

- SDAE's: District Department for Economic Activities. All activities that are taking place in the district have to pass through this institution. Its role to support the private sector, smallholders and communities in general is crucial. They are in direct contact with the grass root level. *Role foreseen in sub-component 1.2*
- Vocational Training Centres and Vocational Medium Schools (public and private). *Partnership arrangements with ADVZ will be established in sub-component 2.1*

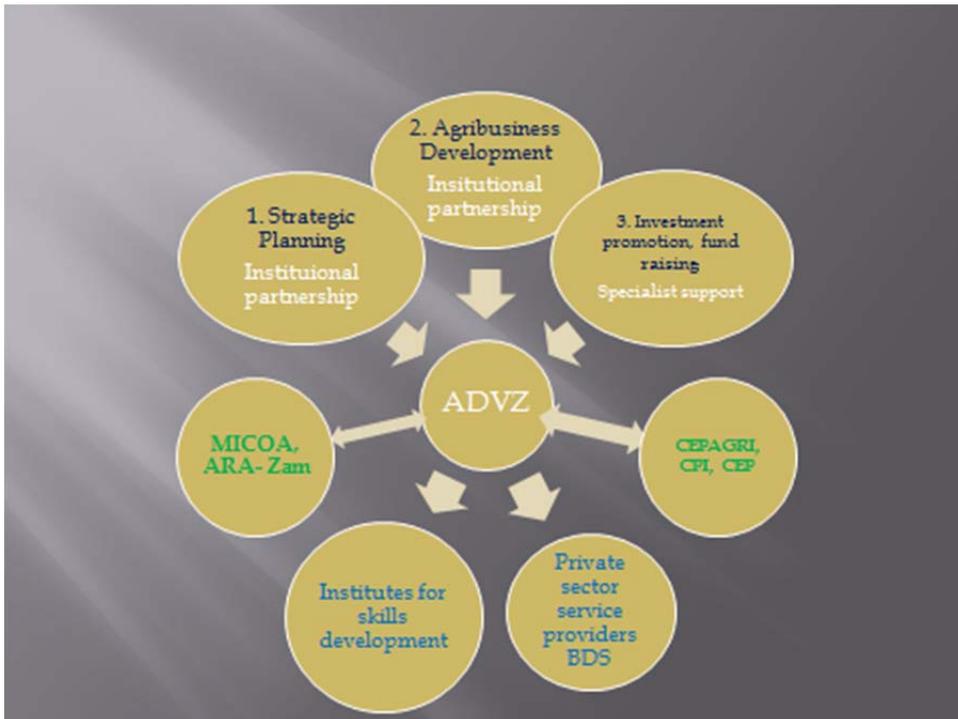
Capacity building is the core activity of the programme, and takes several forms. The basic structure is visualized in Figure 6.1.

Three levels are distinguished:

1. Long term institutional with Dutch knowledge centres are envisaged for CB for the Agency, i.e. for sub-component 1.1. and 1.2; specific TA is sought for sub-component 1.3.
2. Collaboration with key governmental agencies and private sector organizations
3. Capacity building of strategic Mozambican partners by the Agency (Component 2)

⁹⁷ WWF/Waterschap De Dommel, 2010. Fact-finding mission to the Ara Zambezi.

Figure 6.1



6.7 Sub-component 1.1 Strategic studies and planning

Integrated planning

The niche role that the Agency should play is to have an integrated, multi-sector and basin wide perspective of opportunities and constraints in socio-economic development, with a clear understanding of the ecosystem functioning of the basin and the inter-relationships of development with environment and climate change. Key competences required are therefore strategic planning through interpretation of available data and extrapolation of development trends, as well as networking through coordination and communication with all relevant stakeholders. The Mission also recommends that the Agency participates in the new institution that will be established in Mozambique dealing with a “Green Economy” in connection with RIO 20.

Multi-Sector Agenda cum SEA

The Agency will participate in the Multi-Sector Agenda cum Strategic Environmental Assessment, followed by the Land use Plan for the entire basin as a co-leader with the Ministry of Environment, and supported by the Netherlands Commission Environmental Impact Assessment. This exercise is expected to start soon and will have a duration of 18 months. The result of this exercise will provide an excellent starting point, to guide and steer further developments in the basin in a sustainable manner. It will also provide an excellent opportunity for the Agency to get familiar with such a planning exercise that is aimed at socio-economic development of the basin while taking into consideration sustainability, environment and climate changes issues. It is important that the Agency participates to the maximum of its possibilities in this planning exercise in terms of on-the-job-learning.

Delta plan: a specific delta plan is needed for the lower part of the Zambezi basin, preserving as much as possible the ecological functioning of the river system, while at the same time providing protection to the local population against flooding (climate change), many of whom consider the Zambezi River as an enemy rather than a resource.

Data base

The above exercise will provide a very valuable data base of the natural resources and the socio-economic sectors that may serve as a baseline reference. This baseline allows for proper monitoring and evaluation of the development of the basin in general, and development programmes / projects in particular. This data base could be further extended with the information that has been collected in the past by GPZ and that is stored on micro-fiches. Much of this information is highly relevant (topographic maps, soils, climate, vegetation, land suitability, etc.) and should be used and investigated. Some information may need to be updated. The Formulation Mission is of the opinion that no extensive efforts should be undertaken to conduct inventories to collect primary data on natural resources or socio-economic data. Instead, the Agency should collect the relevant information at the designated institutes (Meteorology Agency for climate, DNA for water resources, etc.). ADVZ staff need to have basic knowledge to interpret information and be able to contract out some work to other institutes if important information is missing, an option would be to have a strategic partnership here as well. Four capacities that are needed: (i) design and conception of needs (ii) identification of appropriate institutions to undertake the work, (iii) quality control; (iv) interpretation

Information analysis and information sharing

An important role of the Agency is to make available information that is useful to potential investors or other stakeholders at a general level, which allows them to make decisions at reconnaissance level. Gathering further detailed information at (pre-) feasibility level is the responsibility of the investors or stakeholders. A simple but adequate GIS system is required in order to make the information available in an easy-digestible manner and to generate tailor made maps on various topics.

The Agency should also make available information to donors and NGOs operating in the Valley to avoid duplication and overlap.

Land use planning and physical planning

In contradiction to what is mentioned in the statute and the internal regulations, the Formulation Mission is of the opinion that the Agency should not actively engage in physical planning or land use planning. This is the primary mandate of the Ministry of Environment that has established procedures and guidelines for this work. Within the Ministry of Environment, a specialized training institute for land use planning is in the process of being established. The Agency can and should, however, play a role in stimulating, facilitating or supporting land use planning and physical planning, especially at provincial and district level, but the process is led by the Ministry of Environment.

Studies

In the case of information gaps, specific studies can be conducted. In order to collect the missing information, or to prepare for example a land suitability map for rice in the basin, it is recommended to delegate this to relevant institutes. This approach is necessary considering the broad scope and numerous disciplines for which the Agency simply cannot have experts covering all these fields (agriculture, soils, climate, livestock, forestry, fisheries, roads, mining, water, environment, etc.).

Main functions and tasks

Based on the above, the following main functions and tasks to be performed for sub-component 1.1 are:

1. Setting up data base on the natural and human resources in the Zambezi Valley
2. Participate in the formulation of policies, strategies and plans for the Zambezi Valley
3. Support local governments in operationalize provincial strategic plans and district land-use plans
4. Nurturing public private policy dialogues/platforms, promote networking within private sector
5. Strategic monitoring and impact assessment of key development projects

Opportunities for strategic planning

There are five opportunities for ADVZ to get actively involved in environmental sustainable and strategic development planning:

- Participate in the Special Plan for Tete Province (PEOT)
- Participate in the coordination / organization of the Multi-Sector agenda setting and SEA process led by MICOA and supported by the Commission MER, followed by the physical planning exercise. The green light is soon expected from the Council of Ministers.
- Support Provinces and Districts with strategic and physical planning, incorporating environment and sustainability issues
- Participate in the new institution that will be established in Mozambique dealing with a “Green Economy” in connection with RIO 20.
- Preparing a special Delta Plan for the lower part of the Zambezi Valley, with a focus on protection against flooding (climate change), inclusive sustainable development (poverty alleviation) and environmental sustainability (biodiversity).

Elements of planning approach:

- Obtain an overview of overall basin development, conduct general studies, whereas specialist studies will be implemented by key specialist public agencies (for instance MICOA in land-use planning) or contracted out to private companies.
- Follow an integrated approach: horizontal across sectors (transport, social services, productive services)
- Promote public–private dialogue and feed these into the national debate on policy reforms
- Support sector ministries and provincial and districts authorities in the operationalization of strategic plans
- Promote a balanced development in the respective provinces

Core competencies

Figure 6.2 presents the core team (“critical mass”) of sub-component 1.1

Figure 6.2 Staff of Sub-component 1.1 - Strategic studies, planning and capacity building*

High Level Technicians - Studies and Planning	10
- Development Economist	1
- Sociologist- rural development specialist	1
- Environmental expert & forestry	1
- Civil engineering (with skills in Hydraulics and irrigation)	1
- Agriculture specialist (crops, livestock, fisheries)	1
- Land-use planner	1
- Mining/geologist	1
- IT	1
- Data management; statistics, GPS	1
- M&E	1

* Note: the studies and planning team will be supported by a sub-component manager and staff specialized in Capacity Building.

Qualifications

All staff of the ADVZ is classified as Technical Superior level N1. The required qualifications for the senior positions are:

- Education: M.Sc. degree
- Experience:

- minimum 10 years
- both public and private sector experience
- participated in policy and/or strategy development
- Competences:
 - good communication skills verbal & written, Portuguese & English
 - coaching skills (of local authorities)
 - advisory & consulting skills
 - strong network

Proposed means of capacity building:

- A long-term partnership with a consortium of Dutch knowledge institutes that are involved in the key areas defined and have international courses, training and advice.
- Possible institutes in the Netherlands are the Institute of Social Studies (ISS), -The Hague, Technical University Delft (TU-Delft) and the International Institute for Geo-Information Science and Earth Observation (ITC- Enschede).
- Additional co-funding could be explored from NUFFIC
- Other options could be explored in the region or internationally, when required expertise cannot be made available by the above mentioned institutes
- Specialist TA could be obtained through short term consultancies

6.8 Sub-component 1.2 Technical and financial assistance to agribusiness

Focus and approach

This sub-component seeks to build capacity in the Agency and its partners to promote private sector involvement in priority value chains, focusing on models that link commercial agricultural enterprises (agriculture, livestock, fisheries) with small holder farmers and emergent entrepreneurs (input supplying, mechanization services, advisory services, pre-processing at village level, transport and logistics, trading and BDS (see for a detailed description section 4.1). The commercial enterprise may be a medium-scale company that sells its produce directly to national or international wholesale, may be linked to a large international company or a large international company may be directly involved in primary production, for instance OLAM with large scale rice farming in Mopea, Zambezi Province.

Consequently, this sub-component focuses on project formulation, investment proposals, pre-feasibility studies, business planning, technical & financial advice on value chains and public infrastructure. Staff of the component should be able to make pre-feasibility studies and conduct in-depth value chain analysis.

It is important that the Agency develops a proper assessment methodology with clear criteria to screen all proposals for projects and investments on their quality, particularly with respect to:

- technical appropriateness (operation & maintenance, technology, training, innovation)
- financial viability (profitability, commercial basis, markets, profit sharing, entrepreneurship)
- social acceptance (consultation, participation, equity, corporate social responsibility)
- environment (impacts, climate change, mitigation measures)
- institutional sustainability (ownership, long term commitment, good governance)

Priority value chains

Suitable value chains in the agribusiness sector, including environmental opportunities have been presented in Chapter 4.

Environmental impact assessment

It is imperative that the Agency follows the procedures and criteria with all projects that require an environmental impact assessment according to their category. Since the Agency is not implementing projects itself, but promoting projects and investments by public and/or private partners, the Agency has the responsibility to demand that the partners conduct such EIA studies if and when required.

Main functions and tasks to be performed

1. Project formulation and pre-feasibility studies: value chain analysis (gross and net margins); screening of project proposals, provide key information, so enterprises can draw up business plans, propose management models of irrigation schemes, service parks, etc.
2. Give technical advice to the local public agencies and private sector implementing development projects, for instance in the preparation of location-specific agribusiness projects and infrastructure project
3. Advice on terms and conditions of required external financing for identified projects
4. Coordination with local authorities, private sector agents and civil society in the implementation of development projects
5. Monitoring and evaluation of development projects that are supported by the Agency

Elements of the agribusiness approach:

- Take a proactive approach in merging partnerships in agribusiness, arrange for follow-up initiatives in the field, check gaps and support in seeking solutions;
- Create as much as possible closed vertical systems in the value chain;
- Involve provincial and districts authorities in identification of business opportunities and pre-feasibility studies;
- Include provincial and district staff in capacity building activities;
- In collaboration with CEPAGRI and CPI establish an one-stop agribusiness development centres in Tete, Caia, Quelimane and Beira

Core competencies

Figure 6.3 presents the core team ("critical mass) of sub-component 1.1

Figure 6.3 Staff of Sub-component 1.2 Technical and financial assistance to agribusiness development*

High level technicians for agribusiness development	6
- Agronomist and fisheries	2
- Agroeconomist	2
- Business Economist	1
- Data management	1

* Note: the staff of this sub-component will be supported by staff specialized in CB and the environmental expert (is based in sub-component 1.1)

Qualifications

See section 6.7

Proposed means of capacity building:

- A long-term institutional partnerships with relevant knowledge institutes.
- Wageningen University & Research centre (Centre for Development Innovation, Wageningen UR). Links should be sought be with Dutch instruments for private sector development, such as PSI, PSOM, ORIO, Agentschap NL.
- Other options could be explored in the region or internationally, when under the above mentioned institutional partnership the required expertise cannot be made timely available
- Specialist TA could be obtained through short term consultancies (on specific technical issues)

6.9 Sub-component 1.3 Promotion of investment and securing finance

Main functions and tasks to be performed

- Promotion of projects to be implemented in the Zambezi Valley at the national and international level and fund raising.

Negotiation and sets up the implementation structure of large development programmes/projects. Channelling funds from donors and own revenues (mining) to priority projects in provinces and districts in the valley.

Assisting investors in securing the best source of finance (terms and conditions of credit lines) Participation in the setting-up an independent mechanism for funding for agribusiness.

Elements of the approach

- In channelling funds for public investment to the Valley to promote a balanced development in the respective provinces and districts of the Valley.
- Channelling funds to viable agricultural projects.
- Ensure socio-economic and environmental sustainability criteria are being met.
- Ensure professional financial management.

Core capabilities required in the Agency

Figure 6.4 presents the core team (“critical mass) of sub-component 1.3

Figure 6.4 Staff of Sub-component 1.3 promotion of investment projects and securing finance*

Number of Senior level staff	3
- Business Economist	2
- Financial economist	1

* Note: Senior management of the ADVZ will take up direct functions and roles in promotion of investment projects and securing finance. Furthermore, staff of the CB unit will support the staff of this sub-component.

Qualifications

See section 6.7

Proposed means of capacity building

- Funds for preparing promotion materials, promotional trips outside the countries
- TA in communication and marketing by specialist consultancies

6.10 Sub-component 2.1 Skills development for agribusiness

Given the need for skilled labour and improved enterprise management (see section 3.15) and the enhancement of inclusive models (see chapter 4) the ADVZ should in line with the specific objective of capacity building to key stakeholders in the Zambezi Valley consider the following:

- Capacity building of vocational training institutes tailored to produce skilled labour for new investors and suppliers;
- Establish a SME linkages program that connects big investors with local SMEs;
- Support incubators of entrepreneurs in agribusiness, business development services and others;

- Promote an educational institutions linkages program that connect local institutions with reference institutions in agribusiness development
- Promote a BDS linkages program that connect local companies with BDS support institutes

This component will be coordinated with PIREP and INEFP (see section 6.6). PIREP has funding from the World Bank (35 million, during 2012-15). With improved skills educational organizations can benefit from these funds. The Agency should increase their capacity to present proposals to PIREP related to vocational training to be conducted in the Valley and provide active support and follow-up after projects have been implemented.

Higher level institutes

1. UNIZAMBEZI (Tete)
2. Polytechnics (ISPM) Chimoio

Intended activities to be funded (under MoUs or 3-5 years, to define areas to work together, activities to perform, chronogram, follow-up mechanism and focal point designation in each institution)

- Assessment of delegations and training centres in the Valley
- SWOT analysis oriented to vocational training in competencies areas important to agribusiness
- MoU and an Activities Plan for 3-5 years
- Capacity building
- Short-term TA to support activities development by INEFP team in the Valley
- Establish partnerships with Dutch and other international relevant institutions and organizations relevant to agribusiness

Basic and medium level

A number of agrarian institutes and training schools or centres are pre-identified: "Institute Médio Politécnico de Tete", "Escola Profissional Agro-Pecuária de Caia", "Institute Agrário de Chimoio", "Instituto Agrário de Mocuba", but others exist in the Valley. Training Centres of INEFP, Church Training Schools/Centres, Others (Private Companies, Casas Agrárias), Cooperatives. During the inception phase as assessment will have to be made to select a number of them for partnership arrangements.

Intended activities to be funded

- Needs assessment of each identified entity;
- Prepare a plan of support based on a work plan, including elements such as:
 - o Capacity building: Management and Administration, Organization and Governance, infra-structures and equipment;
 - o Capacity development on teachers;
 - o Curricula development support to launch new areas of courses relevant to agribusiness: e.g. include always "Management and Administration";
 - o Support to develop projects, business plans and fund raising activities to do investments in their farms where students perform their practices.

The component will be supported by the CB unit consisting of 5 staff. The unit will involve staff from the other sub-components.

Qualifications

See section 6.7

6.11 Sub-component 2.2. Provision of Business Development Services (BDS)

The provision of business development services is key for realizing inclusive agribusiness models, as described in chapter 4. The Agency should enhance the capacity institutes that work in this field.

Three types of organization provide this kind of services, (i) universities, (ii) NGOs; and (iii) private organizations. This programme will work with the third category, as they are most in need of support and have a higher sustainability. Support will be given on group basis.

The formulation mission did not have the chance to identify these BDS entities in the Valley. Examples of these are “Resillience”, “ELIM”, “HUB”, “CEFAT”, “Intellica”. During the inception phase partners will be identified. Most of them are in need of capacity development, lack of infra-structures and equipment, as well as lack of demand, considering under developing agribusiness sector and incapacity of local government entities to pay for they fees.

ADZ and all this entities (should be installed in Sofala, Manica, Zambézia and Tete Provinces) should work on a MoU and an Activities Plan for 3-5 years, in order to define areas of competency activities to perform, chronogram, follow-up mechanism and focal point designation in each entity.

Intended activities to be funded

- Assessment of each identified entity
- MoU and an Activities Plan for 3-5 years
- Capacity building: Management and Administration, Organization and Governance, infra-structures and equipment
- Capacity development of staff
- Support to develop projects, business plans and fund raising activities to do investments in order to start-up activities in the Valley districts or to expand to increase proximity and outreach to customers.

The component will be supported by the CB unit consisting of 5 staff. The unit will involve staff from the other sub-components.

Qualifications

See section 6.7

6.12 Sustainability

An extensive sustainability analysis of the proposed support programme was made by the environmental specialist (and DSU representative) following the agreed framework between DGIS and the Netherlands Commission of Environmental Assessment (NCEA). Socioeconomic and environmental sustainability is being addressed by answering 22 leading questions. It is indicated how the proposed support programme will address sustainability issues in the various fields. The full assessment is included as Appendix 7.

The overall assessment is that although the ADVZ mentions sustainable development in its overall objective and mandate few specific references are found in the internal regulations. Suggestions on how to incorporate sustainability as a specific concern were taken into account in the formulation of activities of the sub-components, as well as in the staffing.

Another aspect is the sustainability of the topping-up of salaries of the Agency (see section 6.18). Such “ring fencing” has been stressed as necessary for the Agency to be able to recruit qualified staff, as

current government salary levels are unattractive and insufficient. The situation is particularly difficult, given the fact that the Agency's headquarters are located in Tete, near the mining concessions that has led to inflation in costs, including labour (see section 3.1.3). The risk with topping-up of salaries of beneficiary institutions is that once the support ends, staff leaves as often the institutions are not in a position to continue the salary levels the staff used to have. In the case of ADVZ these risks are much lower. An important element that reduces the risk is that the Agency is expected to receive sharply increasing own revenues from extracting industries, particularly coal (see section 5.1.6). These increased revenues are mainly used for public investments (75%) and will be channelled to stakeholders in the Zambezi Valley, but they may also be used for its internal operations. Usually institutions and individuals that have high responsibilities are subject to good payment (for example, tax collection offices, key medical staff, judiciary, etc.). The agency may fall in this range of institutions, given the funds they have to manage in due course.

A second important aspect is that the Agency is an autonomous entity and may propose salary levels that are beyond the common government structure. Higher salaries need to be approved by the Council of Ministers on request of the Minister of Planning and Development (Article 5 and 6 of the Establishment Decree). The Minister is willing to propose higher salaries, once the Agency has proven it is generating results.

6.13 Cross cutting issues

Gender and social safeguards

Central to the programme is the notion of *inclusiveness* which implies that the active participation in development processes – and having a direct benefit thereof - of underprivileged groups in society is the core focus of the programme. The programme will develop and implement specific guidelines and a monitoring system to gauge the impact its activities have on improving the livelihoods of poorer segments in society.

Gender will be mainstreamed in all programme activities, ensuring that in principle women and men benefit on an equal footing of the programme activities. The gender mainstreaming will be done at the very beginning of the programme in close collaboration with a gender specialist who will also be doing regular coaching visits to follow-up and further concretize the programme's gender policy.

Considering the particular position of private sector actors in the programme, special attention will be given to possible negative impact of profit-oriented behaviour. To ensure profit-orientation will not have negative implications on society and the environment, it is mandatory for all private businesses involved in the programme – either as partners, clients or executors - to adhere to corporate social and environmental responsibility (CSER) principles. A consultant will be hired to draw up specific guidelines and monitoring mechanisms to ensure these principles are translated in a workable, concrete and realistic way in the context the programme is operating.

Environmental safeguards

When mentioning sustainability in the programme document not only reference is made to economic but also to environmental sustainability. In all activities the programme will look into whether meeting the needs of the present generation will not compromise the ability of future generation in the Valley to meet their needs. This principle will be reflected in guidelines and monitoring procedures of the programme.

Environmental impact assessments will be conducted for all investments pursued by the programme.

Good governance

The programme will work on improving the business climate in the Valley, reducing red tape and assisting potential investors to realize their viable, inclusive business propositions. Being a government Agency, the ADVZ will play a pioneering functioning in bringing together stakeholders from public, private and civic society to jointly develop and implement long-term sustainable development processes in the Valley. Thereby, the programme will invest in enhancing the capacities of these private, public and civic stakeholders to ensure they develop the competencies required to effectively engage in multi-stakeholder settings. The Agency will markedly break with the past of its predecessor and apply participatory, client-oriented principles in the way it operates.

6.14 Main risks and mitigating measures

Figure 6.5. Risks and mitigation measures

Risk	Level	Mitigating measures
Inability to hire and keep qualified and competent personnel	Initial high	Ring fencing by donor and from year 3 onwards increase salary level
Financial sustainability: expected revenues from mining not coming through	Low	Written evidence of rights transferred from GPZ to the ADVZ has already been obtained
Political interference: pressure to accept shopping lists of local government / Overburdening: many organizations turn to Agency as a "solution" to relieve their spending pressure problems	High	With capacitated staff good alternatives can be provided if current projects are of low priority ADVZ should develop a clear and transparent policy how to deals with funding requests
Too powerful Agency, that is seen as a (rich) financing body	Low	Are perceptions only, may be cause for the risk above
Lack of political support or acceptance by other sectors / stakeholders; GPZ as the shadow of the past	Medium, temporarily	When capitated staff and showing results, acceptance will increase
Unclear mandate and/or overlaps with other institutions	Low	Ensure focus on key gaps, supporting existing institutions within ADVZs mandate
Over-dependency on current leadership	Initial high	With qualified staff dependency will decrease
Change of leadership	Medium	Current leadership has strong commitment, but can possibly not refuse a high position on GOM
Too wide range of activities (lack of focus), losing credibility	Low	A focused programme in 2 components has been proposed
Loss of credibility following engagement in unviable investments	Low	this will not occur easily with private investment and with guidance of TA

6.15 Operational instruments and administrative arrangements

The Formulation Mission recommends channelling the Dutch funds to a Special Fund with the name Inclusive and sustainable development for the Zambezi Valley, assigned to the Development Agency for the Zambezi Valley (ADVZ). The Special Fund is a Special Account in the Bank of Mozambique, it is therefore "on-budget", but "off-CUT" (CUT is the "Single Treasury Account" (*Conta Unica do Tesouro*)). The Agency

can directly draw from this Fund, with a countersignature of an assigned senior staff of the Department of the Treasury of the Ministry of Finance.

To establish this Fund, a number of documents needs to be prepared:

- The procurement rules that need to be in line with the Procurement rules of the GOM. Basically, the rules establish some ceilings for the various types of procurements, such as the value below which direct purchase is allowed, the value for which three quotations are needed, and the value above which a public tender process has to be started. The procurement process and contracts are monitored by the “Administration Tribunal”.
- The Agency should have established an organogram that allows the allocation of the financial transfers and to implement the programme in an effective, efficient and transparent manner. The Agency should keep an archive with physical documents that allows to identify and back-up all financial and technical operations of the Agency for the respective programme
- The financial and technical implementation should be audited by a recognized external auditor.
- It should be clarified how and who in the Agency is directly involved in the financial, administrative and technical management of the programme.

The Agency needs to formulate a programme operational manual (OM) that minimally embraces the points mentioned above. The OM needs to be countersigned by the Embassy of the Netherlands

6.16 Monitoring and Evaluation

In the inception phase a detailed baseline study will be conducted that will provide targets for the outputs and results of the programme; the baseline study needs to be synchronised with the logframe, so SMART indicators can be defined that form the basis for the monitoring of the programme.

The ADVZ will conduct monitoring and evaluation (M&E) at the overall development impact level, as well as at the (agribusiness) project level. Therefore, staffs with specific M&E tasks are included in the staff for sub-component 1.1. and sub-component 1.2. These staff will support staff involved on the other sub-components as far as M&E is concerned. It is not necessary to have specific M&E officers for sub-component 1.3 and both sub-components of Component 2.

The monitoring will be result-oriented.

An external evaluation mission will be conducted at the start of year 4 (one year before the end of phase 1), to assess performance, and decide on the continuation with the second phase of 3 years.

6.17 Duration

Experience had shown that programmes that seek to introduce changes in agricultural production, processing and marketing requires a long time perspective. Setting up an inclusive agribusiness requires a long gestation period, due to time required for the necessary right to land use (DUAT), obtain basic services (connection to the grid, water, access roads), to test technology (varieties, distance and time of seeding, harvest, etc.) to establish a market, select and train smallholders and emergent farmers.

This support programme that seeks to yield results in inclusive agribusiness needs to have a sufficient long period. In addition to that the ADVZ is a very young agency, that needs to set-up itself, requires extensive capacity building, before it becomes fully effective.

Based on the above, the Formulation team proposes an implementation period of 7 years, consisting of an inception phase (one year) a first phase of 3 years) and a second phase (3 years). An external evaluation mission will be conducted to assess progress made and take a decision on continuation with the second phase.

During the inception phase, the Agency should establish its core teams (“critical mass”). The inception phase should be used to:

- Prepare training needs assessment of ADVZ and develop a CB/training plan;
- Prepare the Global Plan of Operations and the Operational Plan for the first year;
- Conduct a detailed baseline study, and based on this detail and define targets (SMART indicators for the results and outputs of the logframe);
- Formulate collaboration with a consortium of Dutch knowledge institutes and conclude a MoU
- Identification and needs assessment of partners for Component 2, and establish partnerships with local organizations through a MoU.

The Formulation team proposes to have in the first year one full-time international TA to support the ADVZ in the inception phase. This TA is preferably to be provided by the Dutch consortium of knowledge institutes. However, to show the importance of this TA, it has been included in the budget as a separate item (see budget file).

6.18 Programme cost and financing

Appendix 4 presents the detailed programme budget. In this section the main elements are presented, as well as the points of departure for the calculation of the various budget items.

Figure 6.6 presents the budget by component, for the inception phase (1 October – 31 December 2013), and the first phase (year 2-4) and the second phase (year 5- 7). The total budget for the 7 years is 10.6 million EUR. The budget for the inception phase is 1.6 million EUR, and for the first phase 7.8 million, bringing the total of the inception and first phase to 9.4 million EUR.

The highest annual budget is planned after the inception phase, as the ADVZ has to build up its staff. A long-term expert is foreseen during the inception phase to assist the general director in conducting the key activities foreseen in the inception phase (see Section 6.17). The expenditure for the partnership activities with Mozambican partners is effectuated from the second year onwards.

The budget has been divided in two components, component 1 (74%) represents the funds that accrue to / are spent by the ADVZ for CB of its staff. Three sub-components have been included under Component 1. In addition a CB unit included and general management and logistic staff is included. In this unit also cost for training, workshops and seminars are included.

Component 2 (26%) represents funds that are allocated to key partners of the ADVZ, i.e. private and public organizations that are involved in skills development and provision of business development services.

Figure 6.6. Programme budget by component, year and phase (x 1000 EUR)

Programme components	Inception Phase	Year 2	Year 3	Year 4	Phase 1	Year 5	Year 6	Year 7	Phase 2	Budget	Share
1 - Capacity built in ADZ	1,760	2,311	1,609	993	4,915	479	369	368	1,215	7,889	74%
1.1 - Strategic studies, planning	965	1,377	809	525	2,712	222	233	232	686	4,362	41%
1.2 Technical and financial assistance agribusiness	264	396	327	198	920	99	69	69	237	1,421	13%
1.3 Promotion of investment and securing finance	87	110	102	58	270	29	14	14	58	414	4%
CB unit and logistical support	445	429	372	212	1,013	128	52	52	233	1,692	16%
2 Strategic partnerships Mozambiquan partners	0	649	867	705	2,220	162	162	162	487	2,707	26%
2.1 Skills development for agribusiness	0	433	605	497	1,534	108	108	108	325	1,859	18%
2.2. Provision of Business Development Services	0	216	262	208	686	54	54	54	162	848	8%
Gran total	1,760	2,961	2,476	1,698	7,135	641	530	530	1,702	10,597	100%

Figure 6.7 presents the budget by cost category.

Figure 6.7 Budget by cost category, per year and phase

PROGRAMME CATEGORIES	Inception Phase	Year 2	Year 3	Year 4	Phase 1	Year 5	Year 6	Year 7	Phase 2	Budget	Share
staff work and travel allowance	731	856	856	428	2,140	214	0	0	214	3,085	29%
goods and capex (ADVZ and Imp.Partners)	346	601	506	443	1,550	31	0	0	31	1,927	18%
TA (local)	165	338	259	173	769	86	86	86	259	1,193	11%
TA (international)	180	125	56	38	219	19	19	19	56	455	4%
Dutch and regional institutes	242	585	439	293	1,316	146	284	284	714	2,272	21%
local implementation partners	0	324	243	162	729	81	81	81	243	972	9%
Seminars and Work-Shops	45	45	45	45	135	45	45	45	135	315	3%
Auditing and M&E	51	86	72	117	276	19	15	15	49	377	4%
gran total	1,760	2,961	2,476	1,699	7,134	641	530	530	1,701	10,596	100%
Yearly share in total budget	17%	28%	23%	16%	67%	6%	5%	5%	16%	100%	

Expenditure for work and travel allowances for ADVZ is the most important single item, i.e. 29%. Currently, fierce competition is taking place in the recruitment of professionals, as there is huge demand from mining, building and real estate companies in Zambezi Valley, as well as from donors and NGOs implementing development programmes and projects in Mozambique.

The programme will support the ADVZ in offering a more competitive package of salaries and benefit, to allow ADVZ to recruit and keep working a professional team in the rural provinces of the country (“ring fencing”). The “work allowance” considered in the budget seeks to enable ADVZ to establish a strong team to meet the programme results.

The levels of the work allowance are based on the following sources:

Government salaries published in Decree n° 13/2012, May 11, 2012 and the Decision of the Ministry of Finance of May 11, 2012; A sample of main salary groups were taken as reference, and compared with current salaries offered in Tete and Maputo:

- Service Directors working for mining companies in Tete are earning monthly salaries of 10,000 USD (including housing and local travel to Maputo, excluding benefits of training);
- Technicians (not necessarily high level education) with 5-7 years of experience with essential skills receive 5,000 to 6,000 USD (full package, duty station Tete);
- In Maputo, high Level technicians, with 5-10 years of experience costs not less than 2,500 to 3,000 USD.

The current salary and work allowance levels are presented in Figure 6.8

Figure 6.8 Salary levels at ADVZ and work allowance

Position	Yearly Salary (Mzm)	Monthly Salary (Mzm)	Monthly Salary (EUR)	Work Allowance	Total Income
General Director	1.606.000,00	114.714,29	3.018,80	2.750,00	5.768,80
Deputy General Director	1.477.520,00	105.537,14	2.777,29	2.750,00	5.527,29
Services Director	1.220.560,00	87.182,86	2.068,00	2.250,00	4.318,00
Chief of Department	963.600,00	68.828,57	1.811,28	2.000,00	3.811,28
Executive Secretary	674.520,00	48.180,00	1.267,89	1.500,00	2.767,89
High Level Technician N1	311.996,00	22.285,43	586,46	1.500,00	2.086,46
Administrative Assistant/Financial/Logistics/Others (average)	84.823,20	6.058,80	159,44	1.500,00	1.659,44

1. Average of 38,00Mzm/EUR

2. Salaries include Taxes and Social Security (From around 5% to 35%)

ADVZ should consider these levels in developing a detailed table with work allowances for each individual technical, management and administrative staff position mentioned in Figure 6.11), staying within the total yearly budgeted amount.

The share of capital expenditure in the total budget is 10%, for ADVZ mainly for the setting up of business development support service centres. Capital expenditure under Component 2 is for incubating facilities and technology centres and addressing specific needs for local implementing partners. The total cost is 18% of the budget.

A third important cost element is cost for **international technical assistance (ITA) and the institutional partnerships with Dutch knowledge institutions** (21%). The main task of ITA and the institutional partnerships is to build capacity in the ADVZ and its partners. It is clarified that the institutional partnerships with Dutch knowledge institutions will cover cost of ITA, but also includes training to ADVZ staff provided in the Netherlands or in Mozambique. This budget is allocated for each component and sub-component, that will allow the ADVZ to negotiate MoU (TORs, fees, expenses, number days, procedures, operationalization, and deliverables) mainly with Dutch institutes, and eventually with regional ones (if justification of inexistence in the Netherlands of quality and competitive offer for specific competencies is provided). Within this budget line the following are eligible costs:

- Total fees and expenses to pay for international and regional assistance;
- 10% of local taxes that are due to all technical assistance contracts with foreign organizations;
- To allow the General Director and respective Component Coordinators of ADVZ to travel out of the country to negotiate MoU's with Dutch and regional (SA) institutions, as well as to do promotion of investment in Netherlands and regionally.

Local Technical Assistance (LTA) is allocated by component and sub-component that will allow the ADVZ to negotiate with individual consultants and organizations (fees, taxes, expenses, number days, procedures, operationalization, etc.). This budget line under Subcomponent 1.3., includes funds to hire a local consultant to prepare detailed investment opportunities presented in section 4.2.3 The ToRs should be developed just after project launching and procurement procedures should immediately take place.

A maximum of 7-10 investment opportunities should be prioritized (establishing selection criterions based on section 4.2. and further elaborated with CDI). Consultancies should focus on developing market assessments, financial analysis (capex and working capital investment, current costs, margins, etc.), potential local partnership and specific inclusive and sustainable partnerships with emergent entrepreneurs and smallholder farmers.

- Funds are allocated for the establishment in Business Development Centers for both rehabilitation and equipment's purchase to make these crucial facilities functional, serving private sector development in Zambezi valley;
- Locations: Beira, Quelimane and Caia;
- Dimension: average of 400 square meters each (for cost calculations). This makes 60% of this area usable, what means 240 square meters usable for all organizations in each center;
- Organizations to be installed: ADVZ; CPI; CEPAGRI; CEP; IPEME; others.

ADVZ will negotiate with each organization, location by location, which is the facility required (if any, because in some of this location each of this organization might already have good facilities so no need to duplicate).

- References to space allocation: 50 square meters for a common meeting room; 60 square meters for ADVZ team and facilities (ADVZ team will support the business center operation and support all

the project activities in the region/province); 130 square meters to be split between the remaining organizations; In the Business Center in Caia ADVZ and IPEME will be represented and a common area will be installed for several services and facilities that are unavailable in Caia.

Figure 6.9 presents share of Dutch funding in the programme budget

Break down of Dutch Funding	Inception Phase	Year 2	Year 3	Year 4	Phase 1	Year 5	Year 6	Year 7	Phase 2	Budget	Share
Total Dutch Funding	1,715	2,916	2,431	1,400	6,746	405	121	0	527	8,988	85%
staff work and travel allowance	731	856	856	428	2,140	214	0	0	214	3,085	29%
goods and capex (ADVZ and Imp.Partners)	346	601	506	424	1,531	16	0	0	16	1,893	18%
TA (local)	165	338	259	121	718	43	22	0	65	947	9%
TA (international)	180	125	56	26	208	9	5	0	14	402	4%
Dutch and regional institutes	243	585	439	205	1,228	73	71	0	144	1,615	15%
Services and goods for local implemetation partners	0	324	243	113	680	41	20	0	61	741	7%
Auditing and M&E	51	86	72	82	241	9	4	0	13	305	3%
Share in annual total budget	97%	98%	98%	82%	95%	63%	23%	0%	31%	85%	

The Dutch funding has a share of 97% in the first year and 95% in the first phase, whereas it drops to 31% in the second phase. The overall share of Dutch funding is 85%.

Figure 6.10 Share of ADVZ in the programme budget

Break down of ADVZ Funding	Inception Phase	Year 2	Year 3	Year 4	Phase 1	Year 5	Year 6	Year 7	Phase 2	Budget	Share
Total ADVZ	45	45	45	298	388	236	409	530	1,175	1,609	15%
staff work and travel allowance											
goods and capex (ADVZ and Imp.Partners)	0	0	0	19	19	16	0	0	16	35	0%
TA (local)	0	0	0	52	52	43	65	86	194	246	2%
TA (international)	0	0	0	11	11	9	14	19	42	53	1%
Dutch and regional institutes	0	0	0	88	88	73	213	284	570	657	6%
Services and goods for local implemetation partners	0	0	0	49	49	40	61	81	182	231	2%
Seminars and Work-Shops	45	45	45	45	135	45	45	45	135	315	3%
Auditing and M&E	0	0	0	35	35	9	12	15	36	71	0
Share in annual total budget	3%	2%	2%	18%	5%	37%	77%	100%	69%	15%	

The overall share of the ADVZ in the total programme budget is 15%. The contributions of ADVZ are being delivered mainly in the second phase.

Figure 6.11 presents an overview of technical staff that is included in the topping-up of salaries and subsidies (per diem), i.e. 34 positions, including 4 administrative staff. Experience with earlier projects (for instance the Dutch funded Biofuel programme with CEPAGRI has shown that topping-up is effective when not only technical staff, but also logistical staff and management is included. With 5 management positions, the total number of staff is 39.

Besides 10 high level technicians for sub-component 1.1, 6 for sub-component 1.2 and 3 for sub-component 1.3, the unit of CB and logistical staff is supported with 9 positions and the general management with 6 positions. This number of 34 is considered by the Formulation Team to be the “critical mass”, with a total allocation of 2.5 million EUR (salaries and subsidies).

The ADVZ may wish to increase the number of staff over time, when the work requires once they are in the position to offer higher salaries, but should do so outside the current budget.

In addition, the ADVZ may recruit more staff in areas that are not covered by this programme, for instance in case the ADVZ will be the trustee for donor-funded trust funds, as considered by USAID, staff attached to the implementation unit of the World Bank growth pole project in Tete, or in other fields that fall under its mandate, for instance experts on social services.

Figure 6.11 Staff of ADVZ included in salaries and subsidies cost category by sub-component

Components and units	Number
Sub-component 1.1 - Strategic studies, planning and capacity building	
- High Level Technicians - Studies and Planning	10
- Economist (macro)	1
- Sociologist- rural development specialist	1
- Environmental expert & forestry	1
- Civil engineering (with skills in Hydraulics and irrigation)	1
- Agriculture and livestock	1
- Fisheries	1
- Mining/geologist	1
- IT	1
- Data management; statistics, GIS	1
- M&E	1
Sub-component 1.2 Technical and financial assistance to agribusiness development	6
- Agronomy and fisheries	2
- Agroeconomist	2
- Business Economist	1
- Data management	1
Sub-component 1.3 Promotion of investment projects and securing finance	3
- Business Economist	2
- Financial economist	1
Management unit	6
General and Deputy Director	2
Component Coordinator	1
Delegations Manager (Caia, Beira, Quelimane)	3
Unit- CB and logistical support to ADVZ & CB to partners	9
Senior CB to ADVZ	1
Assistant to ADVZ	1
Senior – skills development and business development services	2
Assistant skills development and business development services	1
Senior	1
Senior procurement	1
Assistant procurement	1
Senior financial unit	1
Assistant financial unit	1
Total number of staff	34

Appendices

Appendix 1 – Terms of reference

Terms of reference EKN

TECHNICAL SUPPORT PROGRAMME TO THE ZAMBEZI VALLEY DEVELOPMENT AGENCY

TERMS OF REFERENCE FOR FORMULATION MISSION

1. BACKGROUND

The Council of Minister's Decree nr. 23/2010, June 30th created the Agência de Desenvolvimento do Vale do Zambeze – Zambezi Valley Development Agency- Zambezi Agency, a Government Institution that has as main mandate the promotion of the Zambezi region and to seek for national and international financing of projects that will booster economic growth and will reduce poverty of the people of the region. More, it has also as development objectives the achievement of sustainable, equitable and participatory management of the natural resources of the Zambezi Valley (land, water, mineral resources, forestry, fisheries,), and to increase the derived social and economic benefits for the people living in the basin, and other stakeholders”.

The Zambeze Agency has started its operations in May 2011, after the appointment of the Director General and during the last 10 month has focused its attention on the preparation work needed, namely:

- Recruitment of the main personal, having secured for the top management posts good skilled and high experienced body;
- Consignation of funds from taxes (from mining and land in the Valley), securing the Agency with the minimal funds needed for its basic needs;
- Review of the main Government strategies and plans (both national and local), enabling the alignment of the Agency views and plans with the Government priorities. The meetings held with some Ministers and with the Governors of the four provinces covered by the Valley helped not only for the introduction of the Agency, but also for a direct share of views and priorities.
- Identification and negotiation of funds for development projects in the Zambeze Valley. So far the following projects are under preparation, to start implementation early next year:
- World Bank funded “Agriculture and Fisheries Development project in the Zambeze Valley”, with an amount of USD 100,0 million allocated under the recently approved Country Assistance Strategy (CAS). The Zambeze Valley is leading the preparation of this project.
- World bank funded “Growth Poles Project”, with an amount of USAD 100,0 million allocated in the CAS. This project covers Zambezy Valley and Nacala Corridor. The Zambeze Agency is the implementing unit for the components in the region and Gazeda is responsible for the Nacala Corridor.
- “Trade and Agroindustry Development project in the Zambeze Valley, with an amount of USD 100,0 under negotiation with the Exim Bank of China. This is a commodity line of credit, where the Agency has the role of coordination of the negotiations and setting up of the implementation structure.
- “Agriculture mechanization Project”, with an amount of USD 50,0 under negotiation with the Exim Bank of India. This is a commodity line of credit, where the Zambeze Agency has the role of coordination of the negotiations and setting up of the implementation structure.

The Zambeze Agency is at earl stage of the preparation of the “Zambeze Valley Development Action Plan”, which is scheduled to be presented to the Government by September 2012, for its approval. This will

constitute the main guiding document (policy, strategy and multi sectorial plan), not only for the Zambeze Agency itself, but for the Government intervention towards the Valley development.

The above mentioned projects pose serious challenge for the Zambeze Valley capacity of coordination and technical capacity to deliver in time the results expected.

To ensure sustainability of the outputs of the Institution, and to address more substantively the development objectives as expressed in its mandate, a technical support to the Agency needs to be considered in at least two different stages and areas. Firstly, there is a need to strengthen institutional capacity contracting short term consultancy that will identify and design development projects with stakeholder participation within the Basin at all relevant levels. Secondly, there is a need to identify and establish appropriate mechanisms for facilitating, implementing and managing sustainable poverty reduction oriented development investments in the Basin.

The present is a Terms of Reference for a mission that will design and present a project proposal that addresses technical and financial support to the Agency as above mentioned, for submission to the Government of the Netherlands.

2. OBJECTIVES

The overall objective of the Mission will be the formulation jointly with the Agency and in large consultation with stakeholders, a programme to:

- i. Identify opportunities for sustainable investment/business developments in in the Zambezi Valley, covering the priority value chains, such as horticulture, cereals (rice and maize) livestock (cattle and goats for beef and dairy), fisheries (small scale aquaculture) and poultry.
- ii. Build capacity of the Agency to manage and implement identified projects. Support to local government institutions and private sector, through the Agency, should also be considered for capacity building, within the mechanisms being established in the program.

It is envisaged that the programme should have a time frame of at least five years, which the first two should be appraised for evaluation in order to proceed to the next phases. Following the evaluation a decision will be made on continuation of the support or adaptation of the programme if needed.

3. SCOPE OF WORK AND OUTPUTS

The main focus of the assignment will be to:

- a) Study relevant documentation (national, regional) on Zambezi Valley, resources and potential, focussing on use of land, water resources, flora and fauna as key elements for economic development of the region.
- b) Describe the development context of the Zambezi Agency with respect to key actors, ongoing programmes and investments, donors and financiers, resources, opportunities and constraints for development,

- c) Analyse the relevance of the Zambezi Agency outputs within the overall development context in Zambezi Valley, and analyse its capacity to execute its mandate, propose areas for strengthening and ways of cooperation with stakeholders.
- d) Develop and prepare a programme proposal for future support to the growth and development of the Zambezi Valley region, that focuses on the following three key components:
 - i. Institutional support to Zambezi Agency and, through it, to other relevant agencies and stakeholders in the Zambezi Valley, to ensure efficient, sustainable, equitable and participatory integrated development of the region towards to food security and nutrition and poverty alleviation.
 - ii. Identification of opportunities for investment / business development in the priority value chains.
 - iii. The establishment of appropriate, efficient and sustainable institutional and financing mechanisms for facilitating and managing investments in poverty-oriented development projects in the Basin, with particular focus on small scale agriculture and fisheries in linkage with medium and large scale national and international companies
- e) Based on prior item (d) develop an outline of a programme and respective action plan that includes:
 - i. Project details with identification of key main objectives and key outputs, activities (including narrative and log frame and time table) with different roles for state, civil society and private sector,
 - ii. Programme costs and financing,
 - iii. Benefits and beneficiaries, poverty impact, environmental impact, gender impact,
 - iv. Administrative arrangements, institutional framework and lines of communication and responsibility,
 - v. Operational proposal, including plans for convening a donor conference (if necessary) to solicit other donors participation on financial and technical support for implementation of projects for poverty alleviation and economic and social development at the lowest appropriate levels in the Basin.
- f) Based on the prior item d(2) a mission will be planned to the Netherlands to present the opportunities for business in the Valley in the Netherlands

4. TEAM COMPOSITION

The Mission team will work closely together with two professionals of the Zambezi Agency, who will act as key resource persons and dialogue partners. The expenses involved in their participation in activities associated with the assignment will be covered by the budget for the assignment.

The nature and organisation of the assignment requires a team of at least four consultants consisting of:

- a team leader who is familiar with Institutions Development, Development of Poverty Reduction Development Projects and has ample experience working with participatory development processes and institutional development related to fast developing countries;

- two or three team members, with extensive experience in technical, planning and investment aspects covering the fields of agribusiness, fisheries, water resources development; and if possible with knowledge and expertise in the broader development framework in southern Africa region with particular reference to Mozambique,
- an environment specialist, and
- financial economist.

5. SCHEDULE of WORK

5.1 Work Schedule

It is envisaged that the work will comprise:

- i. An introductory meeting in Maputo to establish relevant contacts, collect additional information, undertake an initial assessment of Zambezi Agency and discuss and agree upon a detailed work schedule for the assignment (2 Days Work).
- ii. A short period of fieldwork in Zambezi Valley (Tete, Manica, Sofala and Zambezia Provinces), 3 days each province during which the Team will interact with the main actors, namely local authorities, private sector representatives (CTA/CEP and Civil Society Organizations. A complete list of potential contacts will be supplied before mission starts; (two weeks work)
- iii. Presentation of the Draft programme document to the Zambezi Agency and to the Netherlands Embassy (3 Days), followed by the detailed drafting of a full project proposal (next two weeks).
- iv. A visit to the Netherlands to present the opportunities for business in the Valley in the Netherlands

5.2. Timing and Reporting

The assignment is expected to begin early June 2012.

6. RESPONSABILITIES

The Netherlands government is responsible for:

- Contracting consultants for the formulation mission;
- Provide qualified staff from the EKN to accompany the mission;
- Paying the costs associated with the mission (consultants' fees, per diems and travel costs); and
- Making comments on the mission report, in conjunction with the Zambezi Agency.
- Supporting the visit of the Agency to the Netherlands and the meeting with the Dutch investors

The Mozambique government is responsible, via Zambezi Agency, for:

- Organising the visit programme in Maputo and four provinces;
- Providing adequately qualified staff to accompany the mission; and
- Making comments on the mission report, in conjunction with the Netherlands government.

7. DEVERABLES

- An electronic version of the draft mission report and of the draft programme, submitted in English to the Mozambique and Netherlands government, including a proposed programme and budget.
- Four copies of the final mission report, submitted in English and Portuguese sent to the contracting agency.

Addition to TOR/EKN:

Whereas capacity building is specifically mentioned in the TOR, in discussions with ADVZ, GON and EKN this aspect was highlighted, and the Formulation Team was informed that the following paragraph was added to the TOR:

“There is a need to invest in skills development, in order to make the Zambezi Valley developments sustainable. The local people should be seen as economic actors and change agents, but in certain situations require support to enhance their existing skills and strategies. Depending on the situation in which they find themselves, there will be demand for different skills. The mission needs to look at how to link skills training and the mission findings in the best way possible.”

Summary ToR for environmental specialist

The planned mission has the tasks to identify investment possibilities in the food producing sectors and to formulate an institutional support programme for the Zambezi Valley Development Agency.

As part of the mission team, the tasks of the DSU representative are specifically:

- to identify opportunities for environmentally and socially sustainable investment in the sectors mentioned, offered by the ecosystems in Zambezi Valley;
- to identify, discuss within the mission team and, to the extent possible, help formulate proposals that avoid or mitigate social and environmental risks, including climate change linked risks, of the investment options the mission intends to propose;
- to see to it that any investment that the mission intends to propose complies with sustainability requirements of the Netherlands parliament and that, in case there might be any cause or reason for possible doubt on a proposals sustainability, EIA is foreseen to substantiate the proposals sustainability;
- to formulate proposals that guarantee adequate development of environmental and social expertise within the Zambezi Valley Development Agency.

Expected results are:

- an environmentally and socially sustainable programme for possible investment in the food producing sector in the Zambezi Valley;
- an institutional development programme for the Zambezi Valley Development Agency that secures adequate application within the agency of the national social and environmental safeguard requirements.

For this assignment you represent the Commission in the mission and you speak and formulate written contributions on behalf of the Commission.

You are expected to contribute to the draft general report of the mission. In addition you are expected to simultaneously yet separately report your findings to the Commission, copying and justifying your contribution to the general draft mission report.

You will keep close coordination with the Commission during your assignment to discuss any relevant subject. The Commission technical secretary that will co-ordinate the DSU work for Mozambique is Reinoud Post.

Appendix 2 – Logical framework

	<i>Intervention logic</i>	Objectively verifiable indicators	Assumptions
Overall objectives	<i>Poverty reduction, sustainable use of natural resources</i>	<ol style="list-style-type: none"> 1. reduction of poverty in Zambezi Valley by x % 2. sustainability criteria were adhered to in approved investment projects 	
Project purpose	<i>Inclusive and sustainable development in the Zambezi Valley</i>	<ol style="list-style-type: none"> 1. increase of income of small holder agriculture by x%, xyz MT 2. increase of employment generated by commercial agriculture and agribusiness (no of work days) 3. increase of commercial investment in priority value chains, including Dutch investment (no of commercial enterprises, and investment volume; no of smallholders engaged, all operating more than three years after starting; no of processing companies operating in rural areas) 4. spreading of public and private investment over the four provinces (balanced development). 	<ul style="list-style-type: none"> - GOM supportive in reforms in agricultural sector; - Business environment improves - Political stability - Increase of open competition, no favourism towards party or state enterprises
Expected Results	1. The ADVZ conducts effectively strategic studies and planning	<ol style="list-style-type: none"> 1. regional data base established and regularly updated 2. strategic policies and plans for Zambezi Valley/provinces/districts formulated (PEOT-tete, Multi-sectoral Plan, prospects of irrigation, Delta Plan Lower Zambezi), 3. supported provincial and district strategic and annual action plans 4. an effective platform for dialogue public-private sector and effective stakeholder coordination in place 	<ul style="list-style-type: none"> -stakeholders accept guidance of ADVZ - ADVZ adheres to facilitation and does not implement projects - ADVZ is able to broaden its focus outside government circles - business community is interested in sustainable / inclusive development
	2. The ADVZ effectively facilitates agribusiness development	<ol style="list-style-type: none"> 1. pre-feasibility studies conducted 2. investment portfolio developed 3. one shop business development centres effectively functioning 4. inclusive business models developed and applied 	
	3. The ADVZ effectively mobilizes and channels funds	<ol style="list-style-type: none"> 1. specific and permanent financing mechanisms developed 2. investment packaged negotiated with GOM and donors 	
	4. Strengthened service providers for SMEs (BDS)	<ol style="list-style-type: none"> 1. more private BDS with head office or with installations operating in the Valley; 2. increase agricultural enterprises able to develop profitable business models (% and no); 3. increase agricultural enterprises able to make profitable marketing plans (% and no); 4. increase agric. enterprises with good management and accounting systems (% and no) 	<ul style="list-style-type: none"> - Organizations in partnership with ADVZ are committed and continue to operate in Zambezi Valley
	5. Strengthened educational centres for skills development	<ol style="list-style-type: none"> 1. more skilled agricultural and technical workers and staff by category (high, middle and low), (in % and no) 2. better facilities and staff of collaborating institutes 3. more young entrepreneurs with vocational and management skills developing activities along the value chain stream (from private extensionists, agrodealers, farming, processing, logistic and distribution, BDS) 	

Results	Activities	Means	Costs EUR	Assumptions
1 The ADVZ conducts effectively strategic studies and planning	Setting up data base on natural and human resources in the Zambezi valley Participate in the formulation of policies, strategies and plans for the Zambezi Valley; support local governments in the operationalization of provincial strategic plans and district land-use plans; set-up public private policy dialogues/platforms, promote networking within private sector; conduct monitoring and impact assessment of development projects	Provision of TA; Seminars; Exchange visits	Inception: 1,410 Phase I: 3,725 Phase II: 909 (incl. CB)	- ADVZ able to recruit and keep staff - ADVZ running/operation costs covered by government budget (sustainability)
2 The ADVZ effectively facilitates agribusiness development	Formulate projects and conduct pre-feasibility studies; Screen project proposals, incl. sustainability criteria; provide key information, so enterprises can draw up business plans, propose management models of irrigation schemes, service parks, etc.; Give technical advice to and coordinate with the local public agencies and private sector in implementing development projects; Advice on terms and conditions of required external financing for identified projects; Monitor and evaluate development projects (implementation level)	TA; business development centres; exchange visits;	Inception: 264,000 Phase I: 920,000 Phase II: 237,000	- high level TA can be timely made available
3 The ADVZ effectively mobilizes and channels funds to clients	Promote projects to be implemented in the Zambezi Valley at the national and international level and raise funds; Negotiate and set up the implementation structure of large development programmes; Channel funds from donors and own revenues (mining) to priority projects in provinces and districts in the Valley; Assist investors in securing the best source of finance; Advise on terms and conditions of credit lines; Participate in set-up of independent mechanism for agribusiness funding; Launch innovative financial and training instruments for young entrepreneurs with management and technical skills (business incubators; equity funds that provide seed capital, etc.)	TA, Publications and media; networking; Promotional tours	Inception: 87,000 Phase I: 270,000 Phase II: 58,000	
4 Strengthened educational centres (agribusiness skills)	Conduct training needs assessment and SWOT of each identified entity; Prepare MOI and action plan; Conduct capacity building of teacher and pedagogic and management staff; Develop appropriate Curricula and teaching materials; Provide opportunities for internships; Establish links and networks with other institutions and agribusiness entrepreneurs	TA, equipment Small infrastructure	Phase I: 1,534,000 Phase II: 686,000	- high level TA can be timely made available - partners accept guidance of ADVZ
5 Strengthened service providers for SMEs (BDS)	Conduct needs assessment and SWOT of each identified entity; Prepare MOI and action plan; Provide training to staff; Develop new curricula; Support increase outreach to customers. Establish links and networks with other institutions and agribusiness entrepreneurs	TA equipment Small infrastructure	Phase I: 325,000 Phase II: 162,000	
Precondition: the ADVZ is able to recruit the a “critical mass” of staff for each component in the first half of the inception period of 1 year				

* During the inception phase a detailed logical framework with SMART indicators will have to be made.

Appendix 3 – Persons met

Name	Position	Institution, organisation	Location
Frédérique de Man	Ambassador	Embassy of the Royal Kingdom of The Netherlands	Maputo
Jan Huesken	Head of Development Cooperation	Embassy of the Royal Kingdom of The Netherlands	Maputo
Celia Jordão	Programme Officer Sustainable Development	Embassy of the Royal Kingdom of The Netherlands	Maputo
Felix Hoogveld	Programme Officer Water Sector	Embassy of the Royal Kingdom of The Netherlands	Maputo
Herco Jansen	Water expert	Wageningen University	Maputo
Rik Overmars	Country Director	Netherlands Development Organisation -SNV	Maputo
Timothy Born	Agriculture, trade and Business Office	USAID	Maputo
Elsa Mapilele	Agribusiness and rural finance advisor	USAID	Maputo
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Pedro Arlindo	Agricultural Economist	World Bank	Maputo
Luis Macário	Water specialist, Water and sanitation programme	World Bank	Maputo
Roberto Albino	Director	ADVZ	Maputo
Hélio Banze	Director	DNA	Maputo
Erasmó Nhachungue	Director of Planning and Studies	Ministry of Coordination of Environmental Action (MICOA)	Maputo
Ana Isabel Senda	Director of Land Use Planning	Ministry of Coordination of Environmental Action (MICOA)	Maputo

Elias Machava	Development Manager – Training and Human Capital	FIPAG (Fundo de Investimento e Património de Abastecimento de Água)	Maputo
Júlio António	Staff Business development services	CPI	Maputo
Emílio Celestino Almoço	Technician	Special Economic Zones Services, GAZEDA	Maputo
Simão Pedro Santos Joaquim	Director	Special Economic Zones Services, GAZEDA	Maputo
Momad Piaraly Juthá	Director	DNP (National Directorate of Planning), MPD	Maputo
Nelson António	Regional Director	CEPAGRI	Manica
Manuel Nordino Wello	Head of Dept of Analysis and Information	CEPAGRI	Manica
Mouzinho A. Carlos	Director	Provincial Labour Directorate	Manica
José Maria	Economic Advisor	Governor's office	Manica
Virgulino Nhate	Director	Provincial Planning and Finance Directorate	Manica
António Mufane	staff	Governor's office	Manica
Natércia Nhabanga	Director	Provincial Directorate of Environment	Manica
Fernando Quingston	Technician	Provincial Directorate of Agriculture	Manica
Lázaro Gumende	Head	Provincial Services of Geography and Cadastre	Manica
Carlos de Sousa Moisés	Provincial Representative (Delegado)	Centro de Promoção de Investimentos (CPI)	Manica
Victor Fausino	Vice President	CEP Manica/GrupoMafuia	Manica
Maria do Céu	Agricultural producer (vegetables)	CEP/ASAM	Manica
Essuf Valy Adamo	Director - Agricultural producer (fruit)	CEP/FRUTIS Lda	Manica
Samuel Gesdo	Agricultural producer	CEP/AGROMACO, Lda	Manica
Lucas Mujuju	Agricultural producer (soya products)	So.Soja	Manica
Joaquim Guitas	Chicken producer	Guitas Chicken	Manica
Hilário Muranga??	Producer	ASAM	Manica
Edgardo Cândido	Chicken producer	AbílioAntunes	Manica
Silvina Antunes	Chicken producer	AbílioAntunes	Manica
Joaquim Langa	National Manager	iTC (Community Land Initiative)	Chimoio, Manica
Paulo Mabota	Manager – Tete	iTC (Community Land Initiative)	Chimoio, Manica
Sérgio Yé	Manager – Sofala, Manica	iTC (Community Land Initiative)	Chimoio, Manica
Eduardo Toselli	Intern	iTC (Community Land Initiative)	Chimoio, Manica

Rafael dos Santos Massinga	Director	Instituto Superior Politécnico de Manica	Chimoio, Manica
Manuel Aleixo Safur	Director	DECA/Mozbife	Chimoio, Manica
Imane Momade Aligy	Agribusiness official	Beira Corridor	Chimoio, Manica
André Vonk	Executive Director	Senwes Grainlink de Mozambique Ltd.	Chimoio, Manica
Manuel Aleixo Safur	Director	D.E.C.A./Mozbife	Chimoio, Manica
Carlos de Sousa Moisés	Delegate	CPI – Manica delegation	Chimoio, Manica
Amos Ubisse	Farm manager	Companhia do Vanduzi S.A. / Mozfoods	Manica
Cláudia Garcia	Supply chain manager	Companhia do Vanduzi S.A. / Mozfoods	Manica
Cristovao Nhamaleze	Production support	District Services of Economic Activities	Bárué, Manica
Fernando Taigon	Permanent Secretary	District government	Bárué, Manica
Elisa Arissone G. Somane	Permanent Provincial Secretary	Provincial Government of Sofala	Beira
Rocha Amborete	Assistant Director	Provincial Directorate of Planning and Finance	Beira
Gimo Simango	Technician	Provincial Directorate of Agriculture	Beira
Ermelinda Xavier Maquenze	Director	Provincial Directorate of Coordination of Environmental Affairs	Beira
Marcelo Amaro	Director	Provincial Directorate of Public Works and Housing	Beira
José Ferreira	Director	Provincial Directorate of Industry and Commerce	Beira
Mamade Abdumemane	Head	Provincial Services of Geography and Cadastre	Beira
Gabriel de Oliveira	President	CEP-Sofala	Beira
Ramiro de Silva	Member	CEP-Sofala / Copoleite cooperative de produtores de leite	Beira
Sicandar Esmail	Member	CEP-Sofala/Nhamacherene Comercial Lda.	Beira
Armando Panguene	Member	CEP-Sofala	Beira
Domingos Flávio	Member	CEP-Sofala	Beira
Filomena Rodrigues	Member	CEP-Sofala / SARESL	Beira
Herculano Machango	Member	CEP-Sofala / Machanga Construction	Beira
Francisco Itai Megué	Governor	Zambezi Province	Quelimane

Itidio Afma Jose Banda	Provincial Director	Department of Agriculture	Quelimane
Graciano Francisco	Provincial Director	Department of Planning and Finances	Quelimane
Isabel Manda	Staff	Department of Fisheries	Quelimane
Amandio Joaquim Macunna	Provincial Director	Department of Industry and Commerce	Quelimane
Jesus Gunia	Advisor	Department of Agriculture	Quelimane
Jib F Bila	Economic advisor	Office of the Governor	Quelimane
Américo Jeremia	Director	Department of DPOPHZ	Quelimane
Juma Cassimo	Director	Department of DPCAZ	Quelimane
Lazaro T. Mathara	Director	Department of DPAZ/SPGC	Quelimane
Amélès Miguel	Senior Staff	Department of DPOPHZ	Quelimane
Rogério L Henriques	Administrator/ adjunct	Grupo Madal (agricultural enterprise, coco, cattle)	Quelimane
Jan de Moor	Engineer, consultant ORIO	Design and development Nantes irrigation scheme	Quelimane
Nelson Sacoor N. Dos Sntos	Economista/Zambezi delegation	CEPAGRI	Quelimane
20 directors and managers	Business in construction, agriculture, fisheries, chemicals, mechanics, etc.	Members CEP	Quelimane
Gulário Selimase	President of Supervisory Board	Empresa Orizicola da Zambezia, SCnt. Rice Milling Plant	Nicoadala, Zambezia
Rosário Herreira	Owner	Poultry Farm	Nicoadala, Zambezia
Ross Grier	Farm manager rice production	Olam, internatial enterprise	Mopeia, Zambezia
Lindo Celestino Gancho	representative	District Office	Mopeia, Zambezia
Albino Carrero	Farm manager (bell pepper production)	Once Mozambique	Mopeia, Zambezia
Julio Alferes	Head of Caia Delegation	ADVZ	Caia, Sofala
Luis Kwengwe	Senior staff Caia Delegation	ADVZ	Caia, Sofala
James White Ant	Manager	Dalman Forestry	Caia, Sofala
Leovigildo Marcos	Director	National Disaster Institute INGC	Caia, Sofala
Gervásio Cristoxão	Services of Economic Activities	District Office	Caia, Sofala
José Paulo Saguat	Services of Economic Activities	District Office	Caia, Sofala
Pinto José Martins	Infrastructure	District Office	Caia, Sofala

Benjamin Luis Michou	Administrator	District office	Caia, Sofala
Ferrad Massasse	Manager	CDAC, Centre for Agricultural Development	Caia, Sofala
Antonio Domingas Juacio	representative	Association Mbatilamukene	Caia, Sofala
Sergio Manuel Afonte Gitosa	Farm manager	Hoyo Hoyo agribusiness	Caia, Sofala
Jose Fique	Director/teacher	EPAC (vocational centre agriculture and livestock)	Caia, Sofala
Atanasio Rocha	businessman	Hotel, trade, inputs supplier	Caia, Sofala
Michael Rex	Farm manager (sugar for ethanol)	Grown Energy Zambezi	Sena, Sofala
Tsitsi Mubwulzwe	Assistant to the manager	Grown Energy Zambezi	Sena, Sofala
Joaquim Jose Arotu	Administrator	District Office	Chemba, Sofala
David Boane	Head	Services of Economic activities	Chemba, Sofala
Jorge Aquimo	Head of Tete Office	ADVZ	Tete
Samuel António Buanar	Secretary Permanente	Provincial Government	Tete
Filipe Duarte	Director	Department of Environment	Tete
Maria Cunheti	Director	Department of Fisheries	Tete
Elsa da Banca	Director	Department of Labour	Tete
Gerardo Jereion	Director	Department of Planning and administration	Tete
Custodio Vincente	Director	ARA Zambezi	Tete
Leonardo Júnior	Provincial Delegate	CPI	Tete
	Director	Department of Public Works	Tete
Elton Michel	Agricultural producer	CEP-Tete/IAP Iba	Tete
Manuel Alfinar	Agricultural producer	CEP-Tete/ACEAGRARIOS - agronegocio	Tete
Carlos Cardoso	Consultant	CEP-Tete/KCL Servicos	Tete
Antonio Vieira	Agricultural producer (macadamia)/civil construction	CEP-Tete/Valley MACS/Beery Juice/Mozambique coastal	Tete
Bonifácio Marihemmo	Seed producer/agricultural inputs distributor	CEP-Tete/Bonimar Agro-comercial	Tete
Luis Pereira	Site Manager	CEP-Tete/Siemens (Infrastructure and Cities)	Tete
Benjamin Gemo	Head	Provincial Services of Geography and Cadastre	Tete
Maria Magdalena Fernandes	Permanent Secretary	District government – Cahora Bassa	Cahora Bassa, Tete

Albertino Sinate	Director	District Services of Economic Activity (SDAE) – Cahora Bassa	Cahora Bassa, Tete
Jorge Mafuca	Provincial Director	Fish Research Institute (IIP)	Cahora Bassa, Tete
Louis Boshoff, Kurt Heyns, Norman Goosen, Damian Newmarch	Manager and staff	Mozambezi Fisheries (kapente and tilapia acuaculture)	Cahora Bassa, Tete
Oscar	Technician	Small-scale Fisheries Development Institute (IDPPE)	Tete
Damian Newmarch	General Manager	Mozambezi – CahoraBassa	Cahora Bassa, Tete
Laura Bravo Cardoso	Managing director	Carne do Zambeze Ltd.	Tete
Ockert Swan	Director	Municipal Slaughterhouse Tete	Tete
Carlos Arthur	Staff member	Provincial Directorate of Agriculture	Tete
Gersone Nloenes	Director	District Service for Economic Activities	Angonia, Tete
Cordaria Mário Colar	Staff member	District Service for Economic Activities	Angonia, Tete
Emasse Guinose	Staff member	District Service for Economic Activities	Angonia, Tete
Job Pita	Staff member	District Service for Economic Activities	Angonia, Tete
Mario Assane	Staff member	District Service for Economic Activities	Angonia, Tete
Rosario Nimosse	Staff member	District Service for Economic Activities	Angonia, Tete
Evans Trindade	Staff member	District Service for Economic Activities	Angonia, Tete
José Kunamizana	Staff member	District Service for Economic Activities	Angonia, Tete
Damiao Pitala	Acting Permanent secretary	District Service for Economic Activities	Angonia, Tete
Centurio Launde Saliate	Farmer / secretariat	Farmer Association Agropecuaria Tirimbique	Angonia, Tete
	Farmer / member	Farmer Association	Biribiri, Tsangone district

Appendix 4 – Detailed budget

See separate Excel file.

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Appendix 6 – Suggestions for a visit of ADVZ and partners to The Netherlands

Background

The AVDZ acknowledges the need to attract additional investment to boost an inclusive agricultural development of the Zambezi Valley. The Netherlands is well-known for its knowledge centres and business community in the areas of food, agriculture and water. The triangle Research – Education – Extension, with its corresponding institutions, has been a key driver of the success of the Dutch Agribusiness. AVDZ is very interested to further explore opportunities to collaborate with Dutch institutions. Staff of RNE Mozambique is available and eager to help the Agency to develop good partnerships with private, public and civic entities in the Netherlands. With the new policy emphasis on a stronger engagement of Dutch private sector in development processes, several instruments are available to facilitate Dutch private investment in developing countries, including Mozambique.

The idea is that AVDZ staff will conduct a short mission to the Netherlands to visit promising, high potential contacts, presenting investment opportunities in the Zambezi Valley and developing concrete investment and business deals. Follow-up will be given to Netherlands Economic Mission that visited Mozambique between 4 and 7 October 2011, headed by Henk Bleker, Minister for Agriculture and Foreign Trade. At the same time, the AVDZ may wish to prepare Memos of Understanding (MoUs) with knowledge institutes for the implementation of Component 1 of the Support Programme (see chapter 6).

Approach

The visit of AVDZ to the Netherlands needs to be well prepared and well-targeted to ensure concrete results. Appointments with relevant contacts need to be made and the people involved will have to be briefed so that they have their materials, questions etc. ready. Also the Agency needs to be prepared for each visit, bringing along information relevant for each meeting including a set of key questions.

The Dutch Agentschap NL will be requested to assist where needed with making appointments, especially with private sector. The participants of the 2011 Economic Mission to Mozambique will have to be contacted to obtain an update of whether or not any follow-up activities were undertaken.

It is suggested a project officer from the EKN Maputo will accompany the AVDZ staff. An active involvement is expected from staff of the Ministry of Foreign Affairs, Directorate-General for International Cooperation and the Ministry of Economic Affairs, Agriculture and Innovation.

In the Netherlands one focal point from one organization, such as Centre for Development Innovation (Wageningen UR), Agentschap NL or KIT, could be made responsible for the preparatory trajectory, organizing the visit itself, accompanying AVDZ staff and doing follow-up work.

Possible visits

It is suggested AVDZ will visit relevant contacts in 4 key sectors:

- consultancy and advisory organizations in the areas of agriculture and water (i.e. Royal HaskoningDHV, Oranjewoud, Arcadis, Grontmij, MottMcDonald);
- knowledge and educational centres related to agriculture, food and water (i.e. Wageningen University, Van Hall Larenstein, AERES group, KIT);
- private business engaged in agriculture, food and beverages (i.e. seed potato businesses, seed companies, dairy companies, animal feed producers, sellers of agricultural equipment for sectors such as poultry, dairy, etc., food and beverage multinational as Unilever, Heineken);

- entities involved in supporting private sector activity in developing countries (i.e. PUM, Agentschap NL, CBI, FMO, Netherlands - African Business Council, Ministry of Economic Affairs, Agriculture and Innovation);
- Additional: ADVZ may wish to visit the ISS, TU-Delft, ITC for their possible involvement in sub-component 1.1. of the Support Programme to prepare an MoU for a long-term institutional partnership.

Wherever possible staff from the institutions to be visited who have experience in Mozambique, will be involved in the preparation, the actual visit of AVDZ and the required follow-up activities.

Appendix 7 – Sustainability Matrix

Sustainability analysis of the Agency Support Programme

For the purpose of the sustainability analysis, the DSU representative used the framework that was sent on 27 July by the Netherlands Commission of Environmental Assessment, following discussions with DGIS.

Political economy

1. Political framing and relevance of theme – importance of environment & climate in the political agenda/arena and options do deal with/influence this in the program

What is the current context concerning this criterion?

Environment and climate have gained importance in the political agenda during recent years, following the cyclone and associated floods in 2001 and the Zambezi flooding in 2008. In addition, the donors including the World Bank, continuously emphasise these themes in their dialogue with the Government. There is a strong link between environment, climate change and poverty that hold each other hostage.

Does the proposed programme take this criterion into account?

The Mission has added the word “sustainable” in the title of the support programme to the Agency, and introduced the themes of environment and climate change in various parts of the proposal (see chapter 3 on contributions in this report).

Are there opportunities to influence this criterion in the programme?

The Agency operates at meso-level, whereby it can influence national policies, through its direct linkage with the Ministry of Planning and development, to which it reports. The Agency will also play a role as main counterpart of the World Bank in its planned Development Policy Operation Programme, that will make available US 150 million following improvements in the area of policies, legal instruments and institutions in various sectors. The World bank is also preparing a Climate Change programme, in which the Agency can play a role. Furthermore, the Mission has proposed that the Agency also plays a role in promoting environment and climate change activities in the basin.

2. Natural resources management (NRM) arrangements and responsibilities, including land-use planning – quality and implementation of arrangements for land use planning and NRM and options do deal with/influence this in the programs

What is the current context concerning this criterion?

The Ministry of Environment has started with District land use planning and completed planning in 95 Districts. The plans include a diagnosis of the actual land use and a proposal with recommended land use at scale 1;400.000. The Ministry intends to set up a specialised institute for land use planning, to train staff and improve the exercise. Implementation and follow-up of the plans is lacking.

With respect to NRM, there are policies and strategies defined within the Ministry of Environment, and less so within the Ministry of Agriculture. There is a wide gap between the policies and strategies on paper and the implementation in the field. This is particularly relevant to forest management, soil conservation and forest fires.

Does the proposed programme take this criterion into account?

The proposed programme includes Multi-Sector Agenda setting cum Strategic Environmental Assessment, followed by a land use planning exercise as a primary activity. Furthermore, an important component of the programme will consist of supporting the local authorities (Provinces and Districts) with land use planning.

Are there opportunities to influence this criterion in the programme?

The Mission has proposed, apart from the agriculture value chains, a number of natural resources management activities, such as apiculture, sustainable forest management, sustainable agriculture and development of a delta plan.

3. Environmental economic and commercial costs & benefits –costs of unsustainable development are known and taken into consideration

What is the current context concerning this criterion?

This does not seem to be the case in the political economy of Mozambique.

Does the proposed programme take this criterion into account?

The Multi-Sector Agenda cum SEA provides a good basis to analyse synergies, bottlenecks and issues within and between sectors that allows for weighing and taking into consideration of environmental costs.

Are there opportunities to influence this criterion in the programme?

A set of assessment criteria for screening projects and investments have been proposed by the Mission that need to be further worked out in the inception phase. In these criteria, it is proposed to screen projects.

Policy culture & representation

4. Primary processes implementer – consideration of environment & climate issues in the core processes of the implementer and options do deal with/influence this in the MASP

What is the current context concerning this criterion?

The Mission Statement of the Agency mentions “forming strategic partnerships for the accelerated, integrated and inclusive development of the Zambeze valley”. The Agency has been established only recently: the internal regulations were approved in 2011 and only sparsely make mention of environment and climate issues. Only a handful of staff has been appointed so far.

Does the proposed programme take this criterion into account?

The Mission has included a number of activities to take into account this criterion, such as the screening method of project and investment proposals, the proper application of environmental impact assessment, and the proposal for a number of environment “value chains”. In the capacity building of the Agency, that will be outlined in more detail in the inception phase, this will receive more attention.

Are there opportunities to influence this criterion in the programme?

The biggest opportunity is for the Agency to actively participate in the Multi-Sector Agenda setting cum SEA together with the Ministry of Environment, as has been stressed in the programme. This will help to set make the staff more aware and form their mindset, to take into consideration environment and climate issues.

5. Representation in decision-making – inclusion of stakeholders in planning and decision making during implementation of the programs

What is the current context concerning this criterion?

The Agency is too young to allow an assessment of their performance with respect to stakeholder participation. The predecessor of the Agency (GPZ) did not have an exemplary record, and that lesson has been learnt. In the mandate of the Agency, it clearly states “inclusive” development.

Does the proposed programme take this criterion into account?

It is at the core of the programme. The Agency will not implement projects itself, but will coordinate, stimulate and capacitate implementing agencies. Stakeholder representation is key for this. The Agency will have an

Advisory Board (consulting) consisting of directors of provincial services and invitees that convenes once per month.

Are there opportunities to influence this criterion in the programme?

The programme has included capacity building of partner institutions and relevant stakeholders as an important component. During the inception phase, a training needs assessment of stakeholders will be defined and will serve to make a capacity building programme.

6. Accountability and transparency – accountability & transparency of program implementation

What is the current context concerning this criterion?

The Agency is too young to assess their performance on transparency. However, the Mission was provided with an overview of expenditures and salaries of the Agency since its set up.

Does the proposed programme take this criterion into account?

The Mission has filled out a COCA form for this programme.

Are there opportunities to influence this criterion in the programme?

The Mission has proposed to include a Monitoring & Evaluation expert in each of the three components of the programme.

7. Business interests (NL and locally) – knowledge and inclusion of the opportunities for the private sector of climate and environment integration

What is the current context concerning this criterion?

As a result of the political history, development has so far been strongly government-led. There is, however, a fast growing recognition that the private sector has to play a more prominent role in economic development in general and the agricultural sector in specific (see PEDSA).

Does the proposed programme take this criterion into account?

This programme is strongly geared towards inclusion of the private sector, mainly in the food sector, with the requirement of including CSER aspects. Other sectors in the field of environment and climate change have been added in the programme such as sustainable forest management (environment) and delta management (climate change), in which the NL private sector and knowledge institutes could play a role.

Are there opportunities to influence this criterion in the programme?

There are opportunities in the programme to develop implementation mechanisms, that go beyond CSER as an add-on, for example to include emerging farmers as smallholders in the value chain, whereby they can benefit from support on input supply, training, marketing, etc.

Rule of Law

8. Law enforcement and corruption – options of the programme to deal with/influence this

What is the current context concerning this criterion?

In most international rankings, Mozambique is still among the world's worst performers in many categories, which despite its enormous potential and the latest fast developments in the mining sector, threaten the growth of the country, both economically and in other terms:

- 129th out of 133 countries in the World Economic Forum's global competitiveness index;
- 172nd out of 182 in the UN's comprehensive human development index;
- dropped from Freedom House's list of "electoral democracies" due to suspected corruption in electoral politics losing its recognition as a fair and open democracy;

- Mozambique dropped 7 positions in the World Bank's 2012 Ease of Doing Business report, ranking 139th out of 183 economies;

Does the proposed programme take this criterion into account?

The Agency will have separate financing & Accounting Department and an Administration & Assets Department. The regulations state that it will follow the Government procedures. There are no specific components in the programme dealing with this.

Are there opportunities to influence this criterion in the programme?

The Agency has the chance to show itself as a good example of a transparent institution, getting involved with reputable partners in investments in a transparent and integer manner. The involvement of EKN and the capacity building support programme will have a positive influence on this.

9. Contract security – options of the programme to deal with/influence this

What is the current context concerning this criterion?

In general there is an overall lack of enforcement of quality legislation and contract security at all levels and in all areas⁹⁸.

Does the proposed programme take this criterion into account?

Same as above criterion 8.

Are there opportunities to influence this criterion in the programme?

Same as criterion above 8.

Economic

10. Raw materials (continuity of supply, efficient use and production, energy supply) – programs contribute to sustainable use of raw materials

What is the current context concerning this criterion?

During the last years, Mozambique is realising a strong GDP, but it is noted that this originates from the exploitation of raw materials, such as coal, timber and fish. In general, these resources are exported without further processing, leaving little or no added value behind inside Mozambique. In addition, the exploitation of these resources is not considered to be sustainable.

Does the proposed programme take this criterion into account?

The Agency will support sustainable and inclusive development in the basin, which will be promoted by long term strategic planning and by screening of projects and investments. One of the project screening criteria includes sustainable natural resources utilisation.

Are there opportunities to influence this criterion in the programme?

A number of value chains on sustainable use of raw material have been proposed for support by the programme, such as sustainable forest management and sustainable fisheries. The inclusion of Dutch institutes with a clear focus on environment and sustainability such as Wageningen UR has been proposed.

⁹⁸ MDF, 2011. Support Mission – Food and Nutrition Security Strategy.

11. Business development services including appropriate technological innovation (RD&D) – programs strengthen/develop business development services

What is the current context concerning this criterion?

The lack of proper business development services (and markets) has been identified as a key constraint in the development of the agriculture sector. Although the government policy (PEDSA) emphasises a strong role for the private sector in agricultural development, it still has the tendency to fall back in “old behaviour” whereby the government should try to supply farmers with seed, credit, fertiliser, tractor services, etc. although it is not able to do so properly, thereby distorting the markets.

Does the proposed programme take this criterion into account?

As a result, business development services has been selected as an important value chains for investment support in the programme. It is geared at promoting agribusiness incubators, improving input supplies, providing post harvesting facilities, establishing demo plots & providing training.

Are there opportunities to influence this criterion in the programme?

There are opportunities in the programme to influence this, particularly by involving and supporting the private sector in business development services.

12. Sustainable trade – programs enhance sustainable trade

What is the current context concerning this criterion?

About 80% of the population is rural, strongly dependent on agriculture, constituting 29% of GDP, which is mostly based on subsistence farming. Hydropower, aluminium, gas and soon coal, form the major share of the export value. In addition, there is export of agricultural crops (such as cashew, cotton, sisal, citrus), timber and prawns. Environment and sustainable issues in trade are currently not considered.

Does the proposed programme take this criterion into account?

This is not included in the programme, but there are opportunities to include this when the Agency is fully operating and properly staffed (see below).

Are there opportunities to influence this criterion in the programme?

There are possibilities to promote the production of eco-cotton (without the application of pesticides and with soil conservation measures). In addition, there may be opportunities to promote sustainable trade in fish resources, timber (FSC) and honey. Involvement of CBI can be an option.

Social

13. Demographic trends – programs contribute to employment, and decent wages and work

What is the current context concerning this criterion?

The demographic trend in Tete Province consists of a strong migration towards the capital, as a result of the booming coal mining industry and the associated rising employment opportunities. Rural – urban migration as a result of rural poverty exists in Mozambique. Employment in the agricultural sector is mostly limited to large companies such as large pulp & paper companies, sugarcane irrigation schemes, sisal plantations, etc.

Does the proposed programme take this criterion into account?

The programme advocates an implementation model of private companies who associate with smallholders and emerging farmers (e.g. Vanduzi vegetables, OLAM rice). Smallholders should develop into emerging farmers who in turn should develop into commercial farmers, providing employment opportunities in the rural areas.

Are there opportunities to influence this criterion in the programme?

Stimulation of public private partnerships by the Agency, by bringing parents together and using seed money.

14. Land rights and security of tenure – programs contribute to strengthening land rights and security of tenure

What is the current context concerning this criterion?

Property rights are not formalised, and the Government is considered to be the owner of land in Mozambique. Smallholders can claim customary rights of access and benefits (DUAT). Investors can lease land for periods up to 50 years. Increasing pressure from land development while respecting community is increasingly challenging, such as the recent resettlements due to mining activities in the Province of Tete.

Does the proposed programme take this criterion into account?

The landuse plan (PEOT) is included as one of the first activities of the Agency, and could play a positive role in guiding future land use and zoning.

Are there opportunities to influence this criterion in the programme?

Opportunities to influence this in the programme are very limited, since the land tenure debate is an ongoing national policy issue.

15. Households vulnerability (including income, food security and health) – programs decrease households vulnerability

What is the current context concerning this criterion?

About 80% of the population is involved in subsistence farming, with a strong dependence on natural resources and climate, which renders them vulnerable in particular to floods, cyclones and droughts which may be exacerbated by climate change, but also to pests and diseases. The INGC has improved its early warning system of forecasting climatic events, which proves to be having effect (no food distribution in the last three years and the last flood in 2008 did not cause any loss of life).

Does the proposed programme take this criterion into account?

The programme is focussed on improving agricultural development and food security in an inclusive manner, and thus aims to contribute to reduced household vulnerability.

Are there opportunities to influence this criterion in the programme?

There are ample options to involve / include smallholders and emerging farmers in agriculture development projects that are supported by the Agency. One of the promising implementation mechanisms is a (large) private farm with surrounding outgrowers, who are able to benefit from access to inputs, training, credit, markets, etc.

16. Mechanisms for equitable benefit sharing, taxes, fiscal system – programs strengthen mechanisms for equitable benefit sharing

What is the current context concerning this criterion?

Most of the population in Mozambique lives outside the tax system. In general the fiscal system is not favourable for investments in S-E-CC⁹⁹. In general,

⁹⁹ Koning, P.C., 2012. Sustainability analysis of the food security Programme Mozambique.

Does the proposed programme take this criterion into account?

The Agency will receive 1% of the sales revenues of the coal mining (25% of the revenue tax of 4%) that will be made available to promote sustainable development in the basin. This is a form of tax redistribution or benefit sharing that may accumulate to large amounts of funds, considering the targeted extraction volumes of coal.

Are there opportunities to influence this criterion in the programme?

Benefit sharing is considered a key element of sustainability, whereby all stakeholders are committed to continue with the investment activity, and therefore this is included in the screening criteria of projects and investments.

17. Gender – programs take gender issues into account

What is the current context concerning this criterion?

The position of women is taken into consideration in policies and strategies, but the actual situation is similar to many other countries in Africa, whereby women tend to have many more duties than rights.

Does the proposed programme take this criterion into account?

There is no specific component in the programme dealing with this issue.

Are there opportunities to influence this criterion in the programme?

The promotion of the value chains “horticulture & vegetables” and “dairy” offer opportunities to include women. The Mission visited a large scale paprika farm in Mopei, that employed several hundred women.

Environment

18. Land and soil degradation – programs decrease land and soil degradation

What is the current context concerning this criterion?

Land and soil degradation is rated as one of the priority environmental issues in the five-year programme of the Ministry of Environment. Poverty and land degradation are closely related. Translation of policies and strategies to implementation appears to be very difficult.

Does the proposed programme take this criterion into account?

There are no specific activities on this topic included in the programme.

Are there opportunities to influence this criterion in the programme?

The programme includes a number of agribusiness value chains, in which sustainable land management could be integrated (mulching, zero tillage, etc.).

19. Water (safety, security, access) – programs increase water safety, security and access to water

What is the current context concerning this criterion?

Organisations involved in drinking water are FIPAG (major cities) and AAS (rural areas). The coverage of access to safe drinking water is low in Mozambique. ARA is responsible for water management and safety, while HCB and INGC also play a role. In the recent years, these organisations have stepped up communication and coordination, that has yielded immediate results in reduced flooding and improved early warning.

Does the proposed programme take this criterion into account?

The programme does not specifically focus on this area, but it will be part of the Multi-Sector Agenda cum SEA exercise in which the Agency participates.

Are there opportunities to influence this criterion in the programme?

A major opportunity lies in the development of a specific delta plan for the Zambezi Delta, as is proposed as one of the activities of the programme. Another opportunity lies in strengthening cooperation with ARA Zambezi, that will receive technical support from EKN.

20. Ecosystem services and spatial planning – programs maintain/increase ecosystem services and the quality of the spatial planning system

What is the current context concerning this criterion?

Spatial planning as currently undertaken by the Ministry of Environment is mostly a physical planning exercise, with inventories of natural resources, infrastructure and socio-economic data. Ecosystems services as a concept is not widely known or used in Mozambique.

Does the proposed programme take this criterion into account?

This will receive full attention in the Multi-Sector Agenda cum SEA exercise in which the Agency participates, whereby the ecosystems approach will be used as a key principle in planning and development.

Are there opportunities to influence this criterion in the programme?

One of the important activities is to support and stimulate the local authorities (Provincial and District) with spatial planning, in which the Agency can introduce the aspect of ecosystem services (based on their experiences gained in the above mentioned exercise).

21. Forests – programs contribute to sustainable forest management

What is the current context concerning this criterion?

Regrettably, the forest resources in the project area are being depleted and degraded on a large scale by itinerant agriculture, forest fires and logging (219.000 ha/year). The UN-REDD is preparing a project to improve forest management in combination with carbon sequestration.

Does the proposed programme take this criterion into account?

It is proposed that the programme includes the promotion of the “value chain” sustainable forest management. There are examples of private companies (e.g. Dalmann) that manage a forest concession in a sustainable and inclusive manner, involving surrounding communities in timber processing, apiculture, planting of indigenous trees, protection against forest fires, etc.

Are there opportunities to influence this criterion in the programme?

There are other direct and indirect opportunities to contribute to sustainable forest management, such as apiculture, improving land management (reducing itinerant agriculture), forest fire protection, sustainable timber trade, etc.

22. Renewable energy – programs strengthen the use of renewable energy

What is the current context concerning this criterion?

Large parts of the rural areas are not connected to the grid, and the major energy needs are supplied by the forests (fuelwood and charcoal). The sudden interest to invest in biomass and biofuel plantations is slowly fading away.

Does the proposed programme take this criterion into account?

The programme does not include renewable energy activities.

Are there opportunities to influence this criterion in the programme?

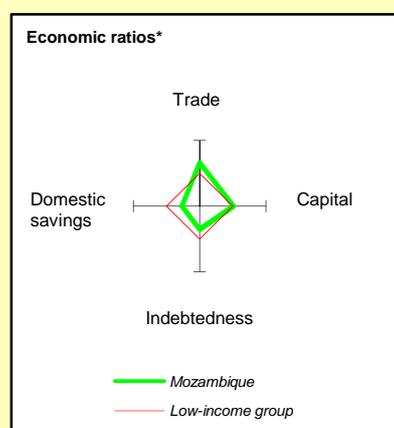
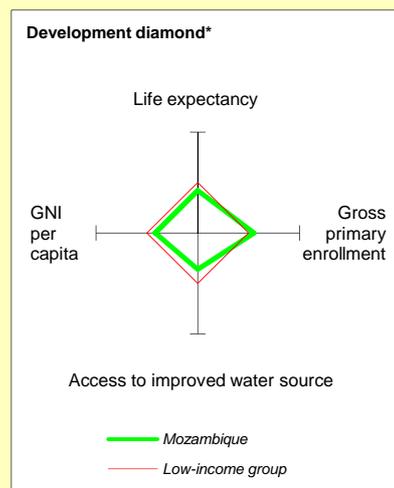
There may be opportunities to include coal briquette making in the programme, based on second grade coal, as a way of replacing wood based energy sources and making optimum use of the lower quality coal resources.

Appendix 8 – Mozambique at a glance

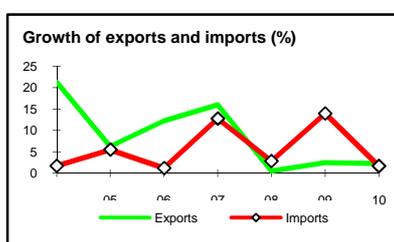
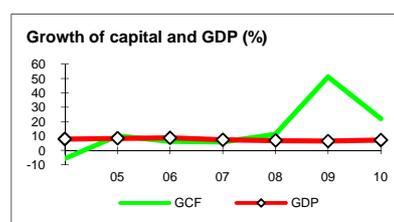
Mozambique at a glance

3/29/12

POVERTY and SOCIAL	Mozambique	Sub-Saharan Africa	Low-income		
2010					
Population, mid-year (millions)	23.4	853	796		
GNI per capita (Atlas method, US\$)	440	1,176	528		
GNI (Atlas method, US\$ billions)	10.3	1,004	421		
Average annual growth, 2004-10					
Population (%)	2.4	2.5	2.1		
Labor force (%)	2.3	2.8	2.6		
Most recent estimate (latest year available, 2004-10)					
Poverty (% of population below national poverty line)	55		
Urban population (% of total population)	38	37	28		
Life expectancy at birth (years)	50	54	59		
Infant mortality (per 1,000 live births)	92	76	70		
Child malnutrition (% of children under 5)	18	22	23		
Access to an improved water source (% of population)	47	61	65		
Literacy (% of population age 15+)	55	62	61		
Gross primary enrollment (% of school-age population)	115	100	104		
Male	121	104	108		
Female	109	95	101		
KEY ECONOMIC RATIOS and LONG-TERM TRENDS					
	1990	2000	2009	2010	
GDP (US\$ billions)	2.5	4.2	9.8	9.6	
Gross capital formation/GDP	22.1	31.0	20.5	23.7	
Exports of goods and services/GDP	8.2	16.5	24.5	25.3	
Gross domestic savings/GDP	-5.8	10.5	2.2	5.7	
Gross national savings/GDP	6.6	10.4	9.0	10.8	
Current account balance/GDP	-31.1	-16.4	-12.0	-14.5	
Interest payments/GDP	1.5	0.8	0.3	0.5	
Total debt/GDP	186.8	169.6	41.3	43.0	
Total debt service/exports	26.2	12.5	1.3	2.6	
Present value of debt/GDP	20.7	
Present value of debt/exports	57.9	
	1990-00	2000-10	2009	2010	2010-14
(average annual growth)					
GDP	6.1	7.8	6.4	7.2	7.5
GDP per capita	2.9	5.1	4.0	4.8	5.2
Exports of goods and services	13.1	14.3	2.4	2.2	5.4



STRUCTURE of the ECONOMY	1990	2000	2009	2010
(% of GDP)				
Agriculture	37.1	24.0	31.5	31.9
Industry	18.4	24.5	23.6	23.4
Manufacturing	10.2	12.2	13.6	13.1
Services	44.5	51.5	44.9	44.8
Household final consumption expenditure	92.3	80.6	84.7	82.1
General gov't final consumption expenditure	13.5	9.0	13.1	12.2
Imports of goods and services	36.1	37.0	42.8	43.2
	1990-00	2000-10	2009	2010
(average annual growth)				
Agriculture	5.2	8.3	10.7	8.5
Industry	12.3	8.5	5.6	6.2
Manufacturing	10.2	7.1	2.8	3.0
Services	5.0	6.9	3.8	6.1
Household final consumption expenditure	5.8	5.8	0.5	1.1
General gov't final consumption expenditure	3.2	-2.9	18.1	2.5
Gross capital formation	8.6	8.1	51.1	22.0
Imports of goods and services	7.6	6.2	14.0	1.7



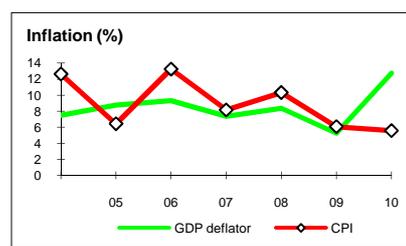
Note: 2010 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

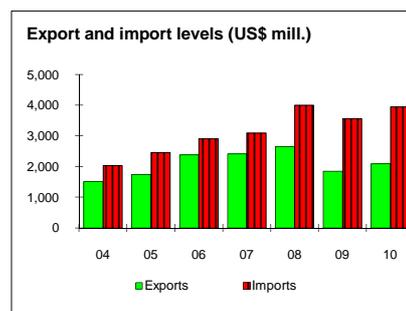
PRICES and GOVERNMENT FINANCE

	1990	2000	2009	2010
Domestic prices				
(% change)				
Consumer prices	43.7	12.7	6.1	5.6
Implicit GDP deflator	34.1	12.0	5.3	12.7
Government finance				
(% of GDP, includes current grants)				
Current revenue	17,036.3	15,235.1	20,738.2	20,620.3
Current budget balance	2,361.7	3,526.4	2,965.2	4,385.7
Overall surplus/deficit	-12,518.5	-8,403.7	-11,451.2	-9,443.6



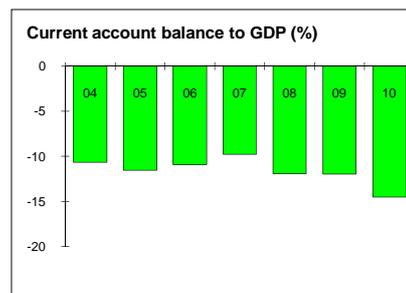
TRADE

	1990	2000	2009	2010
(US\$ millions)				
Total exports (fob)	126	364	1,853	2,089
Cashew nuts, raw cashew and cashew oil	15	20	19	20
Prawn	43	92	36	39
Manufactures	..	14	33	34
Total imports (cif)	780	1,163	3,570	3,948
Food	..	87	227	243
Fuel and energy	..	144	486	586
Capital goods	..	310	1,113	1,323
Export price index (2000=100)	124	100	157	171
Import price index (2000=100)	111	100	142	152
Terms of trade (2000=100)	112	100	111	112



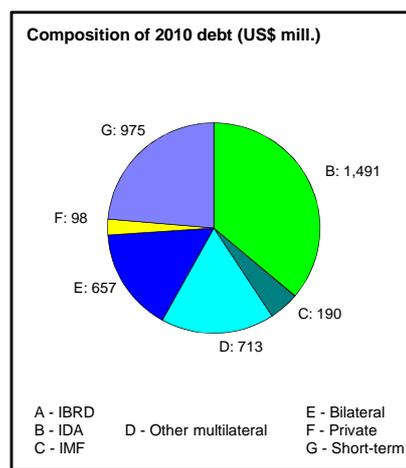
BALANCE of PAYMENTS

	1990	2000	2009	2010
(US\$ millions)				
Exports of goods and services	229	689	2,464	2,741
Imports of goods and services	850	1,547	4,305	4,692
Resource balance	-621	-819	-1,841	-1,951
Net income	-145	-193	-95	-233
Net current transfers	0	315	764	793
Current account balance	-766	-697	-1,171	-1,391
Financing items (net)	772	774	1,523	1,631
Changes in net reserves	-6	-77	-352	-240
Memo:				
Reserves including gold (US\$ millions)	232	745	1,658	1,729
Conversion rate (DEC, local/US\$)	0.9	15.4	27.5	34.0



EXTERNAL DEBT and RESOURCE FLOWS

	1990	2000	2009	2010
(US\$ millions)				
Total debt outstanding and disbursed	4,600	7,205	4,046	4,124
IBRD	0	0	0	0
IDA	268	760	1,356	1,491
Total debt service	79	96	43	90
IBRD	0	0	0	0
IDA	1	6	10	15
Composition of net resource flows				
Official grants	750	756	1,368	1,443
Official creditors	164	98	417	245
Private creditors	26	-31	20	71
Foreign direct investment (net inflows)	9	139	881	789
Portfolio equity (net inflows)	0	0	0	0
World Bank program				
Commitments	105	62	211	344
Disbursements	74	97	199	163
Principal repayments	0	2	2	5
Net flows	74	96	197	158
Interest payments	1	4	9	10
Net transfers	73	92	189	148



This report is part of a support initiative of the Netherlands government to the Zambezi Valley Agency in Mozambique. Investment opportunities in agricultural value chains in the Zambezi Valley are identified, including opportunities for the Dutch private sector. There are good prospects for agribusiness development in value chains, such as vegetable growing, dairy, poultry, vegetable growing and fisheries. Furthermore, suggestions are provided to support capacity development of the Zambezi Valley Agency.

More information: www.cdi.wur.nl

