

Document of
The International Fund for Agricultural Development

REPUBLIC OF MOZAMBIQUE

**PRO-POOR VALUE CHAIN DEVELOPMENT PROJECT
IN THE MAPUTO AND LIMPOPO CORRIDORS
(PROSUL)**

PROJECT DESIGN REPORT

Africa II Division
Programme Management Department

REPORT No. 2728-MZ
25 September 2012

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CURRENCY EQUIVALENTS

Currency Unit	=	MZM
USD 1.00	=	MZM 28

WEIGHTS AND MEASURES

International metric system

FISCAL YEAR

1 January to 31 December

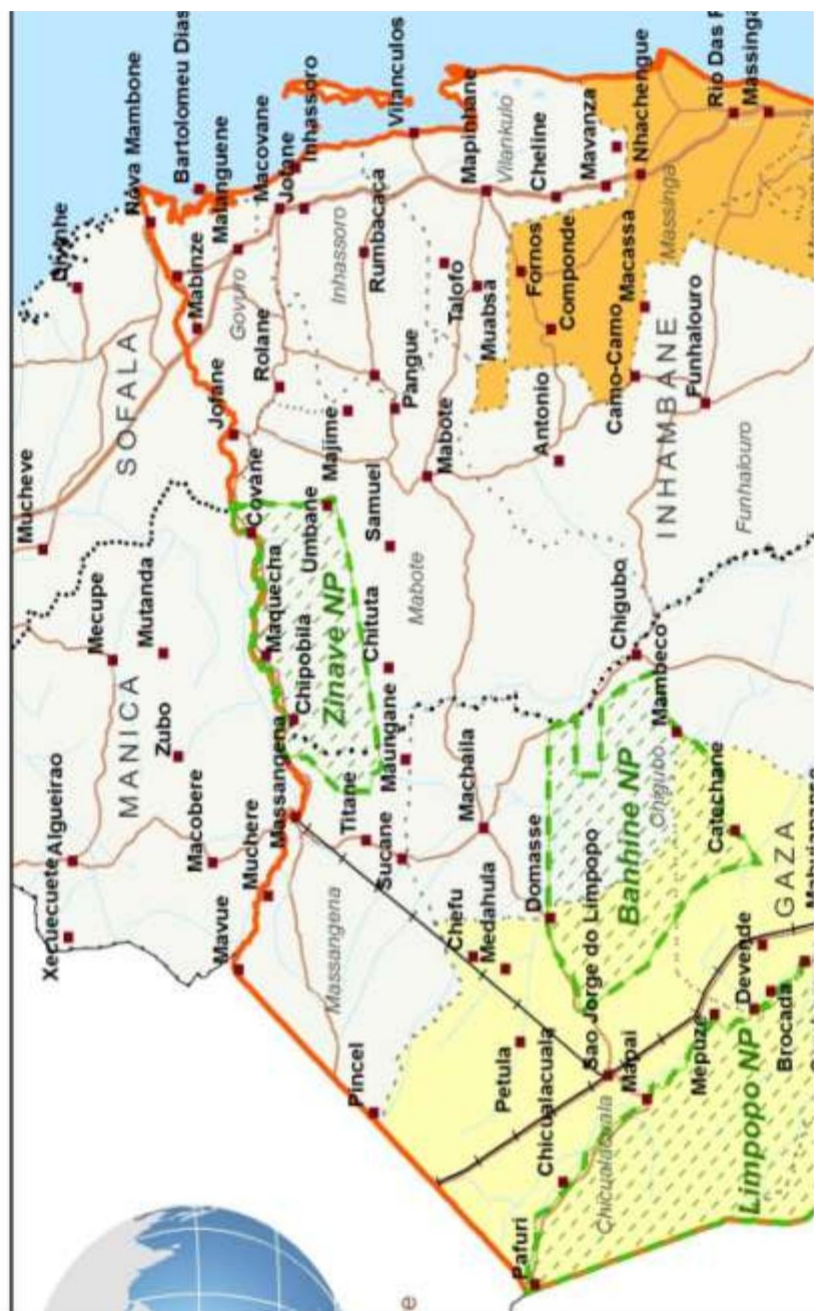
ABBREVIATIONS AND ACRONYMS

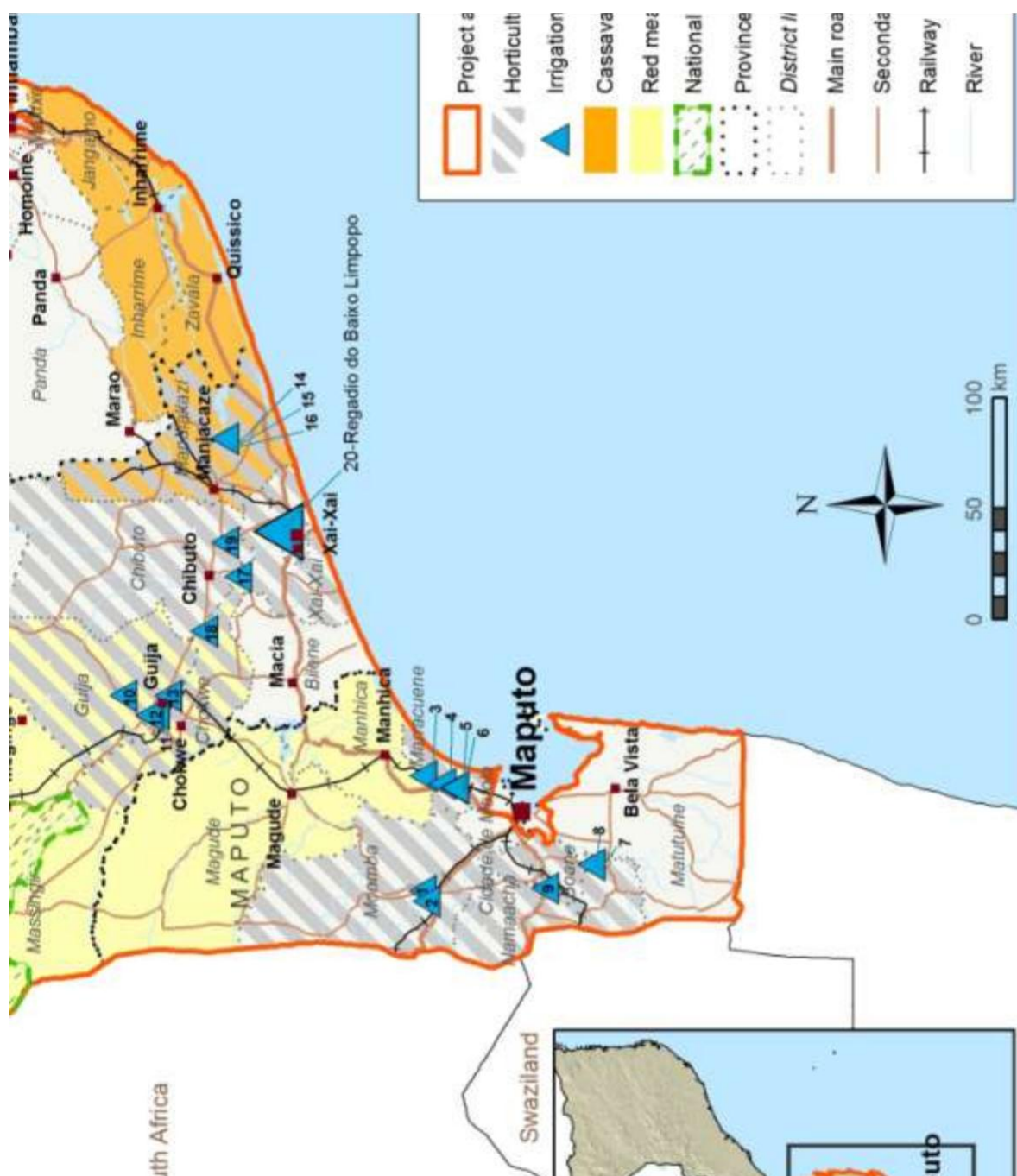
AGRA	Alliance for a Green Revolution in Africa
AMPIA	Association of Agricultural Input Providers of Mozambique
AMPCM	<i>Associação Mozambicana para Promoção de Cooperativas Modernas</i> Mozambican Association for the Promotion of Modern Cooperatives
AfDB	African Development Bank
ANE	<i>Autoridade Nacional das Estradas</i> (National Road Authority)
ASAP	Adaptation for Smallholder Agriculture Programme
AWPB	Annual Work Plan and Budget
BAGC	Beira Agricultural Growth Corridor
CAADP	Comprehensive Africa Agricultural Development Programme
CEPAGRI	<i>Centro de Promoção da Agricultura</i> (Centre for the Promotion of Agriculture)
COSOP	Country Strategic Opportunities Programme
CPE	Country Programme Evaluation
CTA	<i>Confederação das Associações Económicas de Moçambique</i> Confederation of Business Associations of Mozambique
CUT	<i>Conta Unica do Tesouro</i> (Single Treasury Account)
DFID	Department for International Development (of the UK) <i>Direcção Nacional de Extensão Agrária</i>
DNEA	National Directorate for Agriculture Extension <i>Direcção Nacional de Serviços Agrários</i>
DNSA	National Directorate for Agriculture Services <i>Direcção Nacional de Terras e Florestas</i>
DNTF	National Directorate for Land and Forests <i>Direcção Nacional de Serviços de Pecuária</i>
DNSV	National Directorate for Livestock Services <i>Direcção provincial da Agricultura</i>
DPA	Provincial Directorate for Agriculture
DUAT	<i>Direito de Uso e Aproveitamento da Terra</i> Right of Use and Enjoyment of Land
FAO	Food and Agriculture Organisation of the United Nations

FARE	Fund for the Support of Economic Rehabilitation
FDA	<i>Fundo de Desenvolvimento da Agricultura</i> (Agriculture Development Fund)
FFS	Farmer Field School
FO	Farmer Organisations
IT ITC	Information and Telecommunication
IsDB	<i>Iniciativa para Terras Comunitárias</i>
KM	Islamic Development Bank
LLC	Knowledge Management
LPO	Limited Liability Company
LSP	Livestock Producers' Organisations
LSTP	Lead Service Provider
LTA	Land Tenure Service Provider
M&E	Land Tenure Advisor
MFI	Monitoring and Evaluation
MICOA	Micro Finance Institution
	<i>Ministério da Coordenação da Acção Ambiental</i>
MINAG	Ministry for the Coordination of Environmental Affairs
MIS	Ministry of Agriculture
MTO	Management Information System
MOU	Meat Traders' Organisation
MZM	Memorandum of Understanding
NAPA	Metical
NDAS	National Adaptation Programme of Action
NRM	National Directorate for Agriculture Services
O&M	Natural Resource Management
PAMA	Operation and Maintenance
	<i>Programa de Apoio aos Mercados Agrícolas</i>
	Programme in Support of Agriculture Markets
PARP	Poverty Reduction Action Plan
PEDSA	<i>Plano Estratégico para o Desenvolvimento do Sector Agrário</i>
	Strategic Plan for Agricultural Development
PMT	Project Management Team
PNDA	<i>Programa Nacional para o Desenvolvimento do Agronegócio</i>
	National Programme for Agribusiness Development
PO PPCR	Producers' Organisations
PROMER	Pilot Programme for Climate Resilience
	<i>Programa de Promoção de Mercados Rurais</i>
	Rural Markets Promotion Programme
R&D	Research and Development
RIMS	Results and Impact Management System
SDAE	<i>Serviço Distrital para Actividades Económicas</i>
	District Service for Economic Activities
SIDA	Swedish International Development Agency
SISTAFE	<i>Sistema de Administração Financeira do Estado</i>
SME	Small and Medium Enterprise
SNV	Netherlands Development Organisation
SPA	<i>Serviço Provincial da Agricultura</i>
	Provincial Service for Agriculture
SPGC	<i>Serviço Provincial de Geografia e Cadastre</i>
	Provincial Service for Geography and Cadastre
SPPP	<i>Serviço Provincial de Promoção da Pecuária</i>
	Provincial Service for Livestock Promotion
UNAC	<i>União Nacional dos Camponeses</i>
	National Farmers' Union
UNCDF	United Nations Capital Development Fund

USAID	United States Agency for International Development
USD	United States Dollar
VC	Value Chain
VC DAP	Value Chain Development Action Plan
VCP	Value Chain Platform
WA	Withdrawal Application
WUA	Water Users' Association

Mozambique Pro-Poor Value Chain Development Project in the Maputo and Limpopo Corridors





THE INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT

MOZAMBIQUE

PRO-POOR VALUE CHAIN DEVELOPMENT PROJECT IN THE MAPUTO AND LIMPOPO CORRIDORS (PROSUL)

EXECUTIVE SUMMARY

A. Summary and Objectives

1. The project involves pro-poor and climate resilient improvements in three value chains: irrigated horticulture, cassava and red meat. It will work in the trade corridors of the climate vulnerable southern Provinces of Gaza, Inhambane and Maputo, an area that has been largely neglected by development interventions yet is characterised by concrete potential in the targeted value chains. The project will support smallholder production, address *key market and biophysical constraints, ensure sustainable access by smallholders to essential services and create a more favourable business environment*. It will reach 20,350 beneficiary households, mostly economically active poor who are already involved in value chain production. It will be linked to the IFAD-supported PRONEA Support Project (PSP) for extension support and the Rural Markets Promotion Programme (PROMER) for value chain development in other parts of the country.
2. The project goal is to establish improved and climate-resilient livelihoods of small farmers in selected districts of the Maputo and Limpopo corridors. Its development objective is to achieve sustainable increased returns to smallholder farmers from increased production volumes and quality in the targeted value chains, improved market linkages, efficient farmer organisation and higher farmers' share over the final added value.

B. Components

3. **Component 1: Horticulture.** The component aims at increased sustainable income for farmers producing irrigated vegetables through increased productivity, volumes and quality of vegetables reaching both traditional and modern market segments. It will rehabilitate and improve some 2,100 ha farmed by 3,800 smallholders, develop institutional and marketing capacities for another 1,000 smallholders farming a rehabilitated 900 ha irrigation scheme, develop and promote more climate resilient practices that allow the efficient and sustainable production of selected crops to occur in both the traditional dry seasons and the wet season with significant reductions in the use of agrochemicals, finance 200 small greenhouses to help farmers produce in the hot season, establish water user associations (WUAs) and 7 service hubs that provide basic services such as storage and packaging, and strengthen market linkages.
4. **Component 2: Cassava.** The component will respond to new marketing opportunities for cassava-based products by establishing proof-of-concept business models for the profitable and climate-resilient production and marketing of cassava, thus providing increased sustainable income for farmers. It will reach some 8,000 farmers through outgrower schemes and service hubs, in a phased approach. The project will support the multiplication of drought-resistant planting materials, develop and promote climate resilient production practices, establish service hubs that will provide inputs and produce cassava chips and flour, and build market linkages.
5. **Component 3: Red Meat.** For this component, the increased sustainable income for cattle, goat and sheep breeders will be generated by improved climate smart production and better organised markets. It will reach some 5,600 smallholder ruminant producers with activities that foster better production and off-take by empowering small-scale livestock producers to form organisations

producing quality ruminants based on essential services and jointly managed water sources that will increase resilience to drought. It will also develop sustainable market access and better prices by organising cattle fairs, creating Meat Traders' Organisations and developing contracting and outgrowers schemes, and setting up a new and low-carbon slaughterhouse near Maputo town. It will support the preparation and financing of Community Based Natural Resource Management Plans to improve the management of pasture land and to decide on strategic location for project investments. Land tenure support will lead to better community management of grazing areas.

6. **Component 4: Financial services.** The objective of the component is to ensure the access of value chain stakeholders to adequate financial services at an affordable cost by sustainable MFIs using innovative delivery mechanisms to increase their outreach. There is currently no bank or microfinance institution that is in a position to provide the whole range of required financial instruments on its own resources and at an affordable rate. Project funds will be extended to an investment fund, which will on-lend them to microfinance institutions (MFIs), allowing these to provide the range of financial services required. To make sure that they can do this at an affordable interest rate for value chain stakeholders, the investment fund will take an equity position in the share capital of selected MFIs, which will open the possibility to also make a long-term deposit in their shareholders' account.

7. **Component 5: Institutional Support and Project Management.** The component aims at strengthening CEPAGRI so that it can deliver project outcomes and outputs according to plans, and build capacities for innovative business models. This includes capacity-building to support their participation in national climate policy formulation and development programming, the build-up of the Project Learning System (PLS), facilitating Regional Value Chain Platforms and mainstreaming gender and climate change adaptation in policy support for the three value chains. It also includes measures to strengthen land rights of the project's target groups and to improve the management of land use by farmer organisations and communities.

8. **Climate change.** IFAD's new Adaptation for Smallholder Agriculture Programme (ASAP) was established in 2012 (see <http://www.ifad.org/climate/asap/>). A USD 4.9 million grant from this programme will contribute to the Project financing to make the three value chains resilient to the projected impacts of climate change – in particular increased rainfall variability and risks of drought and flooding, especially in the south and central regions of the country. ASAP-funded activities are fully integrated throughout PROSUL, including: (i) project baseline and impact surveys; (ii) capacity-building for the Ministry of Agriculture in climate policy formulation and development programming; (iii) community-based natural resource management plans; (iv) private-sector uptake of climate resilient agriculture techniques; (v) strengthening local meteorological stations; (vi) improving water management approaches and infrastructure, and (vii) introducing climate resilient small-scale infrastructure; and (viii) including climate resilience in the policy and strategic fora/documents such as the Regional Value Chain Platforms and Value Chain Development Action Plans.

9. **Gender.** The project will ensure inclusion and gender equity in the access to its services by targeting and gender studies, piloting the implementation of the Gender Action Learning System (GALS), a participatory approach aiming at ensuring women and poor inclusion in value chains, the participatory establishment of a targeting and gender mainstreaming strategy and action plan for each of the value chains, and the reflection of gender aspects in the Annual Value Chain Development Action Plans and the Project Learning System.

C. Background and rationale

10. Despite sustained high annual growth in Mozambique, the absolute poverty rate remains high at 54.7% of the population. This is to a large extent based on the predominant agricultural livelihood base in rural areas and the low growth of agricultural productivity, and it is exacerbated by

climatic shocks and price fluctuations. This is particularly pronounced in the south of the country where frequent droughts occur and temperatures are rising. However, real business opportunities exist in the three southern provinces in response to the market opportunities that exist in the greater Maputo area, especially for vegetables and meat. Furthermore, new industrial interest in semi-processed cassava products for baking and brewing create opportunities of converting cassava from a food security staple to a climate-proof cash crop. The project thus focuses on these three value chains in applying its inclusive approach, with a special emphasis on climate proof investments to ensure sustainability.

11. The proposed interventions are fully aligned to government policies, especially the Poverty Reduction Action Plan (PARP), the Strategic Plan for Agricultural Development (PEDSA) and the Agricultural Extension Master Plan. It supports the National Adaptation Programme of Action (NAPA) prepared by the Ministry for Environmental Coordination (MICOA), which aims to strengthen capacities to cope with the adverse effects of climate change, including farmers' capacities to deal with climate change by reducing crop and livestock losses in drought-prone regions, reducing soil degradation and promoting diversified commercially-oriented activities. It fits perfectly to implement the draft National Plan for Agribusiness Development (PNDA). The project contributes to all three strategic objectives of the 2011 COSOP, and is also fully consistent with IFAD's Climate Change Strategy, Environment and Natural Resource Management Policy, Rural Finance Policy, Rural Enterprise Policy, Private Sector Development and Partnership Strategy. IFAD's financial contribution to the project will dovetail loan funds (USD 16.3 million each from both IFAD and the Spanish Trust Fund) with IFAD grant funds for institution building, targeting and technical assistance (USD 1.5 million) and the first ASAP grant (USD 4.9 million), and technical in providing sound implementation support to CEPAGRI, a government agency with little project experience.

D. Rural context, geographic area of intervention and target groups

12. The three southern provinces (excluding Maputo city) are home to 4.3 million people, 21% of the country's population. Smallholders farm 90% of the cultivated area, on plots averaging 1.6 ha in Maputo to 2.4 ha in Inhambane. In Gaza Province, livestock is the main basis for rural livelihoods. The region is particularly vulnerable to climate change, being mostly arid or semi-arid, with a high vulnerability to drought and increasing temperatures. The irrigation potential is high, but not much of it is used and only 30% of the area of the irrigation schemes is operational. Road and rail links are poor, and the focus districts for all value chains were selected with relative logistical advantages in mind.

13. The *main target group* consists of the emergent smallholder farmers who are already involved in value chain production (existing cassava, horticulture and livestock producers). A *secondary target group* includes persons who have the potential to become drivers of change (commercial farmers, traders and private investors interested in financing joint ventures with smallholders), and also livestock breeders outside the LPOs and staff of the project-supported business ventures. PROSUL will work directly with a population of around 20,350 benefitting households, of which about 18,400 farming households.

E. Key Benefits

- An additional area of about 2,100 ha of irrigated land is brought into use
- 4,800 smallholder irrigation farmers (60% women) have access to horticultural markets
- 200 greenhouses operational benefitting around 200 farmers (50% women) (ASAP-funded)
- At least 8,000 farmers (50% women) accessing support services through outgrower schemes and service hubs
- 50% of participating households adopt mixed cropping practices to ensure food security (ASAP-funded)
- At least 5,600 breeders (50% women) accessing animal health services (ASAP-funded)

- 25% increased off-take of goats and beef cattle (ASAP-funded)
- At least 75% of participating farmers (50% women) access financial services

F. Implementation arrangements

14. PROSUL will be implemented by a Programme Management Team (PMT) hosted by the Centre for the Promotion of Agriculture (CEPAGRI). This builds on CEPAGRI's mandate and the finding of the recent Country Programme Evaluation that project facilitation units have proven to be the most effective option for project implementation in Mozambique, provided linkages are established with the hosting institution to contribute to institutional building and secure sustainability.

15. The implementation of components 1 to 3 will be carried out by three specialised Lead Service Providers (LSPs). The implementation of the investment fund of Component 4 will be the responsibility of the Beira Agricultural Growth Corridor (BAGC) Catalytic Fund under a Subsidiary Financing Agreement and an MOU to detail the role and responsibilities of the Catalytic Fund and the PMT.

16. Project oversight will be carried out by a Project Steering Committee chaired by CEPAGRI, and three Regional Value Chain Platforms (VCPs). The latter will discuss project achievements and issues, provide overall project guidance and identify issues to be addressed at policy level. Based on this overall dialogue, VCPs will also be responsible for approving component APWBs prior to submission to the Project Steering Committee.

G. Costs and financing

17. The seven-year project will cost USD 44.95 million, including USD 1.67 million in physical and price contingencies (4% of base costs). From IFAD, it will be financed by: an IFAD loan (USD 16.3 million; 37% of total project costs); an IFAD grant (USD 1.5 million; 3%) for institution building, targeting and technical assistance; IFAD's Spanish Trust Fund (USD 16.3 million; 37%); and the first ASAP grant (USD 4.9 million; 11%) to support the integration of climate-resilience across PROSUL. External cofinancing will be provided by the UN Capital Development Fund (USD 140 000; 0.3%). The Government of Mozambique will contribute 6% of total project costs (USD 2.5 million) in foregone tax revenues, while local private investors and beneficiaries will contribute with own resources USD 1.9 million and USD 1.4 million, respectively.

H. Risks

18. The two key risks and mitigation measures are:

- a) Drought. This risk will be mitigated by promoting and multiplying drought tolerant and disease resistant cassava and vegetable varieties and promoting climate-resilient grazing and feeding, promoting climate-resilient production techniques, and supporting irrigation, low-cost greenhouses and access to water facilities for livestock.
- b) Lack of financial capacity and interest on behalf of private sector to invest in processing. This risk will be mitigated by providing private investors with matching grants to support investment in innovative and riskier activity, and developing service hubs co-owned by farmers.

19. Other risks and mitigation measures are discussed in the design report.

I. Environment

20. From an environmental perspective, the project activities aim at making the present farming systems more sustainable than they are today, by gradually including new and improved climate resilient plant material and crop/animal management practices. For irrigation interventions, environmental impact assessments will be carried out as required by national laws. From Agro-processing, limited negative impact may be expected from liquid and solid waste from the slaughterhouse, and waste water from cassava processing. The former will be mitigated by the project supported biogas plant for the slaughterhouse, and the latter will be utilised and disposed of without it contaminating any surface water.

21. The project has been classified in Category B as the potential negative environmental impact of the project is expected to be of low significance and sensitivity. In fact, in view of the strong focus on climate-smart investments funded by ASAP, the project is expected to have many positive impacts on the environment and beneficiaries' ability to cope with climate change.

J. Knowledge management, innovation and scaling up

22. A Project Learning System (PLS) integrating planning, M&E and knowledge management (KM) will be developed to steer project implementation, support economic decisions and share knowledge. The PLS will be open (that is, not restricted to project staff), participatory, growing, focused on analysis and learning connected to CEPAGRI's information systems and supporting accountability to project stakeholders. Every year, innovation areas in which project stakeholders intend to detect good practices and to develop an exchange of knowledge will be identified by the VCPs and included in the annual M&E and KM plan. Moreover, Learning Routes will be organised in areas in which this tool will be suitable to respond to the learning needs. Through ASAP support, baseline and impact studies will take into account various aspects of climate resilience. Particular attention will be given to lessons generated from the Project on how to integrate climate resilience into a value-chains focused project. There will be close interaction between the project KM system and international efforts by IFAD and partners aligned to ASAP to build knowledge on climate resilient smallholder agriculture. This will provide many lessons for scale-up, which is important given the potential to combine the priorities of value-chain development and climate-resilience across the IFAD-supported portfolio and beyond.

LOGICAL FRAMEWORK

Narrative summary	Key Indicators and Targets by June 2019	Means of Verification	Assumptions
GOAL AND DEVELOPMENT OBJECTIVE			
GOAL: Improved and climate-resilient livelihoods of smallholder farmers in selected districts of the Maputo and Limpopo corridors.	1. Increased asset index for 13,700 participating households (RIMS) 2. Reduced child malnutrition (RIMS) 3. 60,000 poor smallholder household members whose climate resilience has increased due to ASAP (ASAP)	Project baseline & impact surveys, reality checked against national statistics	4. Favourable economic environment
DEVELOPMENT OBJECTIVE: Sustainable increased returns to smallholder farmers from increased production volumes and quality in target value chains, improved market linkages, efficient farmer organisation and higher farmers' share over the final added value.	5. % of final price accruing to small-scale producers in the three value chains 6. 20,350 households (50% women) receiving project services (RIMS 1.2.5) 7. Number of farmer organisations extending productions support and marketing service to members (COSOP)	8. Project surveys 9. Service hubs' reports 10. Farmers' organisations statistics 11. Value Chain Platform reports	12. Continued government commitment to improve returns to farmers in agricultural value chains
OUTCOMES			
OUTCOME 1: Increased sustainable income for smallholder farmers producing irrigated vegetables in project areas through increased productivity, volumes and quality of vegetables reaching both traditional and modern market segments.	13. 1,305 ha improved and 796 ha rehabilitated irrigated schemes operational (19 schemes) 14. 4,800 farmers (50% women) accessing support services (RIMS 1.2.5, COSOP) through 7 service hubs (20 schemes) 15. 3,840 farmers (50% women) adopting recommended climate-resilient technologies (RIMS 2.2.2, COSOP and ASAP) (20 schemes) 16. Annual volume of produce sales by hubs (COSOP) 17. All WUAs granted DUATs and with documented rules for regulating members' parcel access and use	18. DNSA and INIR 19. LSP M&E system 20. Project surveys 21. Service hubs' reports 22. Farmers' organisations statistics 23. Value Chain Platform reports	24. Private investors interested in investing in outgrower schemes/hubs along conditions proposed by IFAD
OUTCOME 2: Increased sustainable income for smallholder farmers in project areas from improved cassava production, based on proof-of-concept business models for the profitable production and marketing of cassava-based products.	25. 8,000 farmers (50% women) accessing support services (RIMS 1.2.5 and COSOP) through outgrower schemes and service hubs 26. 4,800 farmers (50% women) adopting recommended technologies (RIMS 2.2.2, COSOP) 27. Average cassava yield by participating households increased from 6.5 t/ha to 11.0 t/ha (+70%) 28. Annual volume of cassava purchased by processing units (COSOP) 29. Increase by 2,880 ha of land managed under best practices (ASAP)	30. Project surveys 31. LSP M&E system 32. Service hubs' reports 33. Farmers' organisations statistics	34. Private investors interested in investing in processing units, outgrower schemes and hubs along conditions proposed by IFAD
OUTCOME 3: Increased sustainable income for small-scale cattle, goat and sheep breeders in project areas through improved production and better organised markets.	35. 5,600 herders (50% women) accessing animal health services (RIMS 1.2.5 and COSOP) 36. 3,360 herders (50% women) adopting recommended technologies (RIMS 2.2.2 and COSOP) 37. Off-take rate of livestock (increased from current 5% to 10%)	40. Project surveys 41. LSP M&E system 42. Farmers' organisations statistics 43. Value Chain Platform reports	44. Private investors interested in investing in slaughterhouse at PROSUL conditions 45. Prospect of higher and regular income induces herders

	<p>38. Annual number of animals sold by LPOs by project year 3 (separate for cattle and shoats)</p> <p>39. # increase in hectares of land managed under best practices (ASAP)</p>		to develop commercially-oriented herd management
<p>OUTCOME 4: Selected value chain stakeholders have a timely and adequate access to a diversified range of affordable financial products, through existing or to be created financial and non-financial service providers.</p>	<p>46. Number of rural clients (50% women) receiving a loan (COSOP)</p> <p>47. At least 75% of participating farmers (50% women) access financial services (by type of client, service, financial/non-financial service provider), loan portfolio</p> <p>48. Portfolio at risk of MFI loans to participating farmers</p> <p>49. Number and volume of working capital loans extended by microfinance institutions to SMEs and repayment rate, by year</p> <p>50. Average interest rates charged to project-supported SMEs, farmers' organizations and farmers;</p> <p>51. Dividends earned by the Catalytic Fund from MFIs and SMEs (by type) and return on investment;</p> <p>52. Yearly amount of PROSUL equity held by Catalytic Fund in SMEs</p> <p>53. Number of staff of MFIs/SMEs trained in financial and management subjects (RIMS) (50% women)</p>	<p>54. Catalytic Fund and MFIs M&E systems</p>	<p>55. MFIs are interested in extending services in rural areas along conditions affordable for agricultural activities</p>
<p>OUTCOME 5: CEPAGRI, and specifically its delegation for the southern provinces, has and uses systems and tools for supporting inclusive value chain development and for promoting new business models.</p>	<p>56. Systems and tools for planning and budgeting public support to value chains and for monitoring value chain performance are operational and implemented</p> <p>57. Linkages with relevant institutions (particularly MICOA and INGC) and with the Strategic Programme for Climate Resilience co-financed by the World Bank and AfDB established and maintained (ASAP)</p> <p>58. 10 CEPAGRI and project staff received training and exposure to issues related to the broader national and regional climate agenda (ASAP)</p>	<p>59. Project reports and publications</p>	

Note: Key output indicators included at the outcome level for clarity are shown in italics.

REPUBLIC OF MOZAMBIQUE

PRO-POOR VALUE CHAIN DEVELOPMENT IN THE MAPUTO AND LIMPOPO CORRIDORS (PROSUL)

PROJECT DESIGN REPORT

I. STRATEGIC CONTEXT AND RATIONALE

A. Country and rural development

1. Over the last two decades, Mozambique has been experiencing an average annual growth rate above 7%, sustained by macroeconomic liberalisation, market-based reforms, massive public investment in infrastructure and large flows of foreign direct investment. However, according to the most recent household survey (2008/09), 54.7% of the population still live in absolute poverty, with no improvement since 2002/03 (54.1%). This is mostly explained by three factors: the low growth of agricultural productivity, which has a direct impact on the income of the 70% of the population that lives on agriculture; the vulnerability of the agricultural sector to climatic shocks, periodic droughts and floods, and rising temperatures; and the declining terms of trade due to sharp increases in international food and fuel prices. Poverty levels in rural and urban areas were respectively 56.9% and 49.6% in 2009. Poverty remains a predominately rural phenomenon with more than 70% of poor households located in rural areas and an even higher proportion dependent on agriculture for survival. While the poverty rate for the southern region as a whole has been declining from 66.5% in 2002/2003 to 56.9% in 2008/2009, the province of Maputo has remained the second poorest of the country, and it is immediately followed by Gaza and Inhambane.

2. **Agriculture.** Although agriculture contributes only 23% to GDP and represents just 20% of total exports, it is the main source of income for more than 70% of the population, provides employment for 80% of the total workforce and generates 80% of the income of rural households. The sector grew by an average annual 7.9% between 2003 and 2008, with much of the growth due to the expansion of the cultivated area and to favourable rainfall, while yields stagnated at levels between 30% and 60% of their potential. Smallholders represent the greater part of the country's farming sector, constituting more than 98% of the total number of farmers and accounting for 95% of the national agricultural production and for about 90% of the total land under use. Low availability of modern inputs, lack of appropriate climate resilient technologies and limited access to finance and other support services are the main determinants of low yields and low returns. Most smallholders still operate close to subsistence level and less than 20% of them regularly sell their products.

3. **Food security.** Between 2005 and 2009, the quantity of marketed agricultural products was multiplied by 2.4, with important increases for both staple food products and export crops. The number and diversity of market agents are increasing, from farmers' associations through to small/medium-sized traders, larger trading companies and agri-business, some of which provide support services to small farmers. However, despite these encouraging trends, Mozambique continues to experience food insecurity at the national and household levels, frequently exacerbated by extreme climatic events. Except for maize and cassava, the country is a net importer of food staples and less than 25% of smallholder families are able to cover their food needs throughout the year. Yet with an annual 4% growth, the urban population is expected to generate increasing demand for agricultural products. Meeting the growing domestic demand for food products and reducing the country's dependence on imports will require the competitiveness of domestic products to be developed, with an emphasis on reducing transaction costs and improving smallholders' access to production and business development services.

4. **Climate change.** The vagaries of current and future climate change represent important challenges. Rainfall variability, the risk of flooding and temperature increases are expected to grow,

especially in the south and central regions of the country. Recent studies by the Institute for Disaster Management (INGC) and the *Instituto de Investigação Agrária de Moçambique* (IIAM) on land use capability suggest that within ten years the impact of climate change will be increasingly felt within the Limpopo Corridor, particularly the lowering of soil moisture content prior to the onset of the rains¹. Adaptation measures are needed to build smallholder resilience to climate variability, and major investments are required to develop irrigation (only 50,000 ha of a potential of 3.3 million ha are irrigated, of which only about 30% are operational), water conservation techniques and drought-tolerant germplasm.

5. Rural institutions. Only about 10% of rural households are members of a *farmers' organisation*. Most farmer organisations deal with problems of poor management, limited focus on service provision, lack of knowledge with regard to post-harvest and marketing aspects, and lack of negotiation skills to develop partnerships. *Extension services* are available to less than 10% of farmers. District-based public extension lacks staff and financial resources and is centred on the production of food crops, leaving out critical elements such as cash crops, marketing, management and farmers' organisation. In line with the Agricultural Extension Master Plan (2007-2016), which supports a pluralist approach building on public, private and associative service providers (and is supported by IFAD-financed National Agricultural Extension Programme - PRONEA), new actors are gradually providing advisory services to farmers, including input suppliers, farmers' associations/unions, larger farmers and private service providers. Furthermore, and in accordance with the National Plan for Agribusiness Development (see below), both the ministry of Agriculture (MINAG) and the national Farmers' Union (UNAC) are planning to develop agriculture service centres to provide advisory services, inputs and mechanisation to smallholders. *Improved inputs* are rarely used because of their cost, climatic risk and the limited outreach of input dealers. *Post-harvest* management and handling are minimal and losses are exacerbated by climatic extremes. Lack of knowledge on quality requirements and product preparation, of adequate infrastructure (cool storage for vegetables, water points, pens and loading ramps for cattle, veterinary centers, well maintained slaughterhouses) and of appropriate transport affect overall quality of products as well as farmers' capacity to add value to their produce. *Financial services* are available to only 4.3% of the population. Financial institutions have limited outreach in the rural areas, charge unaffordable interest rates and require collaterals and other conditions that de facto exclude smallholders from accessing credit. Neither commercial banks nor MFIs offer long-term financing for costly equipment such as tractors or processing units.

6. MINAG. Main functions of the Ministry of Agriculture include the analysis, formulation and monitoring of sectoral policies, as well as the provision of extension and research services (the latter through IIAM). At the district level, District Services for Economic Activities (SDAEs) are responsible for the planning, coordination and monitoring of local services in support of economic activities, including agriculture. The Centre for the Promotion of Agriculture (CEPAGRI) is a public institution placed under MINAG's authority that is responsible for promoting commercial agriculture and agro-industry. A delegation was open in March 2011 in Xai-Xai (Gaza) to cover the three southern provinces. It is staffed by a small team of junior professionals with limited experience, who are responsible for promoting and monitoring investment opportunities and for developing projects in support to private investment.

7. Policies for rural growth. The *Poverty Reduction Action Plan* (PARP - 2011-2014) aims at reducing the incidence of poverty from 54.7% in 2009 to 42% in 2014, by promoting pro-poor, inclusive growth. PARP's first objective is to increase agricultural production, primarily by boosting the productivity of the family sector. This is to be achieved by improving access to production factors, facilitating market access and improving the sustainable management of natural resources. These priorities are developed in the *Strategic Plan for Agricultural Development* (PEDSA - 2011-2020),

¹ INGC (2009). *Synthesis report. INGC Climate Change Report: Study on the impact of climate change on disaster risk in Mozambique*. [van Logchem B and Brito R (ed.)]. INGC, Mozambique

whose goal is to convert subsistence farming into a market-oriented agriculture ensuring food security and securing farmers' income, along an annual 7% agricultural growth. PEDSA's strategy is based on the promotion of a value chain approach and on the development of partnerships between the public sector and private actors. PEDSA targets interventions along six corridors offering production potential and market access, including Maputo and Limpopo corridors in the southern region. Cassava, vegetables and livestock are among the commodities to receive priority public funding. Finally, a draft *National Plan for Agribusiness Development* (PNDA - 2011-2020) has been recently prepared by CEPAGRI, which aims at increasing the competitiveness and added value of agriculture products, by strengthening public-private partnerships and resource mobilisation for the development of priority agribusiness initiatives, including farmers' cooperatives offering a range of services on a profitable basis, outgrower schemes involving small and medium farmers, and agribusiness service centres.

8. **CAADP.** The Comprehensive Africa Agricultural Development Programme (CAADP) Compact has been signed in December 2011, including by IFAD. Key priorities are: (i) to expand sustainable land management and irrigation; (ii) to increase market access through infrastructure improvement; (iii) to improve food *availability* and productivity; and (iv) to promote agricultural research and enhanced adoption of technologies. The government of Mozambique committed itself to increase agricultural investment through public expenditure from the current 5.6% to 10%. NEPAD is also currently managing an exercise to increase investment in climate change, which will include Mozambique and therefore offer potential to engage further.

B. Rationale

9. **National policies.** PEDSA aims at gradually integrating agricultural producers into competitive value chains along inclusive and equitable approaches, giving priority to crops and meat production for the domestic market. PROSUL will support small farmers in the southern provinces so that they can achieve such an objective, by focusing on two of PEDSA's strategic pillars, which are to improve access to services to increase farmers' productivity, and to promote agribusiness entrepreneurs and linkages with smallholder producers. The National Adaptation Programme of Action (NAPA) prepared by the ministry for Environmental Coordination (MICOA) aims at strengthening national capacities to cope with the adverse effects of climate change. Long-term expected results include the strengthening of farmers' capacities to deal with climate change by reducing crop and livestock losses in drought-prone regions, reducing soil degradation and promoting diversified commercially oriented activities. PROSUL is also in line with PNDA and will support some of the priority initiatives aiming at developing a more productive, climate resilient and competitive agriculture, including agribusiness service centres and adequate instruments to finance value chain development. The project target value chains are part of the strategic products promoted by PNDA, and PROSUL also builds on the Cassava Development Strategy (2008-2012), the Livestock National Strategy (2009-2015), as well as preliminary draft orientations available for the forthcoming Horticulture Strategy.

10. **Southern corridors.** A number of donors, including IFAD, are already involved in promoting market-oriented agriculture, but they mostly focus on the northern and central provinces, leaving the south largely uncovered. Yet although they are characterised by higher climatic risks, the southern provinces have diverse agro-ecologic potential, stable temperature throughout the year and ample available land and they benefit from proximity to major domestic and regional markets. The southern region hosts two of the six corridors where PEDSA intends to concentrate priority value chain development, i.e. the Limpopo and Maputo corridors. Furthermore, the last poverty assessment showed that, after the central province of Zambezia, southern provinces are the poorest of the country.

11. **Target value chains².** Horticulture, ruminants and cassava are among the priority commodities supported by PEDSA in the Limpopo and Maputo corridors. *Horticulture* benefits from good agro-ecological conditions enabling production throughout the year, close markets in Maputo City and

² Detailed analysis available in Working Paper – Value chains analysis in Project Life File.

availability of irrigated schemes. The lack of skills, poor maintenance of irrigated schemes, lack of access to finance, absence of cold storage and poor organisation of the value chain hamper production development. *Cassava* is widely farmed by smallholders in the three southern provinces. Consumed mostly fresh, it plays a crucial role in food security. High produce perishability and the lack of processing facilities hamper both production development and market development. *Goats and cattle* production are well adapted to the southern (semi) arid zones and ample land is available for grazing, if well managed. While ruminants represent a significant economic potential for poorer households, they are poorly tended, have high mortality rates, poor productivity and a reduced off-take, due to a low access to veterinary assistance and inputs, particularly during periods of drought, and little incentive to sell on poorly organised markets.

12. The selection of the target value chains was made in August 2011 by a Project Design Reference Group composed of public and private stakeholders³, based on a preliminary analysis of a range of important commodities in the south made by the Royal Tropical Institute (KIT) of the Netherlands.⁴ The same institute then made a detailed analysis of the three value-chains selected.⁵ A stakeholder workshop was organised by CEPAGRI in October 2011, to discuss the results of value chain analysis and to provide recommendations to the design mission. The three value chains face similar challenges, which are related to low and irregular volumes and quality of produce, due in part to climatic extremes, poor access to financial and non-financial services, weak farmers' organisations and limited and unrewarding access to markets. They are largely unorganised and, until recently, have received little support from government and donors. The main reasons justifying the selection of the three value chains are as follows:

- *relevance to smallholders*: they play a significant role in the livelihood and risk management strategies of the poor and they have relatively low thresholds for smallholders to enter and develop market linkages. *Cassava* is farmed by 80% of producers on plots from 0.2 ha and up and is a major staple food crop throughout the southern region. *Vegetable* production is also well developed among smallholders and the yet untapped irrigation potential offers good opportunities for vulnerable households to gain access to profit-making activities on surfaces as small as 0.5 ha. *Ruminants* constitute the main income-generating activity in the arid areas of the southern region. Each of the value chains has three potential end-uses (direct consumption, traditional markets, higher end/contract markets) and contributes to food security, which further supports the entry of poorer groups ;
- *potential for production growth*: the rehabilitation and expansion of existing irrigation infrastructure, together with the introduction of sustainable operation and maintenance systems would provide ample ground to boost *vegetable production* (increased yields by an estimated 40%), which can be further enhanced with the adoption of improved seeds and practices allowing year-round production with the introduction of low-cost greenhouses. The adoption of new high-yield *cassava* varieties specifically for the southern region, together with appropriate climate resilient technical packages, would enable farmers to raise productivity from less than 5 up to above 12 t/ha. Improving animal health would decrease the high mortality rates of *ruminants* (reaching 40% for goats), and the development of market-oriented breeding and fattening schemes would further increase productivity;
- *market potential*: rising population and income growth in southern cities, and particularly in capital city Maputo and suburban area Matola, generate expanding demand for *vegetables*, which

³ The Design Reference Group was composed of representatives of MINAG (national and provincial levels) including CEPAGRI, the Ministry of Planning and Development, the Ministry of Finance, the Ministry of Commerce, IIAM, UNAC (national and provincial levels), the Confederation of Business Associations of Mozambique and the National Association of Micro-Finance Institutions.

⁴ "Value chain selection and analyses for Projecto Sul, Mozambique - Working document phase 1: Selection of three value chains", available in the Project Life File.

⁵ "Value chain selection and analyses for Projecto Sul, Mozambique - Analyses of vegetables, livestock and cassava value chains in Southern Mozambique", available in the Project Life File.

is currently largely covered by South African imports (from 50% to 75% of the market depending on season). Mozambican products however have lower labour and transport costs and could further increase competitiveness through higher yields and year round production. Additionally, next to traditional wet markets, which currently absorb over 75% of the production, several developing supermarket chains are providing new market outlets. Only 5% of the *cassava* production is currently traded, because of the high perishability of fresh cassava and the limited number of processing units. However positive indications with regard to market potential (animal feed industry, production of cassava-based ethanol, wheat substitution in bread production and barley substitution in brewery), and strong government support, all point to robust opportunities to transform cassava from a mostly rural staple food to a new source of cash for smallholders. *Ruminant meat* production and meat consumption are following a raising trend, also partially covered by imports, which is fuelled by urban population and income growth, and which could benefit small livestock breeders in the south if current unorganised markets would evolve towards more formal markets rewarding quality and optimising transaction costs;

- *partnerships with private investors*: in the three value chains, there are opportunities to develop partnerships with private stakeholders (commercial farmers, processors and traders) that can benefit smallholders, not only through contractual marketing arrangements, but also through outgrower schemes facilitating access to inputs and financial services.

13. **Pro-poor value chain development.** Based on the above features, there is ample scope for supporting the development of pro-poor and climate resilient value chains in the most disadvantaged provinces of the country, which could offer smallholders sustainable and equitable income. This would involve: (i) supporting innovative business models, whereby small farmers would develop sustainable and equitable linkages with other value chain stakeholders (commercial farmers, processors and traders) to access remunerative markets and affordable support services, and (ii) supporting small farmers to successfully engage into such business models, by assisting farmers' organisations to evolve into reliable, business-minded organisations that can facilitate members' access to services, fulfil contractual obligations and negotiate higher and fairer prices with commercial partners.

14. **IFAD and other programmes.** PROSUL will contribute to all three objectives of IFAD's Country Strategic Opportunities Programme (COSOP), i.e. to (i) increase the access of small producers to production factors, technologies and resources; (ii) increase their access and participation to markets that can bring them equitable shares of profit; and (iii) increase the availability of and access to appropriate and sustainable financial services in the rural areas. It will develop linkages with other IFAD-financed projects, and particularly with: (i) the PRONEA Support Project (PSP), to identify and deliver most appropriate extension approaches for disseminating innovative technical packages, and to provide assistance in the organisation of Farmer Field Schools (FFS); (ii) the Rural Markets Promotion Programme (PROMER), to exchange knowledge on value chain development in other parts of the country, and (iii) ImGoats, an IFAD grant project developing innovative approaches to promote goat production and marketing. Synergies will also be developed with DFID (investment fund), USAID and Brazil (action research in horticulture), AfDB (water supply in support to livestock raising), the Netherlands (agribusiness education and agriculture business centre), InfoDev/World Bank (SME incubation centres) and with the European Union (local development in the southern provinces).

II. PROJECT DESCRIPTION

A. Approach

15. **Value chain approach.** In the three target value chains, PROSUL will address key production, processing and marketing constraints, with a view to improve farmers' ability to deliver the qualities and quantities required to respond to market opportunities without jeopardizing household food security, build their profit and strengthen their position in the value chain governance. This will involve: (i) *supporting farmers to increase their production sustainably* both in volume and in quality, based on improved germplasm, improved animal health and appropriate climate smart technical

packages; (ii) *addressing key market constraints* (storage for horticulture, environmentally friendly processing for cassava, quality incentives and traders' working capital for livestock) *and promoting market linkages* between smallholders and market agents through equitable arrangements that could secure stable and equitable profits to smallholders; (iii) *ensuring sustainable access by smallholders to the services* they need to boost production, including inputs, agricultural equipment, technical services and financial services; and (iv) *promoting key interventions to develop a more favourable business environment* in the value chain, including research, the establishment of standards resulting in higher prices for all producers, market exploration and promotion, the development of value chain platforms and the promotion of policy dialogue around key issues identified during implementation. Value Chain Development Actions Plans (VC DAPs) will be prepared every year in collaboration with Regional Value Chain Platforms and with district-based multi-stakeholder platforms (Innovation Platforms).

16. Climate-resilience focused approach. Higher temperatures and drought already constitute major factors of vulnerability and are expected to further increase in the southern region. This requires particular attention to be given to helping farmers manage increased and new risks that both threaten their livelihoods and often discourage them from investing in modern inputs and equipment. IFAD's new Adaptation for Smallholder Agriculture Programme (ASAP) was established in 2012 (see <http://www.ifad.org/climate/asap/>). Grant financing from this programme will contribute to make the three PROSUL value chains resilient to the projected impacts of climate change – in particular increased rainfall variability and risks of drought and flooding, especially in the south and central regions of the country. ASAP-funded activities are fully integrated throughout PROSUL. The activities, described in various sections of this report including in Annex 5, include:

- project baseline and impact surveys that take into account various aspects of climate resilience,
- capacity-building to support the participation of the commercial section of the Ministry of Agriculture in climate policy formulation and development programming,
- participatory formulation and implementation of community-based natural resource management plans,
- private-sector uptake of sustainable agriculture techniques that contribute to climate resilience, such as intensified cassava production systems that include mixed cropping,
- strengthening local meteorological stations,
- improving water management approaches and infrastructure, and
- introducing climate resilient small-scale infrastructure such as low-cost greenhouses to help farmers produce in hot season.
- including climate resilience in policy and strategic fora/documents such as the Regional Value Chain Platforms and Value Chain Development Action Plans

17. Private-sector driven approach. To ensure sustainability and facilitate replication, the project approach is largely private-sector driven. It builds on a range of business ventures that are designed to secure smallholders' continued access to markets and services even beyond project completion, by ensuring not only cost recovery but also profit generation. Studies and interviews carried out during project design demonstrated that the range of business ventures proposed in the three value chains are profitable (see models in Annex 4, Attachment IV) and raise significant interest from a range of diversified potential investors. Through further information and active exploration, the project will mobilise private investors from the southern regions, including Maputo, to enter into joint ventures with smallholder to facilitate access to services and to markets. The financing of such joint ventures will be based on a mix of instruments combining private investment as well as equity financing and debt financing, which the project will channel through a local investment fund and partnering microfinance institutions. Such a setting will generate new resources for further investment in the target value chains and will be available to further support replication efforts beyond PROSUL scope.

18. Market linkages. PROSUL will promote the development of smallholders' market linkages with domestic markets, because they have lesser quality requirements that are more easily met by smallholders and because they hold sufficient untapped potential to absorb increased production. The

project will: (i) *identify agribusiness* interested in engaging with smallholders, including commercial farmers, traders, industries, supermarkets and institutional buyers; (ii) *facilitate the negotiation* of mutually beneficial agreements, including through outgrower schemes that would not only facilitate access to market but also channel inputs and technical assistance; and (iii) *provide support packages* to strengthen the capacity of both farmers and agribusiness firms to enter into this kind of arrangement, including access to working capital and investment credit for market agents.

19. Access to services. PROSUL will build linkages between smallholders and existing service providers, either directly or through equitable outgrowers' arrangements. While building on existing value chain players (and providing them with targeted support to facilitate their engagement with smallholders) would be the preferred course of action, it is recognised that, given the incipient development of either value chain, such arrangements would still leave out a consistent portion of the target areas and population. In such areas, the project will: (i) *promote the establishment of privately-run service providing facilities*, including service hubs, which will provide key financial and non-financial services to smallholders; (ii) *promote innovative financial instruments* to support smallholder inclusion into value chain development, especially for the financing of start-up ventures associating private sector and smallholders. Service hubs in particular will be run as limited liability companies, with equitable ownership arrangements associating farmers' organisations and private sector investors, and with professional management modalities geared towards full cost-recovery and profit generation to ensure sustainability

20. Promoting the sustainability of FOs. The strengthening of farmers' organisations (FOs) will be pivotal to ensure that farmers can have inclusive, sustainable access to adequate support services and can market their production at a remunerative price while at the same time sharing knowledge on how to manage climatic risks. The project will provide support to the emergence of commercially-oriented FOs that could fulfil their responsibilities as business partners, increase their technical, managerial, organisational and negotiation skills, and achieve profitability and financial autonomy. Building the capacities of FOs is a process that takes time and that requires continued assistance, whereas once a project comes to an end, because of flailing extension services, FOs have no longer access to advisory services and often lose any progress achieved during project life. To reverse this very common trend, continued access to responsive technical advisory services and coaching in particular must be secured overtime. This will be achieved through the service hubs, which will include a technical advisor paid through the proceeds of other, profit making hub services. At least 30% of the service hubs equity will be owned by FOs, which will give them an important stake to ensure that services are responsive and adapted to their requirements. However hubs will be run by professional managers, thereby relieving FOs from a responsibility that falls beyond their capacities and scope. These arrangements⁶ will be complemented by PROSUL-financed tailor-made capacity building packages to: (i) *promoting the transformation of current weak associations* into well managed, inclusive organisations; (ii) *developing their capacities* to act as shareholders of service hubs and to participate in the monitoring of hubs' performance and management; (iii) *helping them to become inclusive organisations*, with women occupying at least 40% in decision-making structures to ensure responsiveness to female farmers; and (iii) *promoting water users' associations* ensuring sustainable operation and maintenance of irrigation schemes.

21. Increase returns to farmers. PROSUL will support farmers and their organisations so that they can reap a higher and fairer share of the final market price by: (i) *increasing productivity* and reducing animal mortality; (ii) *reducing production costs* through the promotion of climate resilient and climate smart practices; (iii) *increasing added value* through improved production and processing quality; (iv) *targeting more remunerative markets*; and (v) *strengthening farmers' ability to negotiate* with value chain stakeholders. Service hubs, partly owned by farmers, will not only give them access to a large range of services enabling improved production and market linkages and therefore better prices, but

⁶ In the livestock value chain arrangements are slightly different because no service hubs are planned. Technical advisory and coaching services are provided by staff that is assigned by the Lead Service Provider in a first stage, but can later on be paid through proceeds generated by the new, partly farmers' owned slaughterhouse.

will also generate additional returns to farmers through dividends on equity shares. In the livestock value chain, the latter will be achieved through a new partly-farmers' owned slaughterhouse.

22. Innovative business models. The implementation of the mechanisms described above will lead to the development of a set of innovative climate resilient business models. Related instruments (including policy instruments, guidelines and management information system) will be developed together with CEPAGRI and the capacities of CEPAGRI staff, particularly in the Southern Delegation, so that the agency can take the lead in further promoting a dynamic and climate resilient smallholder sector in the three target chains that hold highest potential for the southern provinces. Dividends generated by the shares held by participating financing institutions in project-supported businesses and repayments from debt financing will generate new resources that will be available to finance new ventures. In this context, monitoring and knowledge management will therefore have an important role to play to assess, compare improve performance, to learn from experience, and to disseminate good practices.

B. Project area and target group

23. The southern region. The three southern provinces - Gaza, Inhambane and Maputo – are home to 4.3 million people (excluding Maputo city), who constitute 21% of the total country's population. The southern region is highly vulnerable to climate change, being mostly arid or semi-arid, with scarce and irregular rainfall averaging 500 to 600 mm per year and high vulnerability to drought. A relatively dense network of rivers crossing from West to East provides ample potential for irrigation. Only 9% of small farmers use some form of irrigation, and of the 75,000 ha with irrigation equipment, only 30% are currently operational, because of poor maintenance as well as weak ownership and management structures. Extensive agriculture and animal husbandry constitute a primary or secondary source of income for about 70% of the population, but proximity to South Africa and to Maputo city provides for a wider set of economic opportunities, including wage labour, trade and remittances.

24. Project area. PROSUL will be implemented across the Limpopo and Maputo corridors, with a focus on priority production areas in 19 districts of the provinces of Gaza, Inhambane and Maputo, as indicated by Table 1.

Table 1 – PROSUL Focus Districts

Provinces/districts	Horticulture value chain	Cassava value chain	Red meat value chain
Gaza Province			
1. Chicualacuala			X
2. Chibuto	X		
3. Chokwe	X		X
4. Guijá	X		X
5. Mabalane			X
6. Manjakaze	X	X	
7. Massingir			X
8. Xai Xai	X		
Inhambane Province			
9. Inharrime		X	
10. Jangamo		X	
11. Massinga		X	
12. Morrumbene		X	
13. Zavala		X	
Maputo Province			
14. Boane	X		
15. Manhiça			X
16. Magude			X
17. Marracuene	X		
18. Moamba	X		
19. Namaacha	X		

25. These focus districts were selected based on an initial list of 27 districts proposed by MINAG reflecting the following selection criteria: (i) density of small scale producers; (ii) agro-ecological and economic potential; (iii) poverty incidence; (iv) target commodity already making an important contribution to household income and food security and representing the best option the poor have for market participation; (v) geographical concentration and ease of access to facilitate logistics and to maximise impact; (vi) complementarity with PRONEA, the ImGoats project and other donor-financed interventions; (vii) PNDA priority districts.

26. For the Horticulture component, the final selection of districts is based on a list of irrigation schemes proposed by the National Directorate for Agriculture Services (DNSA). The application of the following criteria led to the selection of 19 irrigation schemes, which in turn correspond to the eight districts mentioned in Table 1: (i) importance of current cultivated area; (ii) majority of smallholders; (iii) accessibility; (iv) performance of WUA (privileging better performing ones); (iv) acceptable technical complexity; (v) cost; and (vi) potential for expansion. The final selection corresponds to a total of 2,101 ha in small-scale schemes. Furthermore, the project also targets 900 ha in a larger irrigation scheme, the Baixo Limpopo Regadio, where the rehabilitation has already been undertaken by AfDB and development activities can start immediately.

27. The Cassava component focuses on five districts in the province of Inhambane and one district in the province of Gaza. The six districts were selected because they concentrate the largest number of both small and medium farms producing cassava in the Southern provinces and because they are all located along the main road leading to Maputo, thereby facilitating market access.

28. For the Red Meat component, the selection is composed of seven districts constituting a ‘meat corridor’ running from Chicualacuala district down to Maputo, which is the main market. Northern, semi-arid districts of Gaza (Chicualacuala and Mabalane) are among the poorest districts in the south, where livestock is the main source of income for vulnerable households and in particular women.

29. **Rural livelihoods in the South.** Smallholders farm 90% of the cultivated area, on plots averaging 1.6 ha in Maputo to 2.4 ha in Inhambane. They mostly produce for family consumption, with low yields and modest returns. Main crops are maize, cowpea, groundnuts and cassava, with rice, vegetables and sugar cane in the valleys and, along with fruit trees, on irrigated land. Erratic rainfall, drought, high temperatures and reliance on rain-fed land constitute one of the main obstacles to greater productivity – climate change will play a role in exacerbating existing vulnerabilities to such risks. Additionally, and as for the rest of the country, low use of inputs (improved germplasm, pesticides, manure, animal drugs, feed) and mechanisation, lack of post-harvest infrastructure, poor state of roads, reduced access to market and pricing information, and lack of adequate financial services further constrain potential income. Livestock ownership is higher in the southern region than in other parts of Mozambique: inland Maputo, Gaza and the west of Inhambane have large areas of rangeland on which smallholders traditionally raise goats and, to a lesser extent, cattle. Livestock plays multiple roles in household livelihood strategies: draught power (because of the greater cattle density, the southern provinces have the largest proportion of farms using animal traction), manure, cash buffer, food and greater capacity to take part in social activities. Women constitute around 57% of the population in the southern regions and they head more than a third of households. Despite such prominent position, women have higher poverty levels, lower literacy, lower access to land and services and their mobility is severely restricted. This is true for the livestock value chains, for vegetable production and marketing, and for the cassava value chain. Female-headed households are significantly disadvantaged in their participation in and their earnings from crop markets.

30. **Target groups.** The *main target group* will consist of the economically active poor who are already involved in value chain production (existing cassava, horticulture and livestock producers) and are able to produce a surplus, but who are caught in a cash trap whereby their failure to improve productivity and access markets prevents them from accessing higher returns. The primary objective for their entry into each of the value chains is to generate income for increased food security and to meet basic household needs of health, education and shelter. *Women* will constitute a direct target group in each value chain because of the clear evidence that, whilst they constitute the majority of the population and female-headed households are amongst the poorest, their access to the value chain and

capacity to generate income is curtailed by traditional gender roles that will undermine their participation unless gender is mainstreamed into the project.

31. The *secondary target group* will include (i) (emergent) commercial farmers, i.e. medium and large farmers, mainly geared to commercial production and who have stable linkages to markets; (ii) traders, and in particular meat traders who will get better organised with project support; (iii) private investors interested in financing joint ventures with smallholders; (iii) livestock breeders who will not be part of the LPOs supported by the project but who will nevertheless be able to market their production at the new slaughterhouse; and (iv) staff hired to operate the various business ventures supported by the project. The first two sub-groups can be important drivers of change, because they have a commercial interest in the development of the smallholder sector to meet market demand, and they can be an effective channel for facilitating smallholders' access both to markets and services.

32. Furthermore, project investments will impact a large range of *indirect beneficiaries* in the project area, who will benefit from: (i) improved access to services through the service hubs, which will serve a larger population than those farmers' organisations supported by the project, particularly with regard to inputs and financial services; and (ii) improved access to credit through the additional resources generated through loan repayments. Indirect beneficiaries will also include poorer households who lack the assets necessary to participate directly in the project activities, but who will benefit from labour opportunities generated by increased agricultural. Finally the project is expected to have a wider, out of the project area impact through its contribution to the development of innovative and climate-resilient business models that could boost the development of the target value chains in the southern provinces in the face of growing climatic risks. In this respect the investment fund supported by the project as will be explained below, would play a key role as, even in the absence of additional funding, it would allow investments in new business ventures using the repayment of resources initially allocated by the project.

33. **Inclusive strategy.** The target value chains respond to a range of self-targeting features: (i) cassava is farmed by poor and extremely poor, and constitutes a key food security crop in the south; (ii) horticulture provides quick returns even from small plots and generates labour demand; and (iii) livestock is a cornerstone of the livelihood strategies pursued in very poor semi-arid areas. They were selected because they already play an important role in the livelihood, food security and risk management strategies of the poor and therefore offer an opportunity for relatively low risk diversification into generating income from agriculture. Whilst the value chains also include non-poor producers, in particular horticulture and livestock, the fact that they each have different livelihood functions (food security, cash income or buffer) and markets (traditional and modern) reduces the risk of elite capture.

34. However the self-targeting aspects of the project need to be supplemented by operational measures to ensure that project services respond to the priorities and capacities of poorer groups and of women, and that inclusion and gender equity are mainstreamed in all aspects of project implementation. Main measures (details in Annex 2) include:

- *targeting and gender studies.* Targeting and gender studies will be carried out at project onset to further detail the main characteristics of male and female producers of different poverty levels; and (ii) identify opportunities and measures required to promote the inclusion of the various groups in the three value chains and to mainstream gender and inclusion issues into project activities.
- *GALS.* The gender study will also pilot the implementation of the Gender Action Learning System (GALS), a participatory approach aiming at ensuring women and poor inclusion in value chains. Learning from the pilot will be used to include GALS as the main approach to build social inclusion and ensuring that participation, project activities and decision-making are more equally distributed across social levels and across gender. Furthermore, a Learning Route on GALS will be organised for PROSUL stakeholders (see Annex 10).

- *Targeting and Gender Mainstreaming Strategy and Action Plan.* Stakeholder workshops will be organised to discuss the results of both studies and contribute to the establishment of a targeting and gender mainstreaming strategy and action plan for each of the value chains. A key measure will be the establishment of quotas for women's access to services (minimum 50% of serviced clients) and women's participation in decision-making bodies.
- *Annual Value Chain Development Action Plans.* Every year, a Value Chain Development Action Plan (VC DAP) will be prepared by each of the Value Chain Lead Service Providers (LSPs) together with value chain stakeholders, building on multi-stakeholders' platforms to be set up with PROSUL support. They will detail actions required to improve production and develop market linkages as well as activities designed to expand women's and poorer households' inclusion.
- *Inclusive farmer organisations, service hubs and MFIs.* LSPs will assist Farmers' Organisations (FOs) to ensure that capacity assessments and development plans take into account specific constraints faced by women and by poorer smallholders and contribute to making participating FOs more inclusive and gender-balanced organisations. Similar provisions will be adopted to ensure that service hubs and MFIs are responsive to the needs of women and of poorer farmers, including through specific training.
- *Project management.* To support the development and implementation of the project inclusive strategy, the Programme Management Team (PMT) will include a Targeting and Gender Specialist, who will be responsible for ensuring that targeting and gender mainstreaming is applied throughout project activities.
- *Knowledge management and institutional support.* The Project Learning System will include the monitoring of inclusion and gender aspects, and lessons learnt (including on the interlinkages between gender and climate change) will be made available to multi-stakeholders platforms and project implementers to support regular analysis, improved performance and annual programming of related activities. Building on lessons learnt from project achievements, the Targeting and Gender Specialist will also support the mainstreaming of gender and inclusion into CEPAGRI's analytical and operational systems, including trainings and the development of guidelines and toolkits as appropriate.

35. In addition to these general measures that encompass all the value chains, specific measures will facilitate the access of women and poorer households to project benefits in each value chains and are summarized in Annex 2. Finally, the project will finance specific activities aiming at securing land rights and improving access to land by poorer people, women and youth (see below and Annex 4, Section 8) and enhancing the climate resilience of each value chain (Annex 5).

C. Project development objective

36. The project goal is to attain improved and climate-resilient livelihoods of smallholder farmers in selected districts of the Maputo and Limpopo corridors. To that end, the project development objective is to sustainably increase returns to farmers, of which at least 50% women, in the three target value chains, by promoting increased volume and quality of production, improved market linkages, efficient farmer organisations and higher farmers' share over the final added value. Main indicators are, for each value chain: (i) volume and value of annual production marketed from target areas; (ii) percentage of final price accruing to small-scale producers; and (iii) number of farmers' associations extending effective and inclusive services to members.

D. Components and outcomes

37. The project comprises five components: (i) Horticulture; (ii) Cassava; (iii) Red Meat; (iv) Financial Services; and (v) Institutional Support and Project Management.

Component 1 – Horticulture

38. **Objective and approach.** The component aims at increasing the income of smallholders growing vegetables in selected irrigated perimeters, by assisting them in intensifying vegetable production, accessing support services to raise productivity and quality, and developing remunerative market linkages both with modern and traditional markets. The component will target small farmers with an average of 0.6 ha in and around existing irrigated schemes in seven target zones over eight districts in the provinces of Gaza and Maputo. It will be implemented through three main strategic thrusts. *First, it will promote year-round vegetable production*, thereby allowing farmers to supply markets products off the peak season and to earn higher prices. This will be achieved by: (i) financing small investments aimed at developing existing irrigation schemes; (ii) providing access to low-cost greenhouses to reduce impacts of high temperatures on production; and (iii) promoting efficient water usage and irrigation operation and management, as well as adequate seeds and farming practices that would further improve production, mitigate drought risks and improved the efficacy of agrochemical use. *Second, it will develop linkages between smallholders and other stakeholders in the value chain*, to gain better access to both market and services. This will be achieved through innovative approaches, especially for the southern provinces, including outgrower schemes and the development of professionally managed horticulture service hubs co-owned by farmers. The project will also build the capacities of farmers and other value chain stakeholders (including small collectors and traders) to engage with the markets and negotiate higher margins, based on enhanced quality and on regular supply. *Third, it will develop a favourable value chain environment*, by setting up multi-stakeholder platforms to empower value chain stakeholders, including small farmers, in supporting value chain development, promote dialogue and ensure knowledge management and the dissemination of innovation.

39. **Phasing.** The component will be implemented on 20 irrigation schemes clustered in six target zones over nine districts as indicated in Table 2. Activities will start in the schemes that have the largest areas currently in operation (Moamba, Chokwe/Guijá and Xai Xai)..

Table 2 – Horticulture target zones

Zones	Number of schemes	Area (ha)	Number of beneficiaries
Moamba (M)	2	630	1,030
Marracuene (M)	4	335	758
Namaacha/Boane (M)	3	214	342
Chokwe/Guijá (G)	4	340	615
Manjakaze (G)	3	390	711
Chibuto (G)	3	192	358
Xai Xai (G)	1	900	1,000
Total	20	3,001	4,804

40. **Expected outcome.** The expected outcome of the component is that around 4,800 farmers producing vegetables on operational, well-managed irrigated schemes in selected target zones of Maputo and Gaza provinces will raise their income through increased productivity, volumes and quality of vegetables reaching both traditional and modern market segments. Furthermore it is expected that an additional large population of farmers, including those cultivating other crops, will be serviced by the service hubs.

41. **Sub-component 1.1 – Rehabilitation and expansion of existing irrigated perimeters.** Investments in this sub-component will be implemented in accordance with the national Guidelines for Irrigation Development Investments and will include the following:

- *Design.* In each scheme, the design phase will include a feasibility study carried out in consultation with farmers, a capacity assessment and development programme of the existing WUA, and a participatory selection process for the allocation of land to new beneficiaries in

expanded schemes. It will end up with an agreement defining the responsibilities of all parts, and especially of the WUA, in ensuring operation and maintenance (O&M).

- *Construction.* Civil works will be carried out by competent contractors selected through competitive bidding. Farmers in the supervision of works, through the constitution of a quality control committee within the WUA, and will provide labour.
- *O&M.* In this stage project involvement will be limited to monitoring the implementation of O&M plans, assessing possible weaknesses in scheme management and providing additional capacity building as required.
- *Strengthening of WUAs.* A participatory established, tailor-made capacity building programme will be set up for each WUA, covering (i) participatory design and supervision of work; (ii) scheme O&M and related planning; and (iii) pump operation and maintenance.
- *Institutional support.* PROSUL will provide institutional support to irrigation staff at the provincial and district level so that they can ensure the supervision of design and construction and provide support to O&M.

42. **Sub-component 1.2 – Strengthening linkages between value chain stakeholders.** Investments will include:

- *Scoping study.* A participatory scoping study will be carried out by the LSP at project inception to identify value chain stakeholders, assess their interest in participating in the project and their capacities, identify specific market opportunities and lay out business development opportunities that have potential for increasing smallholder income. Climate relevant data will be collected in an integrated study. Detailed terms of reference are in Annex 4.
- *Outgrower schemes.* PROSUL will assist commercial and small farmers to engage in outgrower schemes and forward contracting by: (i) facilitating information; (ii) providing legal and technical assistance for developing contractual arrangements; and (iii) organising study tours for buyer and farmer representatives. Details are in Annex 4, Section 6, and in Annex 5.
- *Service hubs.* Where outgrower schemes are not possible, service hubs constitute an alternative model to provide the core set of services that farmers will require to integrate value chains and retain part of the added value. A service hub will be set up in connection with each of the seven target irrigation clusters and will provide the following types of services: (i) cold and dry storage, enabling farmers to market produce a few weeks or months after peak season and to get better prices; (ii) access to inputs by including an outlet within the hub building to be leased out to an input dealer; (iii) agriculture equipment and maintenance services, by leasing out space to an equipment dealer; (iv) financial services, by including a rural finance point of services leased out to an MFI; (v) technical advisory services through the hub's technical advisor; and (vi) market linkages through the development of supply contracts with buyers and the setting up of a simple to secure price information. To ensure sustainability, service hubs will secure service provision on a commercial basis, so that not only the cost of providing services is entirely recovered, but also that a profit can be generated and either reinvested to develop activities, or distributed to owners through the payment of dividends.

Each hub will be implemented as a limited liability company (LLC), whose assets will consist of the hub's equipment and infrastructure and whose shareholders will comprise: (i) producers (either individually or through their organisations) for a minimum of 30%, and (ii) private investors (including traders, processors, collectors, exporters or any other third party). Farmers' shares will be financed by a partnering microfinance institution, which will hold the shares on farmers' behalf until such time that they can buy them by using part of their dividends. The company's management will be entrusted to a professional hub manager, who will be contracted by the company and will be accountable to the company's Board of Directors. Smallholders are therefore not expected to take charge of management functions, but they will get project support to build the capacities required to participate in the company's governance

structures (see below). The hub will also be staffed with a technical advisor, an accountant and support staff. Details are in Annex 4 in Sections 4 (Financial Services) and 5 (Hubs).

- *Joint Teams of Experts.* Joint Teams, one for each hub, will offer a complementary source of technical assistance. They will be composed of one input dealer, one trader, the hub's technical advisor and a farmer promoter, and will provide training and advisory services to both farmers and small traders with regard to input supply, market opportunities, and good technical practices. The integrated setting of the joint team will further support the development of linkages between value chain players.
- *Innovation.* Innovative agriculture practices will be promoted through the following instruments: (i) PROSUL, in part using funding from ASAP, will facilitate access to financing (through Component 4) for about 200 *low-cost greenhouses*, which will enable small farmers, of which at least 50% of women, to supply markets year-round and increase the efficacy of agrochemical usage; (ii) as an incentive to introduce quality inputs, farmers operating in target irrigation schemes will benefit from a *start-up kit* on a maximum of 0.25 ha per household; (iii) *Farmers' Field Schools* will be organised for enhanced production of quality vegetables along an agribusiness orientation; and (iv) cost-effective *climate resilient packages* (including on-farm trials and demonstration plots) will be developed in conjunction with IIAM to ensure appropriate, climate-resilient crop and soil management practices.
- *Support to farmers' organisations.* The project will provide capacity building support to current farmers' organisations, so that they can progressively develop into inclusive, well managed and profitable organisations that provide services to members, are able to exert their responsibilities as shareholders of the hub and are reliable business partners meeting their contractual obligations for producing and marketing.
- *Access to markets.* In addition to market linkages developed through hubs and outgrower schemes, investments will include: (i) rehabilitation of access road to secure all-year access of trucks; and (ii) market promotion.

43. **Sub-component 1.3 – Strengthening linkages between value chain stakeholders.** Investments will include:

- *Regional Value Chain Platform.* A regional value chain multi-stakeholders' platform will be set up, in connection with the National Horticulture Group, to identify value chain bottlenecks and make decisions for improvements, including with regard to policy development and the introduction of climate-resilient approaches. It will also provide overall project guidance, facilitate the coordination of project activities, participate in the preparation of annual VC DAPs and approve Component 1 APWBs prior to submission to the Project Steering Committee;
- *Innovation Platforms.* Similarly, multi-stakeholder platforms will be established in each of the districts where PROSUL will develop activities, in connection with the hub. They will have a key role in promoting project knowledge management and in disseminating good practices.
- *Monitoring, knowledge management and communication* of the various innovative approaches and models developed through the component will translate into a set of tools to be used by CEPAGRI to replicate the approach in other areas of the province, including a monitoring and evaluation system with a database and tools for analysis, proof-of-concept business models and technical notes.

44. **Implementation arrangements.** An international Horticulture LSP contracted by the PMT through a competitive bidding process will bear overall responsibility for coordinating the implementation of Component 1, in collaboration with the PMT and CEPAGRI. Every year, a VC DAP will be prepared by the LSP together with value chain stakeholders. VC DAPs will constitute the basis for the preparation of the Annual Work Plan and Budget for the component. The procurement of contractors for irrigation studies, works and supervision will be secured by the National Institute for

Irrigation (INIR). Activities related to land security will be implemented by a Land Tenure Service Provider along modalities detailed in Annex 4, Section 8 and in Annex 5.

Component 2 – Cassava

45. **Objectives and approach.** The component aims at shifting cassava from a subsistence crop to a cash crop by developing a set of business models whereby smallholders would produce increased volumes of good quality cassava and would have access to new types of markets for cassava products. A first, three-year phase will aim at developing viable business models, based on different forms of business partnerships and market outlets, primarily for cassava chips and flour. The first phase will target the districts of Inharrime (Inhambane) and Manjakaze (Gaza), and will be implemented along three major thrusts. *First, it will develop farmers' capacities to increase sustainably cassava productivity and quality*, by developing sustainable access to high yield cassava stems building on a commercially-run multiplication system, by promoting mechanization and building farmers capacities for improved, climate-resilient farming practices that will increase productivity, reduce drought risks and enhance food security. *Second, it will develop linkages between smallholders and other players in the value chains*, to promote access to developing markets and ensure smallholders' access to support services so that production can meet market requirements. *Third, it will develop a favourable value chain environment*, by setting up multi-stakeholder platforms to empower value chain stakeholders, including small farmers, in supporting value chain development, promote dialogue and ensure knowledge management and the dissemination of innovation. These will be thoroughly documented to set the basis for scaling up in the second phase.

46. By the end of the third year, a detailed review of achievements, lessons learnt and of further market prospects will be carried out in conjunction with the project mid-term review. Building on outcomes, activities will be expanded to four additional districts (Jangamo, Massinga, Morrumbene and Zavala) in the province of Inhambane, where service hubs will also be developed. In phase 1 districts, investments will be complemented with three smaller processing units per district, which would absorb increased production closer to production areas. Similar smaller units will be deployed as production increases throughout the project target area. Lessons learnt from the first phase will also help in determining a research and policy dialogue agenda to be supported in phase 2 to further develop a conducive environment for value chain development.

47. **Expected outcome.** The expected outcome of the component is that around 8,000 farmers in five districts of the province of Inhambane and one district of the province of Gaza sustainably increase their revenues out of cassava production, based on proof-of-concept innovative business models for the profitable production and marketing of cassava-based products. It is expected that an additional large population of farmers, including those cultivating other crops, will also be serviced by the hubs. and marketing of cassava-based products.

48. **Sub-component 2.1 – Strengthening linkages between value chain stakeholders.** Investments will include the following:

- *Scoping study.* A participatory scoping study will be carried out by the Cassava LSP to identify existing value chain players that would participate in business development (FOs, emerging/ commercial farmers, processors, private investors) and make detailed proposals of possible business ventures to be supported by the project. Based on the above, the Cassava LSP will identify for each of the two pilot districts a mix of settings testing several options for (i) business partnerships, including two service hubs with varying forms of ownership associating smallholders and private investors, as well as forward contracts with processors or other buyers; and (ii) market outlets, for cassava-based products (chips for the animal feed industry and ethanol production, and flour for the bakery industry) but possibly also for fresh tubers to supply mobile processing units linked to the brewery industry, or other types of processors. Detailed terms of reference are in Annexes 4 and 5.

- *Service hubs.* It is not expected, in this incipient stage of value chain development, that there will be any private investors interested in setting up outgrower schemes, except maybe in the brewing sector. One service hub will therefore be established in each of the target districts and will provide the following types of services: (i) *access to inputs*, and particularly to high-yield, drought tolerant and disease resistant planting material; (ii) *processing*: cassava hubs will include a processing unit, with an annual capacity of 7,000 t, which will produce chips and high quality flour, in accordance with prior market exploration; (iii) *equipment, financial services, technical advisory services and market linkages* will be developed along similar lines as described above for service hubs in the horticulture value chain. Similar arrangements will also be developed with regard to hubs governance structure and management. Details are in Annex 4 Sections 5 (Hubs) and 4 (Financial Services), and in Annex 5.
- *Small processing units.* Once hubs will have attained 70% of their processing capacity, financing will be made accessible through MFIs to FOs/private investors for the installation of three smaller processing units per district, which will increase processing capacity at a lower cost once the market is developed.
- *Forward contracts/outgrower schemes.* PROSUL will assist small farmers to engage into forward contracting and where possible outgrower schemes through the provision of similar support as planned in the Horticulture Component and which is detailed in Annex 4, Section 6.
- *Innovation.* Innovative agriculture practices will be promoted through the following instruments: (i) in collaboration with IIAM, the project will support the development of a commercially based system for the multiplication of *new high-yield, drought and disease-resistant cassava varieties*; (ii) as an incentive to introduce quality inputs, members of participating FOs will have access to a *start-up kit* on a maximum of 0.30 ha per household; (iii) *Farmers' Field Schools* will be organised for enhanced production of quality cassava along an agribusiness orientation; and (iv) cost-effective *climate resilient packages* will be developed in conjunction with IIAM to ensure appropriate, climate-resilient crop and soil management practices. Details are in Annex 4 Section 2 (Cassava) and in Annex 5.
- *Support to farmers' organisations.* The project will provide capacity building support to current farmers' organisations, so that they can progressively develop into inclusive, well managed and profitable organisations that provide services to members, are able to exert their responsibilities as shareholders of the hub and are reliable business partners meeting their contractual obligations for producing and marketing.
- *Access to markets.* In addition to market linkages developed through hubs and outgrower schemes, investments will include: (i) rehabilitation of access road to secure all-year access of trucks; and (ii) market promotion, in particular to advertise the use of cassava flour and cassava flour bread.

49. **Sub-component 2.2 – Value chain environment.** Investments will include the following:

- *Regional value chain platform.* A Regional Cassava Value Chain Multi-Stakeholder Platform (VCP) will be set up, which will further strengthen linkages between value chain stakeholders. The VCP will also be responsible for participating in the preparation of Value Chain Development Action Plan (see below) and for approving component APWBs prior to submission to the Project Steering Committee. Activities and implementation modalities will be developed along similar lines as those described for the Horticulture Component above.
- *Innovation Platforms.* Similarly, multi-stakeholder platforms will be established in each of the districts where PROSUL will develop activities, in connection with the hub along similar modalities as those described above for the Horticulture Component.
- *M&E, KM and communication.* The monitoring of business models performance, analysis of achievements and documentation of lessons learned and best practices with regard to both production, processing and climate resilience will bear particular importance to develop proof-

of-concept business models and pave the way for the second phase. Knowledge management will translate into a set of tools to be used by CEPAGRI to replicate the approach in other areas of the province, including a monitoring and evaluation system with a database and tools for analysis, proof-of-concept business models and technical notes.

- *Policy and legislative environment.* In the second phase, and based on the recommendations of the Cassava VCP and of the Mid-Term Review, the project will support key areas required to develop a conducive policy and legislative environment. These could include the development of quality standards and norms to promote the use of high quality cassava flour in bread production with the National Institute for Standardisation and Quality (INNOQ) and related training of value chain players.

50. **Implementation arrangements.** An international Cassava LSP contracted by the PMT through a competitive bidding process will bear overall responsibility for coordinating the implementation of Component 2, in collaboration with the PMT and CEPAGRI. Every year, a VC DAP will be prepared by the LSP together with value chain stakeholders. VC DAPs will constitute the basis for the preparation of the Annual Work Plan and Budget for the component. Activities related to land security will be implemented by a Land Tenure Service Provider along modalities explained in Annex 4, Section 8, and in Annex 5.

Component 3 – Red Meat

51. **Objective and approach.** The component aims at enabling livestock producers to take advantage of market opportunities by promoting improved rangeland, higher production and enhanced linkages between value chain stakeholders. Such an approach is expected to stimulate farmers' investment in improved productivity and herd management, to raise income and to contribute to food security. The component will be implemented through three main strategic thrusts. *First it will foster climate resilient and climate smart production practices and farmers' access to production services* by empowering small-scale livestock producers to form profitable, inclusive organisations producing quality ruminants, developing innovative models for breed improvement and improving production infrastructure and adaption capacity to drought. *Second it will develop sustainable market access and better prices* for small raisers through: (i) the organisation of cattle fairs, (ii) the creation of Meat Traders' Organisations and the development of contracting and outgrower schemes that would reward cattle productivity and quality gains, and (iii) the setting up of a new low carbon input slaughterhouse in the outskirts of Maputo. Better prices to farmers will also result from heavier, better treated animals and the development of quality standards. *Third, it will develop a favourable value chain environment*, by setting up multi-stakeholder platforms to empower value chain stakeholders, including small farmers, in supporting value chain development, promote dialogue and ensure knowledge management and the dissemination of innovation. It will also support the government in developing an enabling framework for the development of the meat industry.

52. **Expected outcome.** The expected outcome of the component is that around 3,400 small livestock producers of ruminants (of 5,600 breeders reached by the project) located in the districts of Manhica, Magude, Chokwe, Guijá, Massingir, Mabalane and Chicualacuala in Gaza Province will raise their income through increased productivity and quality of livestock and improved market linkages. New private ventures including MTOs, Livestock Vet Stores and the slaughterhouse will benefit another 1,380 beneficiaries, including employment opportunities for women and young people. Furthermore it is estimated that at least another 10,000 beneficiaries will indirectly benefit from project activities and services, including in districts neighbouring project target districts.

53. **Sub-component 3.1 – Value chain environment.** Investments will include the following:

54. **Scoping study.** A participatory scoping study will be carried out by the Livestock LSP during the initial phase of the project to: (i) map stakeholders involved in ruminant production and trading and assess their performance, capacities and governance mechanisms so as to identify players that will participate in the project and related support; (ii) in collaboration with the International Livestock Research Institute (ILRI), assess the scale, nature and location of demand for meat products in the

Southern provinces, and (iii) selecting project sites and identify the location for the construction of a slaughterhouse and meat processing facilities. Detailed terms of reference are in Annex 4.

55. **Innovation platforms.** An Innovation Platform (IP) will be set up in each participating district, building on the approach of ImGoats, an EU/IFAD funded project that is implemented by ILRI and CARE, and along similar lines as explained in Component 1.

56. **Regional value chain platform.** A Regional Value Chain Platform (VCP) will be set up with similar functions at regional level and in connection with the recently established National Livestock Forum. The VCP will also be responsible for participating in the preparation of Value Chain Development Action Plan (see below) and for approving component APWBs prior to submission to the Project Steering Committee. Activities and implementation modalities will be developed along similar lines as those described for the Horticulture Component above.

57. **Monitoring, knowledge management and communication.** In this incipient stage of value chain development, monitoring and knowledge management are key to monitor performance, analyse achievements, identify successful climate-resilient business models and document lessons learned and best practices. Knowledge management will translate into a set of tools to be used by CEPAGRI to replicate the approach in other areas of the province.

58. **Policy development.** In connection with the National Livestock Forum, the project will support key areas required to develop a conducive policy and legislative environment in areas identified by the Innovation Platforms/ Regional VCP, including regulations for hygiene practices in the meat industry, a certification process of local traders, a licensing system for meat transportation vehicles, production and processing standards to be developed in partnership with the National Institute for Standardisation and Quality (INNOQ), and approaches required to manage climate risks.

59. **Sub-component 3.2 – Production improvement.** Investments will include the following:

- *LPOs.* The project will support the strengthening/creation of Livestock Producers' Organisations able to develop production standards and efficiency in accordance with market requirements, provide services to members and manage a range of common assets, including grazing resources, water points, fodder banks and cattle fair equipment;
- *Innovation.* Innovative practices will be promoted through the following instruments: (i) *Farmers' Field Schools* will promote farmers' acquisition of technical and management skill; (ii) LPOs will be supported to prepare and implement *community-based Natural Resource Management Plans* to improve the management of pasture land and to decide on strategic location for project investments; (iii) cost-effective *climate resilient and climate smart packages* will improve dry season feeding and promote climate-resilient technologies; (iv) *fodder banks* designed to bridge forage scarcity in the dry season will be established and develop into commercial, LPO-managed ventures; (v) *breeding units* will be set up in partnership with commercial farmers, whereby small raisers will exchange their livestock against improved breeds, which they will then fatten and sell to the commercial farmer; (vi) as an incentive to adopt regular animal treatment members of participating LPOs will have access to a *start-up kit* with basic animal drugs for a maximum of 5 cows and 8 goats per household.
- *Access to services.* Services will be promoted at the cattle fair and will include the following: (i) a commercial network of *Livestock Vet Stores* will be established in partnership with a private pharmaceutical company, which will provide access to essential veterinary drugs and to the services of Animal Health Agents (AHAs); (ii) *financial services* will be provided by MFIs participating in project implementation either at the cattle fair or through mobile banking; (iii) *technical advisory services* will be provided through AHAs, breeding units and a technical expert assigned by the Livestock LSP to each district, with the possibility of turning the latter into permanent positions financed through the proceeds of the slaughterhouse (see below); (iv) *access to water* will be secured through water facilities (mall earth dams, boreholes and water troughs for livestock) managed by LPOs.

60. **Sub-component 3.3 – Market linkages.** Investments will include the following:

- *Cattle fairs.* The project will finance the improvement of cattle fairs, which will offer farmers an alternative to selling at farm gate by accessing a secured market place with a larger range of buyers, while buyers will reduce transaction costs. In each target district, the cattle fair will be equipped with steady water supply (through a borehole), a holding and crush pen to facilitate livestock handling and scales, which will be managed by LPOs. These will also be assisted to develop capacity building with regard to contracting processes and sales mechanisms.
- *MTOs.* PROSUL will facilitate the formation of Meat Traders Organisations (MTOs) to provide reliable market access to farmers and reduce transaction costs. They will access credit for buying animals and for purchasing transport equipment. Assistance will also be provided to develop contractual arrangements ensuring farmers a fair price and a reward for quality, and to develop a traders' identification and certification system, which will contribute to strengthening traders professionalism and enhancing the trust of livestock producers vis-à-vis traders.
- *Outgrower schemes.* Commercial farmers involved in breeding units described above will purchase fattened animals from farmers and sell them at higher prices to traders or slaughterhouses.
- *Slaughterhouse.* A new slaughterhouse will be built in the outskirts of Maputo, with a capacity of 25,000 cattle and 20,000 sheep and goats per annum, of which 70-75% will accommodate animals supplied by project-supported LPOs, while the remaining 25-20% will cater for animals from other origins. It will be equipped with cold storage, meat processing and packaging facilities, and include a waste disposal system connected to a bio-digester for the production of biogas (details in Annex 5), which will be used to generate electricity. Training of management personnel and slaughter attendants will ensure the operational efficiency of the slaughterhouse and the adoption of quality standards. The slaughterhouse will be set up under the form of a limited liability company (LLC), with joint ownership by LPOs, MTOs and private investors and will be financed by a mix of grant, equity and long term debt financing (details in Annex 4, Section 4). LPOs shares will be financed by PROSUL through the Catalytic Fund (see Component 4) on behalf of LPOs, who will gradually buy them using part of their dividends.

61. **Implementation arrangements.** An international Livestock LSP contracted by the PMT through a competitive bidding process will bear overall responsibility for coordinating the implementation of Component 3, in collaboration with the PMT and CEPAGRI. Every year, a VC DAP will be prepared by the LSP together with value chain stakeholders. VC DAPs will constitute the basis for the preparation of the Annual Work Plan and Budget for the component, and integrate climate resilience aspects. Activities related to land security will be implemented by a Land Tenure Service Provider along modalities explained in Annex 4, Section 8.

Component 4 – Financial services

62. **Objective and approach.** The objective of Component 4 is to ensure the access of value chain stakeholders (including smallholders as well as other players down the value chain such as commercial farmers, Livestock Vet Stores, MTOs and cassava processors) to adequate financial services provided at an affordable cost by sustainable MFIs using innovative delivery mechanisms to increase their outreach. There is currently no bank or microfinance institution that is in a position to provide the whole range of required financial instruments on its own resources and at an affordable rate. Project financial resources will be extended to an investment fund, which will on-lend them to microfinance institutions (MFIs), allowing these to provide the range of financial services required. To make sure that they can do this at an affordable interest rate for value chain stakeholders, the investment fund will take an equity position in the share capital of selected MFIs, which will open the possibility to also make a long-term deposit in their shareholders' account. The hosting institution for the investment fund would be the the Catalytic Fund set up in the framework of the Beira Agriculture

Growth Corridor initiative, a limited liability share company created under the laws of Mozambique with the objective to invest in and provide financial resources to agribusiness, including smallholder operations. Its bylaws leave open the possibility of extending its activities beyond the Beira Corridor and the Catalytic Fund has expressed an interest to participate in the project along the approach developed in the project report, subject to approval by its Board.

63. **Expected outcomes.** The expected outcome of the component is the timely and adequate access of value chain stakeholders to a diversified range of affordable financial products.

64. **Sub-component 4.1 – Financial services.** Investments will include:

- *Equity and debt financing.* PROSUL will finance a small department within the BAGC Catalytic Fund. The Fund will take a minority equity participation in up to three MFIs, which will be selected based on a call for expression of interest, a due diligence exercise and a financial and operational audit. It will extend resources to each MFI in the form of a long-term deposit, the interest rate of which will be negotiated among shareholders. Equity participation will result in an increase of the share capital of the MFIs and will be used to finance increased outreach through the expansion of their network (including through innovative features such as points of services in the hubs, mobile banking or mobile phone banking facilities). The long-term deposit will be used to extend different types of financial products to PROSUL-supported value chains stakeholders, as shown by Table 3, at an affordable interest rate expected to range from 15 to 18% per year, which would allow MFIs to cover their costs, risk and profit margin.

Table 3: Different financial products for each value chain stakeholder

Stakeholders	Financial instruments
Slaughterhouse LLC	Equity financing Debt financing (investment and working capital) Leasing <i>Grant financing</i>
Horticulture hub LLCs	Equity financing Debt financing (investment and working capital) Leasing Warehouse receipt financing <i>Grant financing</i>
Cassava processing hub LLCs	Equity financing Debt financing (investment and working capital) Leasing <i>Grant financing</i>
Producers' associations	Debt financing (investment and working capital) Leasing
Livestock Producers Associations	Debt financing (working capital) <i>Grant financing</i>
Meat Traders Associations	Debt financing (investment and working capital) Leasing <i>Grant financing</i>
Breeding units	Debt financing (investment) <i>Grant financing</i>
Vet franchisees network	Debt financing (investment and working capital) <i>Grant financing</i>
Cassava producers	Debt financing (investment and working capital) <i>Grant financing</i>

These financial products (detailed in Annex 4, Attachment IV) will generate different types of revenues: (i) net dividends from equity participation in hub companies, together with interests from investment loans, working capital loans and leasing will be used by microfinance institutions to cover their operating costs; (ii) the purchase of shares held by MFIs in hub companies by hub shareholders, together with the repayments of loan principal will form a revolving fund that will be used by MFIs for further investments to the benefit of value chain stakeholders.

The Catalytic Fund will also take an equity position in the limited liability company that will own the slaughterhouse financed by PROSUL (Slaughterhouse LLC), which it will hold on

behalf of LPOs co-owning the slaughterhouse. LPOs will gradually buy back the shares held by the Catalytic Fund. The net amount of dividends earned by the Catalytic Fund from the Slaughterhouse LLC investment will be used to cover the Catalytic Fund operating costs (especially those related to the PROSUL department) while the purchase price paid by LPOs for the Slaughterhouse LLC shares held by the Catalytic Fund will be used for further investments in PROSUL-supported value chains.

- *Grant financing.* Grant financing will be used to reduce the cost of building construction to be supported by the owners of horticulture hubs, cassava processing hubs, Livestock Vet Stores, and slaughterhouse. It will represent a maximum of 30% of the cost of the building, including studies and supervision costs.

Sub-component 4.2 – Capacity building. Capacity building activities will be carried out to the benefit of the following stakeholders:

- *Catalytic Fund and MFIs in which the Catalytic Fund will hold equity:* capacity building will mainly be provided to MFIs additional staff that will be recruited as a result of their participation in PROSUL. It will include: (i) training, (ii) technical assistance to design and implement new financial products and services, to implement new delivery mechanisms, and to adapt their MIS and accounting and financial systems to their new activities, (iii) study tours and exposure visits, (iv) the financing of investment costs related to staff recruitment, and (v) decreasing financing of their operating costs;
- *SMEs created under PROSUL:* these include the slaughterhouse and the service hubs that will be created under the form of limited liability companies (LLCs). Capacity building will be provided to Boards of Directors and to management teams and will include: (i) training on various subjects related to company's management, financial and cash management, as well as accounting; (ii) legal assistance for the creation of LLCs (as part of Component 5); and (iii) study tours and exposure visits;
- *Other loan beneficiaries:* they will access training from MFI staff on financial, cash and credit management and on basic bookkeeping, as well as legal assistance as required.

65. **Implementation arrangements.** The component will be implemented by the Catalytic Fund of the Beira Agriculture Growth Corridor, which will operate as an investment fund on behalf of PROSUL under a Subsidiary Financing Agreement to be signed with the Government of Mozambique. A Memorandum of Understanding will be signed between PROSUL PMT and the Catalytic Fund spelling out the role and responsibilities of either party. The Catalytic Fund will open a specific department adequately staffed to manage and monitor investments made under PROSUL, with an office in the project area. UNCDF will finance the provision of capacity building to MFIs under its programme for strengthening microfinance institutions. Every year, the Catalytic Fund as well as the three participating MFIs will take part in the preparation of the three annual VC DAPs based on which, the Manager of the PROSUL Department in the Catalytic Fund will prepare the project AWPB in collaboration with participating MFIs and the PMT Financial Services Expert.

Component 5 – Institutional Support and Project Management

66. **Objective and approach.** The objective of Component 5 is to strengthen CEPAGRI, the government agency responsible for project implementation, so that (i) it can deliver project outcomes and outputs according to plans and (ii) build capacities so that innovative climate resilient business models developed under the project can be further sustained and replicated and that value chain development can continue beyond project completion. These efforts will be complemented by a Land Tenure Security programme, funding from ASAP, and by the provision of support to strengthen linkages with agri-business education institutions in the southern provinces.

67. **Sub-component 5.1 - Institutional support.** The project will provide support to CEPAGRI to build its capacities for project implementation and coordination, for monitoring innovative climate

resilient business models and value chain performance and for managing and disseminating relevant information to value chain stakeholders.

68. **Capacity building to support value chain development.** Support will be provided mainly to the Gaza Delegation, so that it acquires the capacities, systems and relative guidelines and manuals required to support value chain development, including:

- planning and budgeting public support to value chain development;
- contracting out implementation activities to service providers and monitoring their performance;
- ensuring that value-chain development is climate-resilient;
- monitoring value chain performance, identifying successful business models and good practices and ensure dissemination to value chain stakeholders. This will include setting up an information system accessible to all value chain stakeholders and connected to the Project Learning System;
- facilitating Value Chain Stakeholder Platforms; and
- mainstreaming gender and inclusion into analytical and operational systems.

69. New systems developed will be compatible with CEPAGRI's existing infrastructure. They will primarily respond to the needs of the project value chains, but, once successfully tested and revised as appropriate, they could also be used by the Delegation to cover other value chains. Institutional support activities will be based on annual capacity development plans, which will be established jointly by the PMT Coordinator and CEPAGRI's Gaza Delegate, in connection with CEPAGRI headquarters and with support from specialised technical assistance. Annual plans will also identify public institutions and external assistance required to support implementation.

70. **Policies for climate change adaptation.** The project will contribute, through ASAP, to mainstream climate change adaptation in policy support for the three value chains. Annex 5, Outcome 5, describes the expected outputs in detail. This will include:

- (i) An institutional capacity needs assessment for mainstreaming the Mozambique climate change agenda within CEPAGRI during project inception (a draft checklist is in Attachment 5, Annex 5);
- (ii) the development of policy and strategic tools to promote climate proof agriculture and to increase the resilience of project-supported value chains, which would be led by the LSPs for each value chain. Initial needs assessment would be undertaken during the inception phase for each value chain and policies and tools developed in collaboration with members of the Innovation Platform/Regional VCP (See Annex 4);
- (iii) contributions to the project KM strategy by sharing climate adaptation knowledge appropriate to the needs of each Innovation Platform/Regional VCP (See Annex 4);
- (iv) building the capacities of CEPAGRI staff with regard to the broader national and regional climate change agenda and to develop strong linkages with the national climate change platform; and
- (v) CEPAGRI links with relevant institutions (particularly MICOA and INGC) and with the Strategic Programme for Climate Resilience co-financed by the World Bank and AfDB by CEPAGRI staff participation in the National Climate Change Forum and inviting representatives of that forum to participate in the annual Regional VCP meetings.

71. **Innovative contractual arrangements.** Technical and legal assistance will be made available throughout most of the project lifetime to support project stakeholders in developing and implementing innovative contractual arrangements and governance structures (outgrower schemes, forward contracting, farmers co-owned LLCs and other joint ventures...), securing sustainable returns to farmers and an equitable distribution of margins between smallholders and other value chain stakeholders. It will be programmed by the PMT Coordinator, in conjunction with LSPs.

72. **Agribusiness education.** In addition, PROSUL will provide limited support to developing interaction between professional agricultural education institutes in the South, on the one hand, and,

on the other hand, the service hubs, innovation platforms and regional value chain platforms. This could provide students with field experience, and also offer a field for action research with learning also benefitting project activities. Assistance will be programmed by the PMT.

73. **Sub-component 5.2 – Land Tenure Security.** PROSUL will support measures aimed at strengthening land rights of the project's target groups and at improving the management of land use by FOs and communities. Activities will include: (i) mapping of information relevant to the districts targeted under the three VCs on existing and planned land titles (DUATs); (ii) FO-based analysis of land access and tenure security issues, , with special attention given to identifying measures for strengthening land/natural resources rights of poor and vulnerable groups including women and youth; (iii) depending on the outcomes of (i) and (ii), support to community land delimitation and the issuing of DUATs to FOs. It is anticipated that the focus in the horticulture VC would be more on supporting the granting of DUATs to FOs and on strengthening them to develop internal rules for equitable land access. For the livestock VC, it is expected that the main emphasis will be on demarcating grazing/browsing areas and strengthening community and FO management rules for these areas. For cassava, it is anticipated that the emphasis will either be on community land delimitation in cases where cassava fields are scattered over a wide area or on the issuing of formal DUATs for associations where consolidated areas of cassava farming are identified. Priority will be given to associations directly involved in the ownership or management of hubs or those where there is the greatest demand for land. The sub-component will be implemented by a specialised service provider, with part-time technical assistance to support the PMT in programming and supervising activities.

74. **Project management.** Investments under this sub-component are designed to assist CEPAGRI in the planning, budgeting, contracting, supervising, managing and monitoring of project activities. They will mainly cover:

- *Project coordination and management.* CEPAGRI will be responsible for overall project coordination and implementation. It will be assisted by a *Project Coordinator*, who will be responsible for the day-to-day management and the overall coordination of PROSUL within CEPAGRI. The Project Coordinator will be based at CEPAGRI's delegation in Gaza, where s/he will lead the PMT that will support project implementation. His/her profile should be oriented towards management but also finance, given the high importance of developing access to financial services of a varied and innovative range as part of project activities. Knowledge on climate change issues will be advantageous. In addition to the Project Coordinator, the PMT will be composed of the following full-time staff:
 - a) a *Financial Manager* in charge of financial management, administration and procurement;
 - b) a *Financial and Administrative Assistant*;
 - c) an *M&E / Knowledge Management Officer* in charge of developing and implementing the Project Learning System, in close collaboration with CEPAGRI and with LSPs;
 - d) an *Agribusiness Expert* responsible for guiding and monitoring the implementation of the contracts with the three LSPs and for facilitating the linkages between the LSP on the one hand, and CEPAGRI and MINAG's departments (DNSA and DNSP) on the other hand;
 - e) a *Targeting and Gender Expert* responsible for ensuring that targeting and gender mainstreaming is applied throughout project activities in accordance with the Targeting and Gender Mainstreaming Strategy and Implementation Plan, and in collaboration with CEPAGRI, DPAs, LSPs and participating microfinance institutions.;
 - f) a *Financial Services Expert* responsible for the general overseeing of Component 4, including the overall coordination of the preparation and implementation monitoring of the AWPB, monitoring of performance of the various service providers intervening in the component implementation, and knowledge management.
 - g) In addition, consideration will be given to recruiting a *Climate Change Expert* to complement the PMT capacities in order to supervise the LSPs' efforts to promote climate-resilience in the

supported value chains, and to ensure adequate coverage of climate change aspects in the Project Learning System. This will be considered in the preparation of the first AWPB

- *Project Learning System.* The project will cover all support costs related to setting up and running the Project Learning System integrating planning, monitoring and evaluation (M&E) and Knowledge Management (KM), including baseline and impact studies, database and website establishment, workshops and publications, and short-term technical assistance (see below). There will be close interaction between this system and international efforts by IFAD and partners supporting ASAP to build knowledge on climate resilient smallholder agriculture. Through ASAP support, project baseline and impact studies will take into account various aspects of climate resilience. Particular attention will be given to lessons generated from this project on how to integrate climate resilience into a value-chains focused project. This will provide many lessons for scale-up, which is important given the potential to combine the priorities of value-chains development and climate-resilience across the IFAD-supported portfolio and beyond.
- *Project preparatory activities.* To facilitate a quick project start-up, CEPAGRI will receive advanced start-up funds from IFAD to set up the PMT and carry out preparatory activities that are required until IFAD can make the first disbursement of project funds. Furthermore, a Project Expeditor will assist CEPAGRI in recruiting the PMT and in setting up sound basis for financial management and procurement (draft TOR in Annex 6, Attachment 8). Towards the end of the 6-month preparatory phase, a 2-day inception workshop will be conducted in Xai-Xai by CEPAGRI and the PMT, with the participation of all relevant project stakeholders, to ensure a sound and shared understanding of the project approach and its operating modalities. A Financial Services consultant will attend the workshop to familiarize participants with the content and implementation arrangements of Component 4.
- *Project support costs.* Financing will also cover office operation and transportation (including the purchase of three vehicles and replacement after four years), as well as planning and oversight (meetings of Project Steering Committee and annual audits).

E. Lessons learnt and compliance with IFAD policies

75. PROSUL builds on lessons learnt out of the IFAD programme evaluation (2010) and of project experience. Main lessons, reflected in PROSUL design, can be summarised as follows:

- *Capacities.* Investment should be commensurate with institutional capacity and support for capacity-building and institutional strengthening should be included in project design, based on an assessment of institutional capacities and on the availability of qualified service providers. This was done during design and a list of suitable service providers interested in participating in project implementation as Lead service Providers was established.
- *Participation and flexibility.* Building on consultative participatory processes to orient project design and implementation develops stakeholder ownership and allows project frameworks to be more realistic and more responsive to actual constraints in project environment. Furthermore flexibility in programme design is critical to allow project management to adjust interventions in response to the actual situation and to evolving demands. PROSUL design was based on a series of workshops to select target value chains and stakeholders. Consultative processes and platforms are built into project design throughout all the components, which will allow to adapt the proposed business models to the features and needs of participating stakeholders.
- *Environmental Sustainability.* Project design has corroborated a key conclusion of IFAD's 2011 Environment and Natural Resource Management Policy: that value-chains cannot be supported without also addressing the environment and climate-related issues associated with increased production. The Policy has a strong emphasis on value chains, arguing that with an increasing number of value-chain projects in IFAD's portfolio (46% in 2009) there is an opportunity to maximize the positive environmental impact of value chain development and avoid downside risks. Such risks include where market entry comes at the cost of widespread conversion of

landscapes to often less climate-resilient monocropping, and waste disposal in poor rural communities that process agricultural products. Project activities are designed to avoid such risks.

- *Mainstreaming gender and inclusion.* Efforts with regard to gender mainstreaming and inclusion have been fragmented and do not appear to have had any real impact. IFAD needs to develop a targeting strategy considering recent evidence from poverty analyses showing that gender and social inequalities remain widespread throughout Mozambique. PROSUL design includes a targeting and gender strategy to mainstreaming inclusion and gender concerns throughout project activities, including the assignment of a targeting and gender specialist in the PMT.
- *Farmers' organisations.* FOs have a key role to play in facilitating market access to smallholders, but most of them are weak and little geared towards providing services to their members. Models applied so far are based on the provision of external assistance by projects, which are usually too short-lived to produce lasting effects. To reverse this trend, PROSUL design is geared towards ensuring FOs continued access to responsive technical advisory services and coaching, in particular through service hubs.
- *Implementing agency:* project performance has been most efficient where there is a project facilitation unit integrated in the government implementing agency. This is the model that was retained for PROSUL implementation framework, which features a dedicated PMT integrated in CEPAGRI's structure, using CEPAGRI's systems and strengthening CEPAGRI's management capacities.
- *Endogenous policy dialogue processes.* The most effective policy dialogue is the result of an endogenous process of dialogue among national institutions. This lesson is built into proposed value chain stakeholders' platforms, and in the close linkages between field activities, monitoring and knowledge management, and policy development.

76. PROSUL also takes stock of the experience of projects and players involved in supporting inclusive agri-business value chains and farmers' organisations, in particular with regard to the following issues:

- *Farmers' organisations.* PROSUL builds on new, emerging approaches such as outgrower schemes and forward contracts, and takes stock of the mixed experience of *casas agrárias*, farmer-owned service centres established in connection with irrigation schemes, to propose a new service hub model securing cost recovery and sustainability;
- *Market linkages.* There is an increasing diversity of players on which to base small farmers' access to market. The promotion of market linkages can therefore not rely on one single support model, but should rather rest on a thorough identification of market agents and on the design of tailor-made support packages. This lesson is reflected in the scoping studies and in the provision of a mix of capacity building, legal/technical assistance, study tours and access to financial services;
- *Financial services.* Available financial products on offer by commercial banks and MFIs are not accessible to smallholders because of excessive interest rates and conditions that they can hardly meet. Furthermore, the lack of venture capital hampers the development of agribusiness start-ups willing to engage into partnerships with smallholders. PROSUL will promote innovative instruments to fill current gaps and support inclusive agricultural investments, building on the existing financial infrastructure and on innovative experiences financed by the government and by donors.

77. Project design is also compliant with the main IFAD policies and strategies, including with regard to the Mozambique COSOP, targeting and gender mainstreaming, rural finance, rural enterprise development, private sector development, climate change and environment and natural resource management.

III. PROJECT IMPLEMENTATION

A. Organisational framework

Key implementing agencies

78. The PROSUL organisational framework builds on the CPE finding that project facilitation units have proven to be the most effective option for project implementation in Mozambique, provided linkages are established with the hosting institution to contribute to institution building and sustainability. It is also in line with CEPAGRI's mandate, which is not one of implementing large-scale investment projects but rather of a facilitating and coordinating body. And finally, it is in accordance with the nature of the project, which is to promote the development of business relationships between private actors, which requires a mix of public and private sector competences, and to promote innovative approaches to the development of pro-poor value chains, which requires external expertise.

79. **CEPAGRI.** The Director of CEPAGRI will have overall responsibility for the coordination and oversight of PROSUL. However, line responsibility for day-to-day programme implementation will be delegated to the Project Coordinator, who will exercise it in close collaboration with the CEPAGRI Delegate for the southern provinces in Xai-Xai (Gaza), and with support from the PMT. Annex 6, Attachment 2 presents the project organisational chart.

80. **Programme Management Team.** Overall responsibilities of the PMT include: (i) the provision of strategic guidance to develop project approach and activities; (i) financial and administrative management of project resources in line with the Financing Agreement; (ii) the planning of project activities and the preparation of the Annual Work Plan and Budget (AWPB); (iv) the contracting and procurement of project-related services and supplies; (v) the monitoring of implementation of service providers' contracts; (v) the coordination of project activities with the various project partners; (vi) the supervision, M&E and KM in relation to all activities; and (vii) the promotion of inclusive approaches. The planning, implementation, financial management and monitoring of project activities will be integrated as part of CEPAGRI's (and particular of its Delegation for the southern provinces) regular planning, budgeting, management and monitoring activities.

81. All PMT positions will be recruited through a competitive bidding open to both MINAG and external candidates, based on detailed terms of reference presented in Annex 6, with a view to ensure the setting up of a qualified, accountable and gender-balanced team. Except for the financial and administrative positions, prior experience with gender mainstreaming will be strongly desirable. Final selection will be submitted to IFAD for no-objection, as well as staff contracts.

82. **Lead Service Providers.** The implementation of components 1 to 3 will be carried out by three specialised LSPs, who will be responsible for implementing activities in support to inclusive and gender-based value chain development, as specified in the description of components. LSP responsibilities will include: (i) the preparation, implementation and monitoring of annual Value Chain Development Action Plans (VC DAPS) and related section in the AWPB, in collaboration with project stakeholders and Regional Value Chain Platforms; (ii) the contracting and procurement of services and supplies involved in implementing the component (with prior approval by the PMT); (iii) the coordination of the activities of the various component partners; (iv) setting up and supporting Regional Value Chain Platforms and Innovation Platforms; (v) supervision, M&E and knowledge management in relation to the component activities, under PMT guidance; and (vi) the preparation of progress reports for their component. Draft terms of reference are in Annex 6. LSPs will be contracted by CEPAGRI in coordination with DNSA (horticulture), IIAM (cassava) and DNSV (red meat) using competitive government procurement procedures and based on renewable performance based contracts. The three LSPs in turn will be responsible for the recruitment of specialised service providers, and in particular national ones, that would be required to carry out the implementation of component activities.

83. **Phasing.** LSPs are expected to organise implementation activities along three phases:

- *an initial phase* of about nine months, during which main activities will consist in: (i) carrying out the value chain scoping study; (ii) setting up all logistics arrangements; (iii) setting up the Value Chain Platform as well Innovation Platforms in the first districts of implementation, and defining their functions and mode of operation; (iv) developing the first VC DAP, together with main value chain stakeholders, and the first AWPB; (v) setting up an M&E/KM sub-system, under the guidance of the PMT, to become an integral part of the Project Learning System; and (vi) setting up administrative, financial and management systems required to comply with project requirements;
- *a main phase* of about four years, during which LSPs will implement the VC DAP jointly with value chain stakeholders. LSPs will revise the plan on an annual basis as a preliminary step to the preparation of the AWPB, based on actual performance and jointly with value chain stakeholders. Annual VC DAPs will be validated by Value Chain Platforms and by the Project Steering Committee. By the middle of the second phase (end of 2015), IFAD will carry out a Mid-Term Review (MTR), which will review project achievements, including the performance of innovative business models, and will propose relevant adaptations. Furthermore, a comprehensive Implementation Support Mission will be organised by IFAD beginning 2018, which will conduct a thorough review of achievements and make recommendations for the exit phase to ensure sustainability beyond project completion;
- *an exit phase* of about two years, during which implementation responsibilities intended to outlive the project (such as monitoring value chain performance and disseminating results, ensuring access to market information, ensuring coordination and interaction between value chain stakeholders, providing support services...) will be taken over by permanent stakeholders, including farmers' organisations, service hubs, Value Chain Stakeholders Platforms, private sector and financial institutions. Activities to be implemented by the service provider will therefore include: the provision of capacity building for the purpose (including training, coaching and methodological tools); and the preparation of value chain development strategies and plans for a new period starting right after project completion.

84. The exact duration and development of each phase will be adapted to the specificities of each component, in accordance with the progressive phasing in of target districts and in agreement with the PMT and CEPAGRI. Attachment 11 in Annex 11 shows district phasing for each component.

85. **Catalytic Fund.** The BAGC Catalytic Fund will be responsible for the implementation of Component 4. Arrangements will be finalized at project onset, and will be consigned in a Subsidiary Financing Agreement signed by the Fund and the Ministry of Finance (with prior IFAD no-objection), which will stipulate the terms and conditions under which PROSUL resources will be transferred to the Fund. An MOU with the PMT will further detail the role and responsibilities of both the Catalytic Fund and the PMT. Main responsibilities of the Catalytic Fund would include: (i) the creation of an adequately staffed specific department for PROSUL activities with an office in the project area; (ii) the preparation of annual AWPBs building on VC DAPs and the implementation of related activities; (iii) the monitoring of participatory microfinance institutions and other SMEs; (iv) quarterly reporting to the PMT on activities, financial progress and achievements; and (v) provision of technical assistance to microfinance institutions and SMEs in which it holds equity. Details are provided in Annex 4, Section 4 - Financial Services.

86. **Land Tenure Service Provider.** A Land Tenure Service Provider (LTSP) will be contracted to carry out all activities related to land tenure security. In addition to the LTSP, a part-time Land Tenure Advisor will be contracted, as required, to support the PMT and other service providers in identifying and supervising the LTSP's inputs.

87. **DNSA.** DNSA will play an advisory role for the implementation of Component 1 - Horticulture, by providing advice to CEPAGRI, to the PMT and to LSPs on all aspects related to agricultural policies and national strategies.

88. **INIR.** INIR will be responsible for the procurement and overseeing of a consulting firm to carry out the design and supervision of irrigation works and of private contractors to carry out the works.

89. **DNSV.** DNSV will play an advisory role for the implementation of Component 3 -Red Meat, by providing advice to CEPAGRI, to the PMT and to the LSP on all aspects related to livestock policies and national strategies.

90. **IIAM.** IIAM will play an advisory role for the implementation of Component 2 - Cassava, by providing advice to CEPAGRI, to the PMT and to the LSP on all aspects related to cassava policies and national strategies. Furthermore, IIAM will be responsible for implementing the whole range of research activities financed by PROSUL across the three value chains, and for setting up a system for the multiplication of high-yield, drought-resistant cassava stems on a commercial basis.

91. **DNEA.** DNEA will be a member of Project Steering Committee, through which it will provide advice and feedback to project stakeholders and implementing agencies on extension and access to services. It will be associated to knowledge management activities so as to capitalise on good practices developed through service hubs, outgrower schemes and other mechanisms designed to facilitate smallholders' access to services.

92. **DPAs.** As the lead institution of the agricultural sector at provincial level, DPA will play an important role in facilitating PROSUL implementation and linkages with agriculture stakeholders in the province. Specific responsibilities are detailed in Annex 6. To strengthen the linkages between the project and DPAs and to support the implementation of such responsibilities, each DPA will appoint a Focal Point who will be working full time with the project, for which s/he will receive a salary compensation.

93. **SDAEs.** District Services for Economic Activities (SDAEs) will facilitate the setting and operation of service hubs, by facilitating linkages with local actors. They will receive regular information about project activities and outcomes in their district, have access to hubs' business plans and progress reports and have quarterly information meetings with LSPs. With regard to extension, the development of production in the target value chains will require specialised expertise and it is not expected that SDAEs extensionists can specialise in all the value chains. SDAEs extensionists will participate in technical trainings supported by the project and be invited to open a contact point within each hub to attend farmers looking for advice on other crops than those targeted by the PROSUL, especially food crops.

94. **ANE.** The National Roads Authority (ANE) will be responsible for planning and overseeing road rehabilitation (included in components 1, 2 and 3), along arrangements that have already been successfully applied by PROMER and ProPESCA.

95. **Farmers' organisations.** FOs and their apex structures are central stakeholders in PROSUL implementation, with regard not only to production development but also to marketing, provision of support services, participation in value chain governance and in the development of service hubs. The project strategy and programme of activities are geared towards ensuring that, by the end of the project, they have become professional players in their respective value chains. Furthermore, FOs will own shares in the equity of service hubs and of the slaughterhouse that will be built by the project, which will enable them to participate in decision-making at board level, and thereby contribute to sustainable provision of responsive and affordable services. The strengthening of FO capacities will be one of the main responsibilities of PROSUL LSPs. The PMT will specifically provide guidance for the promotion of FOs entrepreneurial skills (through the Agribusiness Specialist) and to ensure that participating FOs become inclusive and gender equitable organisations (through the Targeting and Gender Expert). National apex organisations (UNAC, AMCPM, FENAGRI) are keen to be involved in organisational and agribusiness capacity development initiatives and LSPs will review possibilities to associate them in project implementation.

96. **Micro-finance institutions.** Up to three MFIs will participate in PROSUL and provide the range of financial instruments required to support value chain development, through resources channelled through the Catalytic Fund.

B. Project oversight

97. **Project Steering Committee.** This committee of up to 30 members will meet twice a year to: (i) review project progress against targets; (ii) assess management effectiveness; (ii) decide on corrective measures where appropriate; (iii) review lessons learned, good practices and innovation; (iv) approve AWPBs and review progress reports; and (v) provide overall guidance to project implementation. It will gather the representatives of main stakeholders involved in project implementation. For details see Annex 6.

98. **Regional Value Chain Platforms.** A Regional Multi-Stakeholder Value Chain Platform (VCP) will be established for each of the target value chains. VCPs will gather the representatives of key stakeholders for the southern provinces, i.e. farmer organisations and their apex structures, service hubs managers and technical advisors, market agents (processors, traders and institutional buyers), key service providers, financial institutions (including the BAGC Catalytic Fund and participating MFIs), agri-business education structures⁷, DPA, IIAM's Southern Zonal Centre, INRI local delegation, and CEPAGRI's Southern Delegation. They will also include representatives from MINAG at the national level (DNSA, DNSV, IIAM) to channel policy related issues of concern. They will meet at least twice a year, prior to the meeting of the Project Steering Committee. They will provide a venue to discuss project achievements, identify successes and problems as well as good (and climate-resilient) practices, discuss possible solutions including non-project based solutions, providing overall project guidance and coordinating interventions, and identifying issues to be addressed at policy making level. Based on this overall dialogue, VCPs will also be responsible for approving component APWBs prior to submission to the Project Steering Committee. The LSP will assist in setting up the VCPs, establishing their internal rules and regulations and facilitating their work. It will also ensure gender-balanced participation in the VCP.

99. Discussion on project performance will lead to discussing key issues linked to the value chain development (such as pricing, quality, sustainability, access to services etc.) as well as to identify key policy areas that need to be addressed at national level. Interaction between stakeholders will help in devising coordinated and harmonised interventions, whereby each stakeholder would contribute along its role and capacities based on a shared vision of value chain potential and constraints. Such an approach should be conducive to the development of synergies and of alliances based on mutual interests among stakeholders in the value chain and contribute to developing value chain governance at the regional level. It is expected that VCPs progressively evolve into permanent multi-stakeholder value chain platforms at the regional level, for which they will receive institution building support from the LSPs. The Mid-Term Review (end of 2015) will specifically review achievements of VCPs and provide orientations as to whether and how they should evolve into permanent structures.

100. **Innovation Platforms.** Similarly, multi-stakeholder platforms will be established in each of the districts where PROSUL will develop activities and for each of the value chains. They will have a similar composition as VCPs for what regards private sector actors, and will also include the SDAE and locally-based IIAM researchers. Innovation Platforms will have a similar role as that of VCPs, but at the district level, i.e. discussing issues of common interest and possible solutions, both project and non-project based ones. They will have a key role to play in promoting project knowledge management and in disseminating good practices. They will be established with support from the LSPs.

⁷ Such as the Chibuto School of Business and Entrepreneurship (Gaza), *Instituto Superior Politécnico de Chokwe* (Gaza) and *Instituto Superior de Vilanculos* (Inhambane).

C. Planning, monitoring and learning

101. **Objectives and approach.** A Project Learning System (PLS) integrating planning, M&E and KM will be developed with three main objectives:

- *steer project implementation:* it should provide project stakeholders with information and analysis required to: measure project outcomes; assess project effects on the livelihoods of participating farmers (including vulnerable households, women and young people); assess the relevance of the project strategy, methodologies and implementation processes; detect difficulties and successes; and support decision-making to improve project performance. It should also provide information to measure project contribution to the implementation of PEDSA and of PNDA, and to the achievement of COSOP targets;
- *support economic decisions:* it should provide value chain stakeholders, and in particular farmers' organisations and service hubs, with the information and analysis they need to assess the return brought by innovation, to develop profitable and climate-resilient activities and to adapt their strategies accordingly, by monitoring both quantitative (yields and production, margins, stocks, credit management...) and qualitative results (members'/clients' satisfaction). Furthermore, it should provide stakeholders and government with the informative environment needed to make policy decisions that can positively benefit economic activities within the value chains;
- *share knowledge:* based on the above, the PLS should develop lessons learning, capture best practices and successful innovation, and share knowledge under appropriate formats to support project performance and policy dialogue. Specific areas of interest in this respect include inclusive business models, public-private partnerships for farmers' access to services, and innovative financial instruments. Particular linkages with complementary IFAD-financed projects (such as PROMER, PAFIR and ProParcerias) will be built and maintained.

102. The system will be open, i.e. its use would not be restricted to project or government agencies staff, but also provide information and learning for value chain stakeholders; participatory, i.e. associate project stakeholders, and specifically producers' organisations, in the definition of indicators, data collection, analysis and dissemination of results; growing, thus small initially and develop progressively as needs and capacities develop; focused on analysis and learning in support of decision making and policy dialogue, and not merely on data production; connected to CEPAGRI's information systems; inclusive of women and marginalised groups; and supporting accountability to project stakeholders.

103. **Project planning.** The PLS cycle would start with the preparation of the AWPB, first at component level building on VC DAPs, then for the whole project. Planning will include an annual plan for M&E/KM and communication, which will also identify specific areas in which project stakeholders intend to identify lessons and good practices. As of the second project year, the process will build on the results and recommendations of Regional Value Chain Platforms. With support from the LSPs, they will analyse past project performance, propose corrections and discuss/validate AWPBs based on the VCDAP.

104. **Data management.** The PLS will provide both quantitative (including geo-referenced) and qualitative information and will be organised along three levels:

- *producer level:* this level would encompass information relating to farmers and to their organisations, as well as to service hubs performance. Information systems at this level will be set up by LSPs. They will reflect the specificities of each value chain and will provide information needed to support decision-making within farmers' organisations and service hubs. Poorer producers and women will have to be specifically consulted. A small database would be set up within each service hub to facilitate the process;
- *component level:* this level will provide information on progress in implementing components, including on the outcomes of market linkages developed between small farmers and traders/institutional buyers/processors. This level will be implemented by LSPs and, for component 4, by the Catalytic Fund;

- *global project level*: this level will aggregate information on the five project components to measure project/RIMS/ASAP indicators and to assess overall project performance. It will be the responsibility of the M&E and KM Officer.

105. A specialised consultant will be hired by the PMT to support CEPAGRI/project staff and VCPs in: (i) agreeing on a shared understanding of project objectives, approaches and planned activities; (ii) agreeing on a vision of the objectives and expected results of the PLS, as well as on a broad framework for M&E and KM and on priority actions to implement it; (iii) identifying quantitative and qualitative indicators to initiate the system at each level. Indicators will be developed with relevant stakeholders at each level; they will have to be coherent with CEPAGRI information systems, easy to collect and gender-disaggregated. The consultant will prepare an M&E and KM strategy, including a detailed plan for the first year and an M&E and KM manual. S/he will also provide orientations to design a management information system (MIS), to be set up by a service provider and accessible to project stakeholders. The MIS will include project financial and technical data from the PLS and other important sector information to analyse performance of the project and other initiatives (such as prices). It will process information and present it along appropriate formats such as dashboards, charts and maps. Regular updates will be carried out to incorporate new information requirements that will arise during project implementation. Information will also be available through an online website. In addition, a baseline study will be carried out for each component and will establish the reference situation with regard to project indicators. Training will be organised for project and CEPAGRI managers to build capacities required to use the system.

106. **Innovation and knowledge sharing.** Tools and venues for knowledge sharing will be identified as part of the PLS and will be described in the M&E and KM manual. Every year, innovation areas in which project stakeholders intend to detect good practices and to develop an exchange of knowledge will be identified by the VCPs, and the annual M&E and KM plan will outline corresponding methodologies, responsibilities and deliverables. These will be reviewed by VCPs, and extensive dissemination through appropriate supports and communication channels will then be carried out based on the communication plan to be prepared by the PMT.

107. **Learning routes.** Four Learning Routes (LR) will be organised by the PMT, with guidance from the specialised and IFAD-supported NGO PROCASUR. Two LRs have been pre-identified during project design. One is on GALS (see above Section II) and could be implemented in Malawi, Uganda, Zambia or Sierra Leone. The other LR is on the Red Meat value chain and would involve value chain stakeholders (farmers, butchers, traders and DNSV staff) either in Tanzania or in Kenya. Two more Learning Routes will be organised to support innovation in the horticulture and cassava value chains. Details on Learning Routes are in Annex 11.

D. Financial management, procurement and governance

108. **Financial management.** CEPAGRI will open a USD Designated Account at the Bank of Mozambique, which will receive IFAD financing proceeds. From this account:

- *all funds required to meet project expenditure, except start-up funds flowing to the Start-up Account and funds to be disbursed by the Catalytic Fund*, will flow into the national finance, budgetary and reporting system, namely the *Conta Unica do Tesouro (CUT)* and e-SISTAFE, the government's electronic public finance budgetary and reporting system;
- *funds to be disbursed by the Catalytic Fund* will be transferred to the Catalytic Fund as per the Subsidiary Financing Agreement (SFA) to be signed between Fund and the Minister of Finance. The SFA will stipulate the terms and conditions under which PROSUL resources will be transferred to and used by the Catalytic Fund (see details in Annex 4, Section 4).

109. The Designated Account will operate with an advance payment from IFAD (Authorised Allocation), which will be determined by IFAD based on expected patterns of expenditure, withdrawal application processing timeframe, and requirements for financial efficiency.

110. **Advance Account.** e-SISTAFE only allows payments that can be processed through bank transfers, which leaves out a range of payments required in project implementation (such as for example the payment of per diem to participants in workshops or in Learning Routes). For such cases, CEPAGRI will open a local currency Advance Account in Xai-Xai, at any commercial bank acceptable to IFAD, to process small payments that cannot be accommodated in the e-SISTAFE system. Funds will be transferred from the CUT to the Advance Account.

111. Both the Designated Account and the Advance Account will be in the name of the project, appropriately coded within the CUT and e-SISTAFE coding framework. The Designated Account will be operated by the signatories as directed by the Ministry of Finance and MINAG. The Advance Account will be operated by the CEPAGRI Delegate for the Southern Provinces and the Head of the Administration and Finance Department in the Delegation (joint signatories) and by the Project Coordinator and the PMT Financial and Administrative Manager (joint signatories).

112. Funds will flow from this account through the national finance, budgetary and reporting system, namely the *Conta Unica do Tesouro (CUT)* and E-SISTAFE. For those expenditure that cannot be accommodated into the e-SISTAFE system, such as matching grants, alternative arrangements will be envisaged at final design.

113. Project accounting systems will be consistent with international accounting standards and principles as well as with government requirements, and internal financial controls will regularly be applied. CEPAGRI will be accountable to the government and financiers for the proper use of funds in line with legal agreements, and, with support from the PMT, prepare quarterly financial reports as well as annual financial statements within three months of the end of each fiscal year. It will also be responsible for organising the annual audit within six months of the end of each fiscal year.

114. **Procurement.** Procurement will be carried out in accordance with government regulations, which are consistent with IFAD Procurement Guidelines, and according to the procedures already agreed for all IFAD-funded projects in Mozambique in the IFAD Code of Practices for project management in Mozambique. Service providers will be hired through renewable performance-based contracts. The draft procurement plan attached in Annex 6 for the initial period of 18 months will be finalised by the PMT during the start-up phase and updated annually or as required to reflect actual implementation needs.

115. **Governance.** Annual audits will be performed in accordance with International Standards of Auditing by an external independent auditor. IFAD's direct supervision process includes modules on fiduciary compliance and the responsibility and accountability framework.

E. Supervision

116. The project will be directly supervised by IFAD. For this, annual implementation support missions, initially followed by short follow-up missions six months later, will be organised with the participation of the government (CEPAGRI). Missions will not be conducted as a general inspection or evaluation, but rather as an opportunity to jointly assess achievements and lessons, review innovations, and reflect on improvement measures. Missions will therefore be an integral part of the KM cycle, with mission members playing a supportive and coaching role. To ensure continuity in this process, missions will be carried out by a core team of resource persons returning regularly, joined by specialists to address specific needs of a given year. Additionally, an in-depth Mid-Term Review (MTR) will be organised by government and IFAD by the end of 2015, which will review project achievements, including the performance of innovative business models, and will propose relevant adaptations, in close collaboration project implementers and stakeholders. A detailed list of issues to be reviewed by the MTR is included in Annex 11. Furthermore, in early 2018 IFAD will conduct a comprehensive Implementation Support Mission to review achievements and make recommendations for the exit phase to ensure sustainability beyond project completion.

F. Risk identification and mitigation

117. Table 4 identifies main risks and mitigation measures.

Table 4 – Main risks and mitigation measures

Risk	Mitigating measures
Climatic extremes – drought, floods, increased temperatures	<ul style="list-style-type: none"> • Promotion of resistant cassava varieties and horticulture seeds, and of climate-resilient grazing and feeding • Promotion of resilient production techniques • Irrigation and low-cost greenhouse and access to water facilities for livestock
Lack of financial capacity and interest on behalf of private sector to invest in processing	<ul style="list-style-type: none"> • Provide private investors with matching grants to support investment in innovative and riskier activity • Develop service hubs co-owned by farmers
Weak technical and management capacities of farmers' organisations	<ul style="list-style-type: none"> • Support to governance and management provided by LSPs • Service hubs to be managed by skilled professionals
Lack of capacities of smallholders to negotiate fair deals with private investors and to exert shareholder responsibilities	<ul style="list-style-type: none"> • Provision of legal assistance and support by LSPs • Investment Fund holding shares on behalf of farmers' organisations and representing their interests
Scarcity of labour force, as the region has high rates of immigration of men to South Africa and urban areas	<ul style="list-style-type: none"> • Train primarily women on technical skills to fill the gap • Facilitate access to mechanisation through hubs and outgrower schemes as well as through appropriate financial services (investment credit and leasing – Component 4)
Unprofitability of cassava development	<ul style="list-style-type: none"> • Pilot phase built into project, with assessment by mid of fourth year to assess success and identify whether conditions for upscaling are met

IV. PROJECT COSTS, FINANCING AND BENEFITS

A. Project costs

118. **Project cost.** The total project cost for the 7-year duration, including physical and price contingencies, is estimated at around USD 44.95 million (summary and detailed cost tables are presented in Annex 7). Physical and price contingencies make up about 4%, and foreign exchange 16% of the total costs. Taxes amount to approximately USD 2.5 million. Funds allocated to project management total USD 6.72 million or about 15% of project base costs.

Table 5: Project costs by component

Component	Amount (MZM million)	Amount (USD '000)	% of total base costs
1.Horticulture	357.0	12,750	29
2.Cassava	109.7	3,917	9
3.Red meat	151.1	5,398	12
4.Financial services	405.9	14,497	33
5.Institutional support and project management	188.0	6,716	16
Total BASELINE COSTS	1,211.7	43,278.5	100
Physical Contingencies	33.2	1,187	3
Price Contingencies	175.2	482	1
Total PROJECT COSTS	1,420.2	44,947	104

B. Project Financing

119. IFAD will finance 87% of project costs or approximately USD 39.02 million, of which USD 16.30 million in the form of a highly concessional loan, USD 1.52 million in the form of a grant, a USD 16.30 million loan (highly concessional) financed by IFAD's Spanish Trust Fund and a USD 4.91 million grant from ASAP. The United Nations Capital Development Fund (UNCDF) will finance about USD 143 000 in technical assistance. The government is expected to finance about USD 2.49 million for taxes and duties, private sector USD 1.90 million and beneficiaries USD 1.40 million. Table 6 shows the financing plan of the project.

Table 6: Project financing plan

Financier	Amount (USD '000)	%
IFAD loan	16,298	36.3
IFAD grant	1,519	3.4
IFAD Spanish Trust Fund	16,298	36.3
ASAP grant	4,908	10.9
UNCDF	143	0.3
Government of Mozambique	2,487	5.5
Private investors	1,896	4.2
Beneficiaries	1,398	3.1
Total PROJECT COSTS	44,947	100.0

C. Summary benefit analysis

120. **Beneficiaries.** PROSUL will work directly with a population of around 20,350 households, including about 18,400 farming households. The remaining households will benefit from wages earned in hubs, small cassava processing units, Livestock Vet Stores and in the slaughterhouse, processing units and hubs (staff), and will also include members of Meat Traders' Organisations (MTOs) and around 50 commercial farmers. Altogether the project would directly benefit a population of around 102,000 persons. In the horticulture sector, PROSUL would support 4,800 farmer households on irrigated plots of less than 0.7 ha. In the cassava value chain, the project would support 8,000 smallholder households cultivating cassava on an average of 0.6 ha. In the red meat sector, the project would benefit around 5,600 smallholder households breeding cattle and shoats.

121. It should be noted that these are conservative figures, which only take into account direct beneficiaries, i.e. those that will receive direct project support. In addition however, hubs will benefit a larger population of farmers that could access services of interest for other types of crops than those supported by the project (for example inputs, financial services, equipment, storage). Cattle fairs will also attract a larger number of farmers than those that directly benefit from project services. The development of horticulture will provide increased opportunities for labour benefitting poorer households. The slaughterhouse will service clients from other areas than project target areas, and MFIs will be able to channel revolving resources to new clients. FFSs developed for the first time in

the livestock sector will ensure further replication throughout the country. Finally, the development of innovative business models that could be further promoted by CEPAGRI could potentially benefit a much larger population of smallholders throughout the southern provinces.

122. **Benefits.** Main benefits expected from the various components include:

- *Horticulture:* improved productivity and extension of production cycles in irrigation schemes and greenhouses, allowing all year production and higher prices during off peak seasons alongside greater climate resilience; the full smallholder exploitation of 3,000 ha of improved and rehabilitated irrigated schemes; development of innovative outgrower schemes; service provision from 7 multi-service hubs, with services that would be of interest not only to vegetable producers, but also to farmers producing other crops; availability of appropriate technical packages to generate higher quality and prices; profitable and autonomously managed farmer organisations.
- *Cassava:* improved productivity of cassava production and processing; development of new business models securing new market outlets and increased income for cassava producers and promoting the market of cassava-based products; service provision from 24 hubs support cassava input provision and processing; development of climate-resilient technical packages to mitigate farmers' risk and to promote higher quality; profitable and autonomously managed farmer organisations.
- *Red meat:* improved climate resilient and climate smart production and herd management resulting in higher and more regular income; functioning breeding units and improved herd quality through joint ventures between commercial and small farmers; functioning cattle fairs and service provision from 7 MTOs facilitating goat and cattle marketing and increasing margins to farmers resulting from reduced transaction costs, and from a network of commercially run Livestock Vet Stores; profitable and autonomously managed farmer organisations; functioning of a new low carbon input slaughterhouse offering a market outlet for breeders and securing better prices through the promotion of higher quality.

123. **Economic viability and sensitivity analysis.** The economic internal rate of return of the project is estimated at 24.6%, with a net present value of USD 39.0 million. The project's economic viability is robust to adverse changes in project costs, and the project still remains viable with increases in capital and recurrent costs of 50%. The project is also robust to decreases in incremental benefits as its economic internal rate of return is still 18.7% if incremental benefits are reduced by 30%.

D. Sustainability

124. PROSUL is organised as a temporary intervention to develop viable and sustainable business models in the horticulture, cassava and goats/cattle value chains, with a clear objective of developing institutions, mechanisms and capacities that would be able to continue on their own after project completion. This is reflected by the following project features:

- *Private-sector driven approach:* PROSUL approach builds on a range of business ventures that are designed to secure smallholders' continued access to markets and services even beyond project completion, by ensuring not only cost recovery but also profit generation;
- *Service hubs:* service hubs are designed along a business model that will allow them to continue extending support services to farmers beyond project completion, including for other value chains than those supported by the project. Main features to this end include: (i) ownership structure allowing investment by private sector; (ii) setting up of a cost-recovery system to sustain profitability; and (iii) staffing of each hub with a skilled manager to be financed by hub proceeds;
- *Farmers' organisations,* which will be supported through tailor-made capacity building packages to acquire the technical and management capacities as well as the financial resources allowing them to become sustainable, profitable organisations, able to sustain contractual arrangements for producing and marketing;

- *Financial support services:* sustainable access to financial services and capacity building will be developed to ensure access to the diversity of instruments required to support value chain development along affordable terms and conditions for agriculture activities;
- *Climate-resilient practices:* the development of climate resilient technological packages and practices will pave the way for sustained productivity and quality improvements in the semi-arid environment of the southern provinces;
- *Multi-stakeholder platforms:* by supporting the creation of stable multi-stakeholder platforms, PROSUL will assist value chain stakeholders in developing strong linkages and support their ability to take the lead in value chain development;
- *Integration in CEPAGRI:* as CEPAGRI's mandate is not one of implementing large-scale investment activities, project implementation will be supported by a Programme Management Team and outsourced service providers. However project management procedures, and in particular M&E and KM will be aligned with CEPAGRI's own procedures and systems;
- *Utilisation of national procedures* for project financial management (CUT and e-SISTAFE framework) will be applied.

