

AFRICAN DEVELOPMENT FUND



MOZAMBIQUE

UNILÚRIO - SUPPORT TO SKILLS DEVELOPMENT FOR AGRICULTURE AND INDUSTRY PROJECT

RDGS/AHHD/COMZ/PGCL DEPARTMENTS

January 2018

TABLE OF CONTENTS

| | |
|--|----|
| I – STRATEGIC THRUST & RATIONALE | 1 |
| 1.1 Project linkages with country strategy and objectives | 1 |
| 1.2 Rationale for Bank’s involvement | 3 |
| 1.3 Donor Coordination..... | 4 |
| II – PROJECT DESCRIPTION..... | 6 |
| 2.1 Project components..... | 6 |
| 2.2 Technical solution retained and other alternatives explored..... | 8 |
| 2.3 Project type | 9 |
| 2.4 Project cost and financing arrangements | 9 |
| 2.5 Project’s target area and population..... | 10 |
| 2.6 Participatory process for project identification, design and implementation | 10 |
| 2.7 Bank Group experience, lessons reflected in project design | 11 |
| 2.8 Key performance indicators | 11 |
| III – PROJECT FEASIBILITY | 12 |
| 3.1 Economic and financial performance | 12 |
| IV – IMPLEMENTATION | 15 |
| 4.1 Implementation arrangements | 15 |
| 4.2 Monitoring | 18 |
| 4.3 Governance | 18 |
| 4.4 Sustainability..... | 19 |
| 4.5 Risk management..... | 19 |
| 4.6 Knowledge building..... | 19 |
| V – LEGAL INSTRUMENTS AND AUTHORITY | 20 |
| 5.1 Legal instrument | 20 |
| 5.2 Conditions associated with Bank’s intervention..... | 20 |
| 5.3 Compliance with Bank Policies | 20 |
| VI – RECOMMENDATION | 20 |
| Appendix I. Country’s comparative socio-economic indicators | |
| Appendix II. Table of ADB’s portfolio in the country | |
| Appendix III. Key related projects financed by the Bank & other development partners in the country | |
| Appendix IV. Justification for 100% projects’ cost financing including VAT | |
| Appendix V. Map of the Project Area | |

Currency Equivalents

As of August 2017 (appraisal)

| | | |
|---------------|---|------------|
| Currency Unit | = | US Dollars |
| 1 UA | = | 1.407 USD |
| 1 USD | = | MZN |
| 1 UA | = | 86.115 MZN |

Fiscal Year

January 1st – December 31st

Weights and Measures

| | | |
|-------------------|---|-------------------|
| 1 metric tonne | = | 2204 pounds (lbs) |
| 1 kilogramme (kg) | = | 2.200 lbs |
| 1 metre (m) | = | 3.28 feet (ft) |
| 1 millimetre (mm) | = | 0.03937 inch (“) |
| 1 kilometre (km) | = | 0.62 mile |
| 1 hectare (ha) | = | 2.471 acres |

Acronyms and Abbreviations

| | |
|----------|---|
| ADB | African Development Bank |
| ADF | African Development Fund |
| COMZ | Mozambique Country Office |
| DANIDA | Denmark Development Cooperation |
| DFID | Department for International Development (UK) |
| DHS | Demographic and Health Surveys |
| DP | Development Partners |
| GDP | Gross Domestic Product |
| GoM | Govern of Mozambique |
| HCS | Human Capital Strategy |
| HDI | Human Development Index |
| IDRC | International Development Research Center |
| IIAG | Ibrahim Index of African Governance |
| ILO | International Labour Organization |
| IMF | International Monetary Fund |
| INE | National Institute of Statistics |
| IPR | Implementation Progress Report |
| JfYS | Jobs for Youth Strategy |
| M&E | Monitoring and Evaluation |
| MOU | Memorandum of Understanding |
| MSMEs | Micro Small and Medium enterprises |
| MEF | Ministry of Economy and Finance |
| PIT | Project Implementation Team |
| QPR | Quarterly Progress Report |
| RBCSP | Revised Results Based Country Strategy Paper |
| RMCs | Regional Member Countries |
| SA | Special Accounts |
| SC | Steering Committee |
| SADC | Southern Africa Development Community |
| TA | Technical annexes |
| AT | Administrative Tribunal |
| TVET | Technical and vocational education and training |
| TYS | Ten Year Strategy |
| UA | Unit of Account |
| UN | United Nations |
| UniLúrio | University of Lúrio |
| USD | United States Dollars |

Grant Information

Client's information

BORROWER: Republic of Mozambique

EXECUTING AGENCY: Ministry of Science, Technology, Higher and Professional Education

Financing plan

| Source | Amount | Instrument |
|--------------------|-------------------------|--------------|
| ADF | UA 10.00 million | Grant |
| GoM/ Beneficiaries | UA 1.10 million | Contribution |
| TOTAL COST | UA 11.10 million | |

ADB's key financing information

| | |
|-----------------------|---------------------|
| Grant currency | UA 10.00 million |
| Interest type* | NA |
| Interest rate spread* | NA |
| Commitment fee* | NA |
| Other fees* | NA |
| Tenor | NA |
| Grace period | NA |
| FIRR, NPV (base case) | 194.8 (MZN Million) |
| EIRR (base case) | 11.6% |

**if applicable*

Timeframe - Main Milestones (expected)

| | |
|-----------------------|----------------|
| Concept Note approval | August, 2017 |
| Project approval | January, 2018 |
| Effectiveness | February, 2017 |
| Completion | February, 2023 |
| Last Disbursement | August , 2023 |
| Last repayment | N/A |

Project Summary

1. **Project overview.** **By strengthening UniLúrio’s training and applied research capacity in agriculture and industry the project will contribute to the development of the skilled labour force needed to enhance the country’s productivity.** UniLúrio’s agriculture and industry related programmes focus on forestry, rural development and zootechny as well as computer, civil, mechanical and geological engineering. The project will support UniLúrio by (i) improving the quality and relevance of training; (ii) strengthening employability and entrepreneurship, (iii) improving equitable access at the university, thus contributing to improving the situation in the national higher education system; and (iv) strengthening strategic planning and management. The total cost of the 5-year project is estimated at UA 11.10 million, which will be financed by the ADF Grant (10.00 million) and government’s counterpart contribution (1.10 million).

2. **The implementation arrangements build on lessons learnt from the implementation of education projects in Mozambique and similar national or regional projects supporting higher education in other contexts.** Thus, day-to-day management will be carried out by the university, which was assessed as having adequate administrative and technical structures and staff for overall management and oversight. Additional assistance will be provided by external consultants recruited under the project on finance and procurement issues.

3. **Needs Assessment.** **The project supports a university, which is serving the poorest region of the country and with high natural resources potential.** It is the most recent public university (established in 2006) and the only public university in the northern region which consists of the three provinces of Cabo Delgado, Nampula and Niassa totaling 44% of the country’s population. As this region has huge natural potential for agriculture which contributes 26% of the country’s GDP, it is expected that UniLúrio’s graduates will contribute to the development of the region and of the country as a whole, in agriculture, in particular. Furthermore, the university plays a major transformational and advisory role through its interaction with the communities (outreach activities in rural areas, internships, etc.).

4. **Bank’s Added Value.** **The project exemplifies, at national level, the Bank’s development vision as embodied in its corporate strategies.** The project is in line with the African Development Bank’s development priorities as expressed in the Ten-year Strategy (TYS) 2013-2022, the Human Capital Strategy 2014-2018, and the High 5s. Skills and Technology is one of the operational priorities of the YYS and is also one major focus of the Human Capital Strategy, which highlights the need to address the issues of youth unemployment through skills. By developing skills for agriculture and industry, the project will contribute to the achievement of several High 5s including “Feed Africa” “Industrialize Africa”, and “improve the quality of life of the people of Africa” in rural areas and cities.

5. **Knowledge Management.** **The implementation of this project will contribute to the generation of knowledge on the support to a multi-campus national university serving a disadvantaged region.** This knowledge relates to (i) the choice to be made in a context of diversity of needs; (ii) the use of ICT to improve effectiveness of academic activities and management for a multi-campus university; and (iii) strategic and business planning to improve sustainability of a higher education institution. The Bank will use the knowledge generated for the design of similar projects in similar contexts. This knowledge will be available through documents and the web sites as well as exchange of experience between the project staff and experts in the RMCs, bilateral and multilateral institutions.

RESULTS-BASED LOGICAL FRAMEWORK

| Country and Programme Name: Mozambique – UniLúrio- Support to Skills Development for Agriculture and Industry Purpose of the programme: To contribute to employment enhancement and poverty reduction in Mozambique by increasing productivity and competitiveness through skilled and entrepreneurial labour force in Agriculture, Engineering and Applied Sciences | | | | | | |
|---|---|---|--|---|---|--|
| RESULTS CHAIN | | PERFORMANCE INDICATORS | | | MEANS OF VERIFICATION | RISKS/MITIGATION MEASURES |
| | | Indicator | Baseline | Target | | |
| IMPACT | Skilled and employable human resource enhancement in the Northern Region | Percentage of graduates employed or self-employed gender disaggregated | Women: 58% Men : 60.8% in 2013 | Women: 62.2% Mem : 64% By 2022 | INE Reports MEF Reports ILO Reports | |
| OUTCOMES | 1. Quality and relevance of training programs agriculture and science fields are enhanced 2. Equitable access to higher education is improved at UniLúrio 3. Strategic planning and management are strengthened at UniLúrio | <ul style="list-style-type: none"> Level of satisfaction of private sector employers of performance of graduates Number graduates (gender disaggregated) in agriculture and science fields Organization model modernized and operational | <ul style="list-style-type: none"> 53% in 2015 835 M & 167 W in 2016 Outdated model in 2017 | <ul style="list-style-type: none"> 90% fully satisfied in 2022 1468M & 513 W by 2022 Model operational by 2021 | UniLúrio reports Opinion surveys Tracer Studies | Risk: Limited private sector and industry base could limit employment opportunities Mitigation: entrepreneurship training and incubation support to prepare students for self-employment and business creation |
| OUTPUTS | A: Academic infrastructure and equipment for the campuses of Marere, Pemba and Niassa 1. Laboratory and library buildings complex constructed & equipped 2. Construction & equipping of agricultural business unit | <ul style="list-style-type: none"> Nr. of laboratory & library buildings functional Nr. of agricultural business units constructed under the project | <ul style="list-style-type: none"> One Lab & library in 2017 None in 2017 | <ul style="list-style-type: none"> 4 libraries & 4 lab (one per campus) in 2020 1 unit in 2020 | UniLúrio reports | Risk: Sustainability, mainly as regards maintenance of the procured equipment Mitigation: maintenance and repair will be included in the UniLúrio annual budget Risk: Limited number of female candidates in applied science & engineering Mitigation: awareness activities at secondary school levels Risk: Resistance of the academics and staff to organizational change Mitigation: Management is committed and the process involving the study will be fully participatory |
| | B: Strengthening training and employability 1. Teacher and lab tutor training 2. Entrepreneurship & gender training integrated in the curriculum 3. Support to graduates' entrepreneurial initiatives | <ul style="list-style-type: none"> Number of teachers & lab. tutors trained under through in-service & formal training Number of curriculums revised & modules produced Number of business initiatives within the agriculture value chain & eng. under the Project | <ul style="list-style-type: none"> 6 Tutors, 14 PHD, 90 Masters in 2017 (24% W) None in 2017 03 in 2017 | <ul style="list-style-type: none"> Tutors 41 (60% W) 104 Masters, 24 PHD by 2023 (45% W) 100% of all curriculums integrated 15 in Faculty of Agric. Eng. (1/y 50% W) | Project monitoring reports; | |
| | C. Equity and gender. 1. Gender guideline mainstreaming 2. Preparation of girls for higher education enhanced | <ul style="list-style-type: none"> Strategic Plan improved with action plan prepared Number of graduating secondary school girls attending preparatory programme | <ul style="list-style-type: none"> Strategic Plan in 2017 140 by 2017 | <ul style="list-style-type: none"> Gender Mainstreamed Strategic Plan in 2019 900 secondary schools girls under tutorial prog 2023 | Site visits | |
| | D: Strategic planning and management 1. Strategic & Financial and Information management system improved 2. Quality assessment improved at UniLúrio | <ul style="list-style-type: none"> Strategic & Financial management system in place Number of laboratories with international certification granted | <ul style="list-style-type: none"> 1 Obsolete System in place None in 2017 | <ul style="list-style-type: none"> 1 upgraded system in 2019 3 CEIL/nutrition Eng. & Agrarian Sciences 2022 | Audit report Reports | |

| | | |
|----------------|---|---|
| KEY ACTIVITIES | Component A: Academic infrastructure and equipment: construction and equipment of labs workshops & libraries 6.4 | <u>Sources (million UA)</u> ADF 10,00 Gov. 1,10 Total 11.10 |
| | Component B: Strengthening training and employability: teacher training; programs and curricula; research; entrepreneurship training; entrepreneurship awards; students' initiatives funded, partnership with private sector; internships; incubation; tracer studies Number of under 2.1 | |
| | Number of business initiatives within the agriculture value chain under the Project, pedagogic seminars agricultural business unit | |
| | Component C: Equity and gender: mainstreaming guidelines; activities to promote participation of females; student grants; preparatory and tutorial programs 0.7 | |
| | Component D: Strategic planning and management: modernization of organizational model; strategic planning; IT connectivity; technical assistance; project management; audit) 1.9 | |

Project Timeframe

| Project Implementation Schedule | 2017 | 2018 | | | | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | |
|--|------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| Activity | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th |
| Loan Processing | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loan Negotiations | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loan Approval | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loan Signature | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loan Effectiveness | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Launching | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component I: Infrastructure and equipment | | | | | | | | | | | | | | | | | | | | | | | | | |
| Procurement: specialist , firms, Equipment | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction of Lab, Library Buildings & Agri. Business Unit | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply of Lab & Library & Agri. Business equipment | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component II: Strengthening training and employability | | | | | | | | | | | | | | | | | | | | | | | | | |
| Teacher and lab tutor training | | | | | | | | | | | | | | | | | | | | | | | | | |
| Agricultural entrepreneurship enhanced at the Faculty of Agri. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Entrepreneurship training integrated in the curriculum | | | | | | | | | | | | | | | | | | | | | | | | | |
| Support to graduates' entrepreneurial initiatives (incubation) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component III: Equity and gender | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gender mainstreaming guidelines (with action plan) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparatory and tutorial programme for final year secondary school girls | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component IV: Project Management | | | | | | | | | | | | | | | | | | | | | | | | | |
| PIT establishment | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply IT Equipment & Furniture | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation of Project Manuals | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitoring & evaluation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarterly Reports | | | | | | | | | | | | | | | | | | | | | | | | | |
| Steering Committee Meeting | | | | | | | | | | | | | | | | | | | | | | | | | |
| Financial Auditing of Project | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mid -Term Review | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Completion Report | | | | | | | | | | | | | | | | | | | | | | | | | |

REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSED GRANT TO MOZAMBIQUE FOR THE UNILÚRIO-SUPPORT TO SKILLS DEVELOPMENT FOR AGRICULTURE AND INDUSTRY PROJECT

Management submits the following Report and Recommendation for a proposed grant for UA 10.00 million on ADF terms to the Republic of Mozambique to finance the UniLúrio - Support to Skills Development for Agriculture and Industry Project.

I. STRATEGIC THRUST & RATIONALE

1.1. Project linkages with country strategy and objectives

1.1.1. The project is in line with the AfDB's development priorities highlighted in the Ten Year 2013-2022 Strategy (TYS), the High 5s, the Human Capital Strategy 2014-2018 (HCS), and the Jobs for Youth in Africa Strategy 2016-2025 (JfYs) as well as the Gender Strategy 2014-2018. Skills and Technology is one of the five operational priorities of the TYS, and the HCS defines priorities and strategies to develop skills and technology for competitiveness and jobs for youth. The project will contribute to the achievement of the Bank's High 5s, which identify key areas to boost Africa's development.¹ Indeed, by strengthening the UniLúrio's Agriculture and Engineering programs, the project contributes to the development of skills to modernize agriculture and enhance industrialization through the enhancement of value chains, thus promoting the country's competitiveness and better conditions for the rural populations which live on agriculture. The project also supports the UniLúrio's efforts to involve continuously with the communities through action research and direct assistance as part of its extension activities and improve their quality of life. Furthermore, through the enhancement of entrepreneurship training and internship, the project will contribute to the implementation of the JfYs, which aims to create 25 million jobs and equip at least 50 million youth to realize their full economic potential, by addressing: (i) demand challenges; (ii) supply challenges, namely equipping youth girls in particular with skills that position them for the jobs of tomorrow; and (iii) linkage challenges and connecting youth to economic opportunities.

1.1.2. The Project is in line with the proposed strategic focus for the Bank's new country strategy. The new 2018-2022 CSP, currently under preparation, received the guidance from CODE to focus on two strategic pillars: Pillar I - Infrastructure development; and Pillar II - Agriculture. Furthermore, the Bank's analytical note for the new CSP 2018-2022, identifies key issues including (i) promoting growth in other sectors that have closer linkages with the rest of the economy and greater impact on creating employment, (ii) investing in human capital to increase the productivity of the labour force, in particular in the Agriculture Sector, and the economy's overall competitiveness, ensuring that the population can also participate in the growth process. So, the proposed project is aligned to the two strategic pillars of the CSP aiming to help close the skills and infrastructure gaps and lead to the creation of jobs, business opportunities and revenues.

1.1.3. The project is also in line with the central objective of the 2015-2019 Government Plan, which aims to improve the living conditions of the Mozambican people, increasing employment, productivity and competitiveness, creating wealth and generating a balanced and inclusive development. With low productivity and competitiveness, a growing labour force and vast natural resources, Mozambique must develop labour intensive,

¹(i) *Light up and Power Africa*, (ii) *Feed Africa* ; (iii) *Integrate Africa* ; *Industrialize Africa* ; (v) *Improve quality of life for the people of Africa*.

competitive products and businesses, while also improving the livelihoods of its population. Priority interventions include increased agricultural productivity and production, value addition, and improved marketing. This will help create adequate conditions for a new generation of young commercial farmers and agro-entrepreneurs to emerge along the various agro-business value chains including inputs supply, mechanization service provision and agro-processing and commercialization. Thus, the proposed Project will contribute to addressing the priorities highlighted in the national 2015-2019 Plan, which relate to the development of human capital, the promotion of entrepreneurship and improvement of competitiveness and productivity in key areas, and the development of economic and social infrastructures.

1.1.4. UniLúrio represents Government's efforts to decentralize its public university system to address increasing demand and improve the development impact of higher education in science and technology. While providing to the country some of the skilled labour force it needs in key areas (such as agriculture and engineering) to add value to its natural resources and boost industrialization, UniLúrio through applied research and mostly through innovative extension activities, impacts directly on the lives of the surrounding communities. The other public institutions in the region are the Pedagogical University and the Military Academy.² The existing private operators have mainly humanities and social sciences courses with few exceptions. The high tuition fee of private education is not affordable for low income families. Therefore, given Mozambique's high level of inequality, and in particular inequality in access to post-basic education, promoting more equitable access is critical for shared prosperity and development.

1.1.5. Enrolments in the higher education system increased rapidly from about 12,000 in 2000 to 101,000 students in 2010 and to around 130,000 students in 2016.³ It moved from a system almost completely concentrated in Maputo to a system that is present in all provinces. The general objective of improving access to higher education is to ensure that secondary education graduates can enter higher education within the framework of defined access conditions and according to available places. Factors of socioeconomic, ethnic and regional origin, gender and others should not be impediments to access to higher education, if not exceptionally, when it is imperative to reduce marked asymmetries. In this regard, some of the strategy's targets are : (i) increase of the proportion of girls from 38% in 2009 to 50 % in 2030; (ii) 20% annual increase of proportion of students with scholarships and (iii) increase of the proportion of graduating students from an average of 10.6% of registered ones in 2009 to 15% in 2020.

1.1.6. It is in this context that the University of Lúrio was established in 2006 as a national public university headquartered in Nampula city, with faculties in Pemba (Cabo Delgado province) and Unango (Niassa province). A sixth faculty has just been established for Social and Human Sciences⁴ on the Island of Mozambique, and a Business School was also recently established in Nampula. This university, which was built under challenging conditions currently offers 14 undergraduate courses as well as four post-graduate courses. However, numerical, geographical growth and the ongoing fiscal consolidation measures related to the ongoing fiscal tightening of the public finances (limitations on new hires, spending restrictions and postponement of new investment projects) pose challenges in ensuring adequate training conditions, research and acceptable quality standards.

1.1.7. With the desired level of investments and strategic planning, Unilúrio can be transformed into an academic institution of excellence prepared to support the needs of the private sector and communities. Among other planned interventions, the investments in

² The list of public & private universities in the region including areas of study in Table 1.4. (technical annexes)

³ Admissions, by sex and area of study of public & private universities are indicated in Table : 4.2 (technical annexes)

⁴ Social and Human Sciences include: communication, tourism, conservation of national heritage, local development and international relations, anthropology and archeology

the gas sector, the rapid urbanization of Nampula and other cities in the region, the continuous development of the corridors will demand skilled work force. The assessment of local natural assets and the discussions with local private sector actors during the field mission indicate that there is potential for the interaction with the private sector (training, internship, incubation) as well as business development, particularly in agriculture. The Faculty of Agriculture Sciences placed in Unango, 60 kms from Lichinga (the provincial capital of Niassa province), is surrounded by 250 hectares of arable land including 40 ha of a magnificent native forest which, if properly managed can have a multipurpose use including research, collection of medicinal plants and tourism. However, apart from the basic infrastructure (class rooms, administrative block, residences and school canteen) no other substantial facilities are in place. The environment is not conducive to attract students that are willing to obtain relevant knowledge based on theory and practice. There is no internet connectivity, equipped laboratories nor infrastructure for agricultural research, experimentation and practical work (irrigation, equipment, experimental fields, etc.). Another key priority is the improvement of lecturer's skills.⁵

1.1.8. In Mozambique, more than a third of faculty lecturing in higher education are only bachelor's degree holders. Other constraints include: lack of learning resources, laboratories and modern technological tools. This explains partially the frequent complaint from employers of lack of concrete hands-on technical skills. Still there is an increased demand for higher education graduates exceeding the available supply, especially within applied sciences engineering, and skilled technicians. In general higher education institutions need to (i) pursue curricula reforms with full involvement of the private sector ; (ii) introduce more experimental and student focused teaching-learning approach and (iii) invest in modern teaching and learning equipment.

1.2. Rationale for Bank's involvement

1.2.1 The project will contribute to hastening targeted solutions for poverty and inequality reduction, which are needed for social inclusion and shared prosperity in Mozambique. According to the 2014/15 Household Budget Survey (IOF)⁶ 46.1% of Mozambicans still live below the poverty lines with both moderate and extreme poverty concentrated in rural areas, notably in the Northern regions (Table 1.2.1). A major reason for the striking levels of rural poverty is largely attributed to the fact that 78% of Mozambique's labour force is employed in agriculture, and dominated by low skilled labor and marked by low productivity. With 800kg/ha of maize or 500kg/ha of soybean the country has one of the lowest crop yields in the SADC region⁷.

Table 1.2.1 Mozambique Poverty incidence

| Area | IOF08 | IOF14 |
|------------|-------|-------|
| National | 51.7 | 46.1 |
| Urban | 46.8 | 37.4 |
| Rural | 53.8 | 50.1 |
| Niassa | 33.0 | 60.6 |
| C. Delgado | 39.0 | 44.8 |
| Nampula | 51.4 | 57.1 |

Source : Ministry of Economy and Finance IOF/2016

1.2.2 The project supports Agriculture, which plays a key role in Mozambique's economy, contributing 26 percent of the country's GDP. Agriculture offers scope to narrow income disparities between rural and urban areas and to reduce poverty in regions that benefitted little from the recent years' economic gains. Evidence from latest studies suggests that many of Mozambique's farm households may emerge from rural poverty if they can overcome impediments to improve agricultural productivity. Low productivity, marginal use

⁵ The average age among tutors/teachers/lectures range from 25 to 30 years old mainly former students without any prior work experience

⁶ IOF08 2008/09; IOF14:2014/15

⁷ South Africa Department of Agriculture & Fisheries (2014/15) crop yields: maize 3,75 t/ha & 1,54 t/ha of soya bean

of improved inputs and labor-saving technologies and limited agronomic knowledge are among the key constraints that affect smallholder performance. Expanding the inclusion of smallholder farmers as primary producers will require in particular, investment in human capital for increased agricultural productivity and production.

1.2.3 It is estimated that about 300,000 individuals enter the labour market each year in the medium term and that this figure could increase to 500,000 by 2025. A changing economic structure dominated by a highly capital intensive extraction of natural resources will only exacerbate inclusivity challenges if solutions to improve skills and foster productivity are not accelerated to help achieve sustainable and broad-based growth. Therefore, improving and expanding skills at the levels of technical, vocational education and higher education is vital in order to meet the demands of the labor market and avoid that shortage of relevant labour force constrains economic growth and thus undermine long term prospects for poverty alleviation.

1.2.4 The project will contribute to addressing some of the social and economic drivers of fragility in the country, namely, (i) inequality along economic and education lines and (ii) narrow and geographically concentrated critical infrastructure. Activities, outputs and the outcomes of the proposed will provide entry points to address those drivers. Moreover, the project is likely to generate indirect positive effects on employment rates (during the construction phase) as well as on dependency ratios in the region (given that the bulk of the beneficiaries in the short and medium term will be graduated youngsters (including young generation of agro- entrepreneurs) which will either become self-employed or join the pool of employable skilled labor force.

1.2.5 There is little support to higher education from development partners. The majority of funding from the GoM and development partners is focused on pre-primary, primary and secondary education resulting in noticeable improvements in enrolment rates and gender parity at these levels (Table 1.2.2). Despite this important progress there are still disparities in student retention among the provinces. The overall quality of education and completion rates remain a concern. Furthermore, the massive increase in those completing primary and secondary education creates significant pressure to expand TVET and higher education opportunities.

Table 1.2.2: Students Evolution (public, private & community) – (2011 – 2016)

| Level | Year | | | | | | | | | Growth | |
|------------------|------------------|------------------|--------------|------------------|------------------|--------------|------------------|------------------|--------------|---------------|--------------|
| | 2011 | | | 2015 | | | 2016 | | | Δ 2016 Δ 2016 | |
| | Total | Women | %W | Total | Women | %W | Total | Women | %W | /2015 | /2011 |
| EP1 ⁸ | 4.441.715 | 2.119.499 | 47,7% | 5.019.828 | 2.400.767 | 47,8% | 5.118.082 | 2,463,879 | 48.1% | 2.0% | 15.2% |
| EP2 | 871.445 | 403.412 | 46,3% | 882.168 | 413.302 | 46,9% | 923.706 | 433,993 | 47.0% | 4.7% | 6.0% |
| ES1 | 761.589 | 359.898 | 47,3% | 780.078 | 378.192 | 48,5% | 794.974 | 386,576 | 48.6% | 1.9% | 4.4% |
| ES2 | 191.320 | 87.495 | 45,7% | 252.460 | 122.194 | 48,4% | 265.417 | 129,313 | 48.7% | 5.1% | 38.7% |
| Total | 6.266.069 | 2.970.304 | 47.4% | 6.934.534 | 3.314.455 | 47,8% | 7.102.179 | 3,413,761 | 48.1% | 2.4% | 13.3% |

Source: Ministry of Education and Human Development

1.3. Donor coordination

1.3.1 Following the disclosure of unreported sovereign guaranteed loans the aid coordination structure in Mozambique is shifting. Disbursement to the Budget Support was suspended and the majority of partners are now directing their resources to finance projects and to pooled funds⁹. Overall donor coordination is effective in the social sectors and the Bank through its country office continues to play an active role. Indeed, the Bank is active in some

⁸ EP: Primary; ES: Secondary

⁹ Sector-wide approaches & financial assistance through a multi-donor pooled fund mechanism of supporting the Government's sectoral expenditure programs

relevant thematic donors' groups like the Agriculture, Roads, Water and Sanitation. While Donor Coordination is effective in Basic and Secondary Education which has traditionally been supported through a basket fund to the Education Sector Strategic Plan, in Higher education coordination is still being consolidated.

1.3.2 The ongoing World Bank financed Higher Education, Science and Technology (HEST) Project provides a comprehensive support to various aspects of higher education in the country. Several universities including UniLúrio in partnership with Eduardo Mondlane University (Maputo) have benefitted from its interventions. UniLúrio has also been active in developing partnerships with foreign universities. For example, currently the Health Sciences Faculty is engaged in an IDRC (Canada)-financed action research partnership with the Canadian university of Saskatchewan, and the Nutrition Programme in a DANIDA-financed project. So, there is a need for synergy and coordination with institutions supporting higher education and those directly supporting UniLúrio (or intending to do so in the near future). This will be facilitated by the newly established coordination mechanism by the Ministry of Science, Technology and Higher and Professional Education in consultation with the development partners to improve assistance to this subsector.

Table 1.3.1: Donor coordination

| Table 13.1. Donor coordination | | | | |
|--|------------|---------|-------------|------|
| Sector or subsector* | Size | | | |
| | GDP | Exports | Labor Force | |
| Social & Econ. Sectors | 24% | n/a | n/a | |
| | Government | Donors | World Bank | 60% |
| USD | 116.5 M. | [14M] | Sweden | 20% |
| % | [88%] | [12%] | Italy | 5% |
| | | | Others | 15% |
| Level of Donor Coordination | | | | |
| Existence of Thematic Working Groups | | | | Y |
| Existence of SWAPs or Integrated Sector Approaches | | | | Y |
| ADB's Involvement in donors coordination*** | | | | M*** |

* as most appropriate ** Years [yy1 to yy2] *** for this sector or sub-sector

**** L: leader, M: member but not leader, none: no involvement

1.3.3 There are other relevant interventions by development partners, which complement the proposed project. These include the Italian Cooperation's support for the establishment of two Higher Education Centers for teacher training in agriculture and tourism. The private sector, particularly the mining industry, are also supporting skills development aimed at reducing skills mismatch, enhancing employability and the capacity of the MSMEs in the value chains. The project will learn from the experiences of these interventions in terms of methodologies, implementation challenges and opportunities but will seek also to complement and build synergies. The project will in particular partner with the Norwegian Embassy who intends to improve UniLúrio's standards by undertaking joint research in environment (marine biology), oil and gas fields. This project will also create the conditions for a smooth implementation of future interventions from the Bank in the region on Priority Intervention Area (PIA) of the Feed Africa Strategy namely the transformation of African Savannas into Bread Baskets and the Development of Agro industry transformation (Agro-poles) in Nacala and Pemba –Lichinga corridors.

II. PROJECT DESCRIPTION

2.1. Project components

2.1.1 Project design (components). **The project aims to contribute to employment enhancement and poverty reduction in Mozambique by increasing productivity and competitiveness through skilled and entrepreneurial labour force in Agriculture, Engineering and Applied Sciences.** This objective will be achieved by building a sustainable skills development capacity of UniLúrio through (i) the enhancement of the quality and relevance teaching; (ii) the strengthening of employability and entrepreneurship oriented teaching (iii) the improvement of equitable access to higher education at UniLúrio; and (iv) the strengthening of the university's strategic planning and management capacity. The table below presents a brief description of the project by component, and is supported by additional information provided in paragraphs 2.1.2 to 2.1.5.

Table 2.1: Project components

| N . | Component name | Est. cost UA | Component description |
|-----|--|--------------|--|
| 1. | Academic infrastructure and equipment | 6.4 | Build sustainable capacity at UniLúrio to enable the institution to perform effectively its functions of teaching, research & services through: <ul style="list-style-type: none"> Construction of laboratory and library buildings complex in Marere, Pemba and Unango campuses Consultancy services for design updates and works supervision Supply of laboratory equipment of Marere, Pemba and Unango campuses Supply of library equipment and material for Marere, Pemba and Unango Construction and equipping of agricultural business unit in Unango Supply of IT equipment and vehicles to support academic activities |
| 2. | Strengthening training and employability | 2.1 | Support teaching and research delivery as well as the enhancement of the employability of the students by : <ul style="list-style-type: none"> Training of faculty and lab operators Support Phd & MSc training Conduct curriculum review & integration of entrepreneurship skills training Support to graduates' entrepreneurial initiatives (incubation) Support to the establishment of partnerships with private sector operators for curricula development including MoU and internships Establish an agri-business unit in Unango to enhance agricultural entrepreneurship at the Faculty of Agriculture Organization of academic workshops and seminars |
| 3. | Equity and gender | 0.7 | Support the Government's policy regarding equity in access to higher education, through: <ul style="list-style-type: none"> Provision of grants to students with a special focus on the promotion of higher female participation; Development of gender mainstreaming program , guidelines and action plan Development and implementation of preparatory and tutorial programme for graduating secondary school students with particular focus on girls (science) |
| 4. | Strategic planning and management | 1.9 | Improve sustainability and UniLúrio's overall strategic planning and quality assurance capacity: <ul style="list-style-type: none"> Study to assess & design a modernized organizational business model Update of UniLúrio's Strategic plan Implementation of a Project Financial management system Improvement of Management Information System Establishment of a multipurpose IT networking infrastructure to improve interconnection of the multi-campus university Design and operationalization of an effective and relevant internal quality assessment management system including strengthening of M&E system Capacity development (Project Coordinator, Accountant & Procurement) Supply of IT Equipment, Furniture and a vehicle for PMT Reporting (preparation, reproduction and dissemination; quarterly) Financial Auditing of Project - Consulting Firm Project Completion Report |

Component 1

2.1.2 This component aims to build capacity at UniLúrio to enable the institution to perform its functions of teaching more effectively, research and services to the communities. Main activities will be (i) the construction and equipping of a modern laboratory building complex on each campus focusing on Agricultural Sciences and Engineering and (ii) the construction and equipping of campus libraries, including digital content. UniLúrio has designed prototypes of the building which will be used for all campuses. Works will include the construction of fences in order to secure buildings, equipment and ensure safety in particular for women. UniLúrio's Faculty of Architecture will be closely involved in monitoring construction works.

Component 2

2.1.3 This component will improve the quality and scope of academic activities as well as the relevance of these activities to the country's needs. Teaching and research will be supported through upgrading some MSc degree holders to PhD level. Pedagogic seminars will also be organized to upgrade all faculty and tutors. Resources will be provided to update the curricula in line with the evolving needs of the labor market and gender equity. To address external efficiency, the project will support the improvement of the employability of the students through entrepreneurship skills development, partnerships with the private sector for curricula development and support to incubation activities. In particular, graduates with a degree/diploma in agriculture will be encouraged to initiate enterprises along the various agriculture value chain including inputs supply, mechanization service provision, and agro-processing. To enhance the contribution of the project to the challenges faced by the country regarding nutrition in the project target provinces, linkages will be strengthened between the Faculty of Agriculture and the Nutrition department of the Health Sciences Faculty through action research and outreach activities. Beneficiaries of MSc and PhD grants under this project or funded by bilateral and multilateral donors will be encouraged to conduct research in this or related fields. An agricultural business unit will be established in the Faculty of Agricultural Sciences as an incubator for students' business initiatives. One minibus and one field vehicle will be provided to each of the campuses to facilitate transportation of students and faculty to the field for research and internship purposes.

Component 3

2.1.4 The component will support Unilúrio to implement Government's policy regarding equity in access to higher education as clearly indicated in the Higher Education Strategy¹⁰. UniLúrio has developed and adopted official guidelines for student social benefits defining the different types of financial assistance students can be awarded¹¹. The project will support the implementation of these guidelines by providing resources to support student's grants. Furthermore, a special attention will be paid to the promotion of higher female participation, through (i) the development and implementation of gender mainstreaming guidelines, (ii) a preparatory and tutorial programme for graduating secondary school girls to facilitate their transition to higher education (iii) increasing scholarships/grants for girls and (iv) preparing and implementing awareness activities at secondary school level and in the community to attract female students to higher education and mainly in the fields of engineering and applied sciences.

Component 4

2.1.5 This component will support overall governance at UniLúrio by strengthening strategic planning and management capacity to improve the institution's ability to face academic and financial challenges and ensure sustainability in the context of diminishing resources from the public sources. Strengthening the culture and capacity of business planning will contribute to enhancing the institution's visibility and credibility. In this regard,

¹⁰Plano Estratégico do Ensino Superior 2012-2020

¹¹ Regulamento sobre os benefícios sociais (UniLúrio, revised in September 2015)

the university will be encouraged to seek international certification for its laboratories to enhance potential for service delivery to external stakeholders. Unilúrio should be able to undertake soil and fertility analyses as well as certification of cash crops products for international markets. The internal quality assessment system will be improved and operationalized, which will increase the university's readiness for quality assessment in the national, regional and international contexts. UniLúrio's administrative entities which will be involved in the management of the project will also be strengthened. Activities under this component will include consultancy for studies and strategic planning, development and upgrade of financial and EMIS systems and staff training. A feasibility study has been conducted for an IT-based networking platform allowing the university which has campuses in three provinces to improve academic and management activities as well as communication, coordination and monitoring within and across campuses. The project will support the establishment and operationalization of this multipurpose IT platform through infrastructure, equipment and training of users.

2.2. Technical solution retained and other alternatives explored

2.2.1 The technical solution retained consists in strengthening the government's approach to a decentralized provision of public higher education. This approach is the most appropriate to (i) bring higher education closer to the deprived northern region of the country, (ii) enhance equity and inclusion and (iii) strengthen the developmental role of universities. It takes also into consideration the region's natural resources potential, mostly in agriculture, and the country's current and planned interventions.

2.2.2 The alternatives considered in designing the project and reasons for rejection are mentioned in table 2.2.

Table 2.2: Project alternatives considered and reasons for rejection

| Alternative name | Brief description | Reasons for rejection |
|--|---|--|
| Transferring students to other universities specialized in Agriculture and Engineering | This alternative consists in sending students to universities in other provinces who have better facilities for training and research in the field of Agriculture and Engineering | <ul style="list-style-type: none"> ▪ Students tend to not return & find other work opportunities even outside their specialty ▪ UniLúrio will miss the opportunity to continue contributing to the development of the northern region in these fields ▪ This is not in line with the Government's policy regarding equity in access to higher education |
| Intervening in all UniLúrio's training programmes | Support will be extended to the Faculty of Health (consolidation) and the Faculty of Social Sciences including tourism (setting up) | <ul style="list-style-type: none"> ▪ This alternative will cause the project to spread its resources & and hence will reduce its impact. ▪ There are already other players/partners and the project will be less in line with the Bank's current priority areas |
| Deploy the Information management system and the IT networking improvement plan in selected areas only | IT networking facilities will be limited to the 2 campuses hosting the Faculty of Agriculture and the Faculty of Engineering | <ul style="list-style-type: none"> ▪ The overall impact of this intervention would be limited. ▪ It can lead to internal imbalances jeopardizing the university's management as a whole |

2.3 Project type

2.3.1 The project is a standalone investment operation. In line with the GoM's 2015-2019 Plan, it aims to provide investment resources to strengthen UniLúrio's capacity to better contribute to solving the country's human capital needs in the fields of agriculture and industry.

2.4 Project cost and financing arrangements

2.4.1 The total project cost for five years (2018-2022) is estimated at USD 15.50 million (UA 11.10 million), an ADF grant of UA 10, 00 million and Government counterpart contribution of UA 1.10. The ADF grant will support all components and all foreign exchange costs (41% of total cost), some local currency costs, including taxes and duties. Taxes and duties correspond to 10% (UA 1.11 million) of the total project cost. As motivated by the need to ensure seamless project implementation in an environment of tight budgetary space for the GoM, a full case for the ADF to cover duty and taxes, in line with the Policy on Expenditure Eligible For Bank Financing is formulated in Appendix IV to be monitored during the mid-term review of the new CSP. The GoM's contribution will totally or partially cover electricity and water, rental and maintenance of project management including salaries of staff involved in project management on all campuses. Cost summaries are presented in the tables below. Tables 2.4 and 2.5 present the estimated project costs by components and by categories of expenditure. Costs have been estimated on the basis of the information obtained from relevant official national institutions as well as various stakeholders in the construction and equipment fields. The project detailed cost table is presented in Technical Annex B2. Incorporated in the cost estimates are 10% of physical and price contingencies.

Table 2.3: Project cost estimates by component (in million)

| COMPONENTS | USD | | | UA | | | % Foreign Exch | % of Costs |
|---|-------------|--------------|--------------|-------------|--------------|--------------|----------------|------------|
| | Local | Foreign Exch | Total | Local | Foreign Exch | Total | | |
| 1. Infrastructure and equipment | 4.65 | 3.52 | 8.17 | 3.30 | 2.50 | 5.80 | 43 | 53 |
| 2. Strengthening training and employability | 1.03 | 1.53 | 2.56 | 0.73 | 1.09 | 1.82 | 60 | 17 |
| 3. Equity and gender | 0.43 | 0.37 | 0.80 | 0.31 | 0.27 | 0.58 | 47 | 5 |
| 4. Strategic planning & management | 2.17 | 0.36 | 2.53 | 1.54 | 0.25 | 1.79 | 14 | 16 |
| Total Base Cost | 8.28 | 5.78 | 14.06 | 5.88 | 4.11 | 9.99 | 42 | 90 |
| Physical Contingencies | 0.65 | 0.42 | 1.07 | 0.45 | 0.30 | 0.75 | 39 | 7 |
| Price Contingencies | 0.38 | 0.14 | 0.52 | 0.27 | 0.10 | 0.37 | 27 | 3 |
| Total project cost | 9.31 | 6.34 | 15.65 | 6.60 | 4.51 | 11.10 | 41 | 100 |

Table 2.4: Project cost by category of expenditure (in million)

| EXPENDITURE CATEGORIES | (US\$ Million) | | | (UA Million) | | | % Foreign Exchange |
|----------------------------|----------------|-------------|--------------|--------------|-------------|--------------|--------------------|
| | Local | Foreign | Total | Local | Foreign | Total | |
| A. Works | 3.51 | 0.39 | 3.90 | 2.49 | 0.28 | 2.77 | 10 |
| B. Goods | 1.21 | 3.62 | 4.83 | 0.86 | 2.57 | 3.43 | 75 |
| C. Training | 0.69 | 1.04 | 1.73 | 0.49 | 0.74 | 1.23 | 60 |
| D. Services | 1.10 | 0.73 | 1.83 | 0.78 | 0.52 | 1.30 | 40 |
| E. Operations | 1.77 | 0 | 1.77 | 1.26 | 0 | 1.26 | 0 |
| Total Base cost | 8.28 | 5.78 | 14.06 | 5.88 | 4.11 | 9.99 | 42 |
| Physical Contingencies | 0.65 | 0.42 | 1.07 | 0.45 | 0.30 | 0.75 | 39 |
| Price Contingencies | 0.38 | 0.14 | 0.52 | 0.27 | 0.10 | 0.37 | 27 |
| Total project costs | 9.31 | 6.34 | 15.65 | 6.60 | 4.51 | 11.10 | 41 |

2.4.2 Table 2.5 shows the expenditure schedule by component and Table 2.6 the expenditure categories by financing sources

Table 2.5: Expenditure schedule by component (in million UA)

| COMPONENTS | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| 1. Infrastructure and equipment | 0.06 | 2.93 | 3.33 | 0.39 | 0.0 | 6.71 |
| 2. Strengthening training and employability | 0.13 | 0.77 | 0.41 | 0.37 | 0.24 | 1.92 |
| 3. Equity and gender | 0.13 | 0.17 | 0.13 | 0.08 | 0.09 | 0.60 |
| 4. Strategic planning and management | 0.51 | 0.50 | 0.35 | 0.35 | 0.16 | 1.87 |
| Total project costs | 0.83 | 4.37 | 4.22 | 1.19 | 0.49 | 11.10 |

Table 2.6: Categories of expenditure by financing sources

| EXPENDITURE CATEGORIES | GOM | | ADF | | | TOTAL | |
|---------------------------|-------------|-----------|-------------|-------------|-----------|--------------|--------------|
| | Amount | % | Amount | Vat | % | Amount | % |
| A. Works | 0 | 0 | 3.08 | 0.22 | 100 | 3.3 | 29.8 |
| B. Goods | 0 | 0 | 3.21 | 0.66 | 100 | 3.87 | 34.8 |
| C. Training | 0 | 0 | 1.28 | 0 | 100 | 1.28 | 11.5 |
| D. Services | 0 | 0 | 1.11 | 0.23 | 100 | 1.34 | 12.1 |
| E. Operations | 1.10 | 83.97 | 0.21 | 0 | 16.03 | 1.31 | 11.8 |
| Total Project cost | 1.10 | 10 | 8.89 | 1.11 | 90 | 11.10 | 100.0 |

2.5 Project's target area and population

2.5.1 The project will support a university, which is serving the poorest region of the country consisting of the three Northern provinces hosting 44% of the country's population. Furthermore, by improving teaching and learning environments, the project will directly benefit 4,500 students (those currently enrolled and those who will be admitted during the project period), 105 tutors/instructors, 900 including people living with disabilities from across the country. Of the target persons, at least 50% will be female. The 105 young tutors (at least 30% female) will benefit from skills upgrading. Rural communities will also benefit from research and technology transfer. In addition, industry and private sector actors in the Northern region, as well as State-owned entities, will benefit indirectly from improved facilities, but also from access to a better trained and more relevant labor force.

2.6. Participatory process for project identification, design and implementation

2.6.1 The Project was designed through participatory approaches including meetings, focus group discussions, interviews and site visits. The Bank's identification, preparation and appraisal missions held consultations involving government line ministries and institutions, provincial and district officials, civil society organisations, the private sector, development partners, and project beneficiaries. The appraisal mission visited all project sites in Nampula, Niassa and Cabo Delgado provinces to grasp the local dynamics and perspectives. All stakeholders agree on the need to improve UniLúrio's capacity to deliver quality training in order to play an important role in the region's economic development. Stakeholder participation shall continue during project implementation through the Project Steering Committee.

Box 1: Key messages from the project's Stakeholders Consultations

- *Relevance of skills development and its effects on employment and income generation;*
- *Need to overcome the existing challenges to finding skilled and experienced professionals for local industries and the contracting of foreign experts;*
- *High production costs, as there is no facilities including laboratories to provide services locally and the need to rely on Maputo or South Africa based laboratories for water, plant and soil sample analyses;*
- *Potential for increasing agricultural production if key investments and marketing linkages for trade is pursued;*
- *Potential to reduce malnutrition if consumption habits change;*
- *Space for the establishment of three-party agreements with regional universities on disease control research;*
- *Practical induction sessions before students join the university to reduce dropout rates;*
- *Soft skill development & start-up packages for young graduates for outsourcing services on non-core activities (growing of trees, land cleaning, harvesting, maintenance) & enabling companies to concentrate on core business activities.*

2.7 Bank Group experience, lessons reflected in project design

2.7.1 The Project design benefits from lessons learned in the implementation of projects in Mozambique in general and human and social sectors in particular. These include: (i) ensuring close supervision of the project by the implementing agency and the Bank; (ii) building capacity and improving implementation conditions to reduce delays; (iii) close coordination with other development partners in order to create synergies and avoid duplication; (iv) ensuring the existence of an effective project management team; (v) improving communication flows between all participating stakeholders; (vi) strong and robust project M&E system in order to improve assessment of implementation progress and impacts; and (vii) strengthening implementation capacity in particular in the area of procurement. The project will ensure synergies with various development partners to explore areas for innovative partnerships and also to avoid duplication.

2.7.2 This project also builds on lessons learnt from the Bank's previous national and regional operations supporting higher education. These include the series of Higher Education, Science and Technology (HEST) projects in several countries in line with the HEST strategy, as well as regional operations including: the Support to a Network of African Institutions of Science and Technology (phases 1 and 2) project under ECOWAS; the support to the African Virtual University (phases 1 and 2). Lessons from the implementation of these operations informed the design of the project through, (i) directly involving the institution as main executing organ in order to increase ownership, to avoid delays and minimize transaction cost of external central management, (ii) enhancement of sustainability using implementation systems that proved their efficiency (iii) a clear identification of project risks; (iv) stronger partnerships with the private sector in key institutional development activities; and (v) addressing sustainability issues through improved strategic planning and business planning to strengthen revenue generation capacity.

2.7.3 The overall performance assessment of the Bank's portfolio in Mozambique conducted in 2015 is 3.30 on a scale of 1-4. The portfolio is comprised of 19 projects (17 public projects, 2 private sector projects and 1 multinational project). There are no projects at risk. The Bank, through its country office (COMZ), continues to play an active role in policy dialogue and at the technical level. The performance rating of recently completed and on-going social sector projects is satisfactory with all conditions precedent to first disbursement met.

2.8. Key performance indicators

2.8.1 Several indicators are defined to monitor overall performance and are indicated in the logical framework. The following are the major outcome and output indicators. *Outcome indicators:* (i) number of graduates (gender disaggregated) in agriculture and science

fields; (ii) level of satisfaction of private sector employers of performance of graduates; (iii) UniLurio organizational model modernized and operational. *Output indicators*: (i) number of laboratory and library buildings constructed; (ii) number of agricultural business units constructed; (iii) number of teachers and lab tutors trained; (iv) number of curricula revised and modules updated; (v) number of business initiatives within the agriculture value chain; (vi) Gender mainstreaming strategic plan with action plan prepared; (vii) number of graduating secondary school girls attending preparatory programme; (viii) UniLurio strategic and financial management system in place; (ix) number of laboratories with international certification.

III. PROJECT FEASIBILITY

3. 1. Economic and financial performance

3.1.1 The project will have significant economic impact, since it will contribute to increase the supply of the qualified labour force required to drive economic transformation in Mozambique.

*Table C.1: Key economic and financial figures**

| | Base Scenario: 40 %* Unemployment rate among the Graduates | Alternative scenarios | | |
|---|--|---|---|--|
| | | Scenario 1: 25 % Unemployment rate among the Graduates | Scenario 2: 15 % Unemployment Rate among the Graduates | Scenario 3: 10 % Unemployment Rate among the Graduates |
| NPV-Net Present Value (MZN Million ; with an opportunity cost of 10%) | 194.8 | 384.8 | 511.5 | 574.8 |
| IRR (Internal Rate of Return) | 11.6/% | 12.8% | 13.6% | 13.9% |

NB: (*) This refers to the current unemployment rate among graduates. Detailed calculations are available in Annex B6

3.1.2 Project also has substantial development impact since it will contribute to building the high level human capital essential for Mozambique's development. The social and economic benefits are presented in paragraphs 3.2.9 to 3.2.11 below. Furthermore, worldwide trends of assessment of rates of return to education in the international context and in Africa indicates higher returns for higher education as compared to lower levels. The analysis of the economic returns to higher education in the BRIC countries¹², indicated that overall, the payoff to higher education over 25 years has risen, all in a context of rapid increase of the absolute number of university graduates. A study by the World Bank¹³ shows that a higher education degree leads to a 28 percent premium in earnings for college graduates in Africa, which is considerably higher than the world's average rate of returns of 19 percent.

3.2. Environmental and Social impacts

Environment

3.2.1 The program is classified as Category 2 according to the Bank's Environmental and Social Assessment Procedures (ESAP). Therefore, a detailed Environmental and Social Management Plan (ESMP) with clear and concise information on the social and environmental impacts of the proposed project as required for all AfDB's Category 2 has been carried out and a summary has been validated and was posted in the Bank Website . While no major negative impacts are envisaged, the project will operate through a responsible management approach, establishing partnerships with institutional stakeholders, the private sector and communities. Sustainability will also be a priority in the selection of key investments like the planned

¹² BRICS : Brazil, Russia, India, RSA and China. Economic returns to higher education in the BRICS countries and their implications for the higher education expansion (Martin Carnoy et al, REAP Working Paper 253, Stanford.

¹³ Mathieu Brossard & Borel Foko. 2007. Coûts et Financement de l'enseignement supérieur en Afrique francophone. The World Bank: Washington, D.C.

incinerator in Pemba (Cabo Delgado) a facility that can be used by other entities and therefore diversifying the sources of income. The PMT Gender Responsive M & Expert will monitor the implementation of ESMP together with UniLúrio's Center for Investigation and Environmental Conservation in the Faculty of Natural Sciences. This Center plays an important role in developing and monitoring ESMP for locally based companies and projects.

Climate Change

3.2.2 The country is already facing the results of increasing changes in weather patterns in the form of longer cyclones, dry seasons, frequent floods as well as the consequences of deforestation. Being a country heavily dependent on rain-fed agriculture and smallholder production for subsistence agriculture, heavy or erratic rainfall patterns may increase the risks of food insecurity. There are major forestry plantations, soybean fields, and cotton and cashew plantations in the Northern Region. Land has been increasingly cleared for agriculture and other pursuits, leading to a rapid deforestation, reduction of native forests, soil degradation and make erosion more likely to occur. In addition, changes to the coastlines caused by human activity have exacerbated the effects of climate change. In Nampula and Cabo Delgado provinces, the rapid growth of the coastal urban centres and the development of the coastal tourism sector are affecting the marine ecosystem damage to coral reefs. While pollution from industrial waste is still low, though with a growing extractive sector, measures need to be in place to prevent potential harm.

3.2.3 The project will contribute to the development of skills which play a major role in assessing, controlling and managing the environmental aspects of the country's development. Particular attention will be made to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters including sustainable and resilient infrastructure, awareness-raising on climate change mitigation, adaptation and impact reduction. Solar water heating systems are already installed in Unango campus and will be pursued. UniLúrio will undertake training activities linked to green and blue industries including assisting local communities to increase the capacity to pursue sustainable livelihood opportunities, sustainable management of native forests, reforestation and land conservation. UniLúrio will also be strengthened to promote water, coastal and marine conservation by supporting the implementation of science-based management plans.

Gender

3.2.4 Mozambique is ranked 21st among 134 countries according to the 2016 Global Gender Gap Report almost entering the top 20. In the last years, the country has improved several ranks with progress in women's estimated earned income and wage equality, and a narrowing gender gap in secondary and tertiary education enrolment. However, women's position continues to be undermined by discriminatory attitudes and practices. Gender differences in terms of access to opportunities are even higher in rural areas.

3.2.5 The country has one of the highest rates of child marriage in the world, affecting almost one in every two girls. The northern provinces have the highest rate : 20% of women aged between twenty and twenty-four married before the age of fifteen (CEPSA/2017). Economic pressures and sociocultural traditions continue to drive families to marry off their daughters at a very young age. Poor quality of education is leading to children (both boys and girls) dropping out and not completing schooling, hence enhancing the quality of education is a key strategy to keep girls in school. Ultimately, girls and their families need improved economic prospects. Among other measures, this will require giving special attention to women in job creation, technical and vocational training as well as to expand their access to other levels of education.

3.2.6 The project will contribute to the Government's target of achieving gender equality in higher education. This will be achieved by increasing the proportion of young

women in science, agriculture engineering and enhancing their academic performance. In 2013, higher education students represented only 0.5% of the total Mozambican population of which, according to a study on gender in higher education in Mozambique 60.5% were men and only 39.5% were women. Table 3.2.1 presenting enrollments in public higher education in 2013 shows that while women represented 41% of the total they are mostly concentrated in the fields related to Education (40%), Letters & Humanities (38%) Social Sciences (49%) and Health sciences (50%) and under-represented in Natural Sciences (24%), Engineering (15%) and Agriculture (31%).

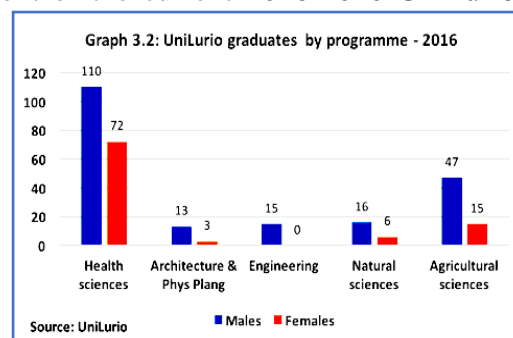
Table 3.2.1 : Enrolments in Public Higher Education (2013)

| Fields of study | Male | Female | Total | %F |
|---|---------------|---------------|----------------|--------------|
| Education | 19 042 | 12 724 | 31 766 | 40.06 |
| Letters & Humanities | 3 362 | 2 106 | 5 468 | 38.51 |
| Social sciences, Management & Law | 29 476 | 29 070 | 58 546 | 49.65 |
| Natural sciences | 5 048 | 1 615 | 6 663 | 24.24 |
| Engineering, Manufacturing & construction | 10 435 | 1 863 | 12 298 | 15.15 |
| Agriculture, Forestry & Veterinary sciences | 3 811 | 1 725 | 5 536 | 31.16 |
| Health & well being | 2 781 | 2 831 | 5 612 | 50.45 |
| Services | 1 581 | 603 | 2 184 | 27.61 |
| Total | 75 536 | 52 537 | 128 073 | 41.02 |

Sources: Based on Statistics on Higher Education, Ministry of Education (2014)

3.2.7 Factors affecting female's career selection are related to other people's perceptions and the construction of gender identities within the family. Therefore, the expectations that family and society have in women, guide girls towards social science courses. In awarding scholarships, current government's schemes take gender into account by seeking to provide 50% to girls. However, the application of this measure is not always easy since women frequently do not have the necessary requirements: low scores in examinations to access public institutions. The reduced number of female PhD candidates is an obstacle for women's access to the highest leadership positions since one of the criteria is to hold a PhD degree.

3.2.8 Of the 297 students who graduated at UniLúrio in 2016 (graph 3.2), only 32.30% were women, with the highest proportion in health sciences. Inequalities exists not only in the reduced number of women in sciences and engineering fields but also in lecturing, in senior management and leadership. There are also disparities and regional unbalances for scholarships. Therefore the project will support the establishment of: (i) academic tutorial services to improve women's academic performance in higher education; (ii) sensitization visits to secondary schools (iii) preparatory program (pre-university foundations period) for girls graduating from secondary schools to facilitate their admission in higher education (iv) additional scientific and technical material for tutorial program and (v) financial assistance (scholarships). Gender is a crosscutting component of the current 2016-2020 UniLúrio's Strategic Plan. The project will support the existing mainstreaming efforts ensuring that all internal policy and strategies include gender equality objectives and activities to address barriers to equitable education outcomes, low female enrollment and completion rates in nontraditional areas and growth sectors of the economy, development of affirmative action policies including the review of entry qualifications or selection procedures.



Social

3.2.9 The 2015 Human Development Index put Mozambique at the bottom of the ranking 180th out of 188 countries and territories. Increasing malnutrition and the cumulative effect of HIV and AIDS with 11.5% prevalence rate among adults are some of the current health challenges. While the proportion of the Mozambican population living below the poverty line has fallen in recent years, in the three northern provinces of Nampula, Niassa and Cabo Delgado, the poverty rate increased, even though these are some of the most fertile areas in Mozambique. Poverty in Niassa almost doubled from 33 to a shocking 60.6 per cent. Factors contributing to the high poverty rates also include climate shocks (floods & drought) and increases in food price.

3.2.10 The higher agricultural production enjoyed by the Northern provinces are clearly not translated into better social indicators, in particular child nutrition or better educational outcomes. Niassa is the largest and with just one and half million inhabitants is the most sparsely populated Province. On the other side, Nampula with four million inhabitants is the most populated province. Almost every second child is malnourished. The Northern provinces also fall behind on skills and infrastructure. The project will support the current efforts to alleviate this situation by training a new generation of young Agro-Entrepreneurs with appropriate skills for the setting up of optimal production systems and viable options along the various value chains including inputs supply, mechanization service provision, and agro-processing. Research as well as work will be directed to change community behavior and on the possible causes.

3.2.11 The project will strengthen the university's capacity in delivering and expanding its extension and outreach activities in the region's rural communities leading to the improvement of people's living conditions. UniLúrio through applied research and mostly through extension activities impacts on the lives of the surrounding inhabitants. The geographical distribution of the Faculties in 3 provinces taking into consideration their potentials, challenges, constraints and main activities not only enhances the relevance of the training but also facilitates the integration of the university to the communities. An example of active contribution to local development is the “*One Student, One Family*” program which materializes the implementation of the extension dimension of UniLúrio. This program which has been in place for about 8 years now, requires all Faculty of Health Sciences (including Nutrition) students, within the context of their training, to work in suburban neighbourhoods experiencing worst health conditions and assist communities through advise and awareness in areas such as primary health care, nutrition, in coordination with the local authorities. The results of this experience are not only published for the academic community but also provides relevant information for the improvement of health system management in the Nampula province and beyond. This approach which is also being experimented by the Agricultural Sciences Faculty will be supported by the project.

Involuntary resettlement:

No involuntary resettlement is expected to occur during project implementation.

IV. IMPLEMENTATION

4.1. Implementation arrangements

4.1.1 The implementation arrangements build on lessons learnt from previous projects supporting higher education institutions. It will strengthen UniLúrio's capacity to manage this and other projects. Through the Ministry of Economy and Finance, the GoM is the recipient of the ADF Grant. The project will be implemented over a period of five years (2018-2023). The Ministry of Science, Technology, Higher and Professional Education will be the Executing Agency.

4.1.2 UniLúrio will be the Implementing Agency for the Project. The appraisal mission has assessed the capacity of the university and concluded that it has adequate structures and processes to implement this project. A Project Management Team (PMT), composed of UniLúrio's staff has been set up for the day-to-day project implementation including an accountant and a Gender Responsive M & Expert. This team which is headed by a Coordinator will be under the supervision of the Vice-Rector. It will be reinforced by external long-term consultants (financial management and a procurement specialist) to be recruited under the project. UniLúrio has allocated office space for these consultants.

4.1.3 The governing body of the University (the University Council) comprising government and civil society representative, shall act as the project Steering Committee (PSC). The steering committee will provide strategic oversight and policy guidance during the implementation of the Project. As defined in the University's Statutes and presented in the organizational chart (Technical Annex B.3), the higher level management organs are: (i) University Council; (ii) Rector; (iii) Teaching, Research and Extension council; (iv) Vice Chancellor's office council; and the (v) Units Management councils. In addition to these organs, the university has 16 central units (6 offices and 10 directorates), and 9 Organic units (5 faculties and 4 specialized centers) which assume daily academic and management functions. The following offices which are directly accountable to the Rector, will be closely involved in overall project management and monitoring: Rector's management Office; Planning Office; University infrastructures management Office; Cooperation and Public Relations Office; Internal Audit Office.

4.1.4 Pre-requisites as per PD 02/15 regarding the design of this project are met and implementation will start immediately after approval. Preparatory work has been completed for activities which could cause delays, including the following: architectural and technical design of all new constructions; lists and specifications of laboratory and other equipment; feasibility study for the establishment of IT networking platform; environmental and social management plan and mitigating measures. Furthermore, the university staff involved in the implementation and monitoring of project activities is in place. The terms of reference and the expression of interest for the recruitment of external supporting consultants should be submitted by the Executing Agency for Bank's clearance before the submission of the project for approval by the Board.

Financial Management

4.1.5 Financial management. An assessment of Unilúrio as Project Implementing Agency (that included a review of the budgeting, accounting, treasury systems, internal controls, reporting and external audit arrangements) was done to ascertain effective financial management of the project. The overall conclusion of the FM assessment is that UniLúrio's capacity to handle the FM aspects of the project satisfies the Bank's minimum requirements as per the Bank FM guidelines. The UniLúrio has handled FM for DANIDA funded-project. UniLúrio's FM performance in managing the donor-funded project (including financial record keeping and reporting) has been generally satisfactory. An experienced and qualified finance consultant will be recruited to manage the financial management functions of the project. The institution uses functional computerized accounting system (e-SISTAFE) to record and process transactions for financial reporting purposes. The control environment from budget preparation, execution and reporting were found to be adequate. In that regard, the Bank will make use of the existing systems within the institution under the overall responsibility of the Director of Finance, to handle the project's FM including accounting for project resources and submitting the required financial reports to the Bank. The assessment also noted that the FM team within Unilúrio are familiar with donor-funded format for interim quarterly reports which

are similar to the Bank's format. In accordance with the Bank's financial reporting and audit requirements, the project will be required to prepare and submit to the Bank Interim Quarterly Progress Report (IQPR) no later than 45 days after the end of each quarter. The overall FM risk for the project is assessed as Moderate. (The detailed FM assessment is attached as Annex B4).

4.1.6 Disbursement arrangement: Flow of funds to finance the institution follows the national treasury and appropriation procedures with controls over the use of funds is generally adequate. Overall disbursement performance by the institution has been generally satisfactory. Specific to this project, payments will be primarily by direct payment where the Bank will pay contractors/consultants and suppliers directly based on satisfactory performance in accordance with the Bank's Disbursement Handbook. Disbursements would be made upon preparation and submission of all relevant documentations by UniLúrio to the Bank's Disbursement Division, through the Bank's Country Office in Mozambique. A Special Account denominated in USD and its associated MZN denominated project operating account shall be opened at the Central Bank of Mozambique and will be limited for use in paying for the small operating project expenses that are recurring in nature. A Disbursement Letter will be issued by the Bank.

4.1.7 Auditing arrangement: UniLúrio has been audited by the *Tribunal Administrativo (Administrative Tribunal AT)*. Issues raised in the previous audit was concerning lack of strict compliance with documents filing procedures. In Mozambique, the AT is constitutionally mandated to audit all public institutions in the country, however given the capacity constraints, Bank funded projects have been audited by private audit firms competitively recruited with the involvement of the AT. Specific for this project, a separate audit report will be prepared for the project annually with the audit carried out by an independent external auditor recruited in accordance with the Bank's requirements. The audit will be conducted in accordance with a Bank approved audit Terms of Reference with the costs of the audit financed from the Grant. The annual audited financial statements including the auditor's opinion and management letter will be submitted to the Bank not later than six months after the end of each fiscal year.

Procurement arrangements

4.1.8 Procurement of goods and works and the acquisition of consulting services, financed by the Bank for the project, will be carried out in accordance with the "Procurement Policy for Bank Group Funded Operations", dated October 2015 and following the provisions stated in the Financing Agreement. Specifically, Procurement would be carried out following:

Borrower Procurement System (BPS): Specific Procurement Methods and Procedures (PMPs) under BPS comprising its Laws and Regulations, namely, Decreto 5/2016 de 8 de Março – Regulamento de Contratação de Empreitadas de Obras Públicas, Fornecimento de Bens, e Prestação de Serviços ao Estado (Regulations for Contracting of Public Works, Supply of Goods and Consultancy & Non-Consultancy Services), using the national Standard Solicitation Documents (SSDs) for implementation of activities under operating costs and research activities, whose individual value does not exceed thresholds of UA 10,000.00.

Bank Procurement Methods and Procedures (PMPs): Bank standard PMPs, using the relevant Bank Standard, for contracts all contracts under goods, works, consultancy and non-consultancy services that are above the threshold recommended for BPS. This provision is based on the outcome of recent assessment conducted on Mozambique's procurement system which found the risk in the use of the BPS in the implementation of projects financed from Bank resources as substantial.

Procurement Risks and Capacity Development: Country, Sector, Executing Agency (EA), and Project procurement risk assessments were undertaken for the project and the output have informed the decisions on the procurement regimes BPS and Bank and the PMPs being used for specific transactions or groups of similar transactions under the project. The global rating of risk assessment was Substantial with possibility of reducing to moderate after the implementation of the mitigating measures. The appropriate risks mitigation measures have been included in the procurement PRCA action plan proposed in Annex B5.

4.2. Monitoring

The project is scheduled for implementation over a 60-month period, from January 2018 to February 2023. This schedule is reasonable, given the scope of activities to be implemented and project implementation capacity in Mozambique. Performance based M&E system will be established based on the logframe indicators (baseline and targets). All relevant baselines and targets will clearly be gender disaggregated. Resources will be provided to strengthen the institutional M&E system in collection and processing of appropriate and relevant data to monitor performance. The system will provide information for the quarterly progress reports. A mid-term evaluation will be conducted after 2 years of implementation to review progress and take corrective measures if necessary. The Bank's Country Office (COMZ) will play a major role in overall oversight and supervision of implementation. Table 4.2.1 below presents the overall milestones.

Table 4.2.1 Monitoring schedule

| Timeframe | Milestone | Monitoring process / feedback loop |
|------------------|--|---|
| January 2018 | Grant approved | AfDB |
| February 2018 | Grant agreement effective | GoM/AfDB |
| March 2018 | Project launched with 3 institutions | Launching mission is organized with adequate skills mix |
| April 2018 | Meeting of Regional Steering Committee | |
| October 2018 | Strategic plan revised & business plan prepared | Updated strategic and business plan |
| January 2019 | Preparatory & tutorial programme for final year secondary school girls finalized and operational | Programme document and reports |
| December 2019 | Constructions works completed | Reports and site visits |
| June 2020 | All equipment purchased and delivered | Reports |
| August 2020 | Mid- term evaluation | MTR report |
| June 2022 | Last Pedagogic seminars conducted | Seminar reports |
| February 2023 | Project completed | |
| March 2023 | PCR mission, including impact evaluation | PCR produced and processed |

4.3. Governance

4.3.1 Mozambique has maintained some consistency in its governance profile since 2006, though with some tendency to decline. On participation & human rights and gender equality, Mozambique has been ranked highly. According to the 2016 Ibrahim Index of African Governance (IIAG), Mozambique scored 52.3 out of 100 in overall Governance, ranking 21st out of 54 in Africa and ranking 16th out of 54 on Gender Equality. The country achieved its highest category score in Participation & Human Rights (58.3) and its lowest category score in Sustainable Economic Opportunity (47.3). The highest sub-category score was achieved in National Security (87.3) and its lowest sub-category score in Accountability (28.4). There are no critical foreseen risks related to Governance. UniLúrio is a well-established university with acceptable management and governance systems. It has all the required organizational structures including a Board/Council with diverse representation. Although it is a public university it enjoys relatively high autonomy and academic freedom. It has a strategic plan

which the project will contribute to update and strengthen along with the preparation of a business plan in order to provide modern tools for sustainability.

4.4. Sustainability

4.4.1 As a public university UniLúrio is funded by the Government, which provides a partial a guarantee for sustainability. It receives regular annual budget allocations, which are used both for investment and operations. UniLúrio is assured to continue receiving government allocations. However, this public funding is not sufficient to cover major investments needed for academic infrastructures and equipment, which so far have depended mostly on interventions by foreign institutions and bilateral and multilateral partners Appendix III presents the list of major ongoing partnership agreements and projects.

4.4.2 The project will support the development of a business plan to guide and strengthen revenue generation. UniLúrio has a strategic plan and is aware of the need to generate more revenue internally for sustainability. Currently UniLúrio not only generates revenue from the different services provided to the students, but also from research projects and some services to the community, respectively. These include fees, public spaces rental to the community, private and other public institutions; sponsorships; research projects; analytical and technical services (e.g.: analysis of crops¹⁴, food processing and extractive companies, NGO's, community ,etc.). These revenues represent about 10% of the budget of the university. To improve UniLúrio's capacity in generating revenue, the project will assist in updating the strategic plan and developing a business plan. Partnership with the private sector will be also strengthened. UniLúrio is already actively engaged in partnerships with the private sector which offers scholarships, funds for research activities, and internships.

4.5. Risk management

The main risks presented in the following table have been articulated in the results-based logical framework.

Table 11: Risks and mitigation

| No | Potential Risks | Rating | Mitigation Measures |
|----|--|--------|---|
| 1. | Sustainability, mainly as regards maintenance of the procured equipment | Medium | Maintenance and repair of relevant equipment will be included in the UniLúrio annual budget |
| 2. | Limited number of female candidates for applied sciences and engineering | Medium | Preparatory and tutorial programs for final year secondary school girls; awareness activities at secondary school level; dedicated grants |
| 3. | Resistance of the academics and staff to organizational change | Low | Management is committed and the process involving the study will be fully participatory |

4.6. Knowledge building

The implementation of this project in a specific national context will contribute to the generation of unique knowledge for higher education and skills development. This knowledge relates to; (i) maintaining high standards while ensuring equity in a university established to serve the poorest region of a country facing various challenges; (ii) strengthening academic and management functions of a university with campuses established in several geographically distant provinces and (iii) development of relevant information to improve national systems from the extension activities. The Bank will use the knowledge generated to study, design and implement similar projects in other RMCs. This knowledge will be available

¹⁴ Mandatory for international trade for products like cashew & peanuts

through documents and web sites as well as exchange of experience between the project staff and experts in the RMCs and in the RECs.

V. LEGAL INSTRUMENTS AND AUTHORITY

5.1 Legal instrument

The financing instrument proposed is a grant of UA 10.00 million to the Government of Mozambique.

5.2 Conditions associated with Bank's intervention

Conditions precedent to Entry into force of the Grant Agreements: The grant agreement shall enter into force on the date of signature by the Recipient and by the Fund.

Condition precedent to First Disbursement: The obligations of the Fund to make the first disbursement of the Grant shall be conditional upon the entry into force of the Protocol of Agreement.

Others Conditions:

- (i) The Borrower shall prior to the request for disbursement of advance to the special account provide evidence of having opened one (1) foreign currency denominated Special Account and one (1) local currency denominated Special Account, at the Central Bank of Mozambique into which the proceeds of the Grant will be deposited;
- (ii) Update of the University Administrative and Accounting procedures manual no later than six months after the project launching; and
- (iii) Appoint project private external auditors acceptable to Fund no later than nine months after First Disbursement.

Undertakings

The Borrower undertakes to implement the Project in accordance with the Environmental and Social Management Plan (ESMP).

5.3. Compliance with Bank Policies

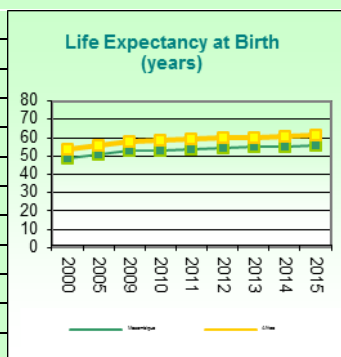
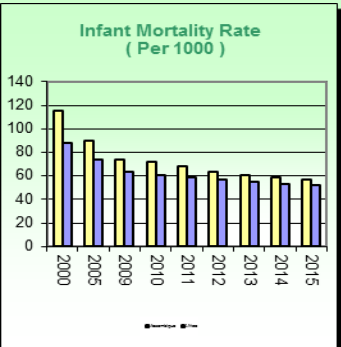
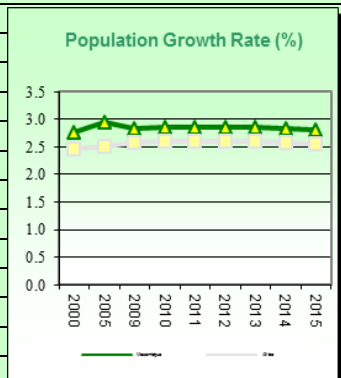
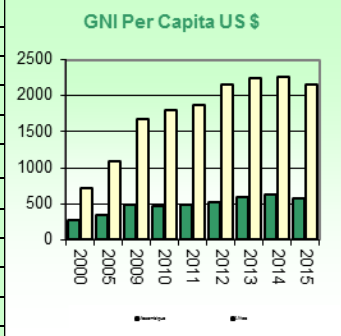
- (i) This project complies with all applicable Bank policies.

VI. RECOMMENDATION

6.1 Management recommends that the Board of Directors approves the proposed ADF Grant of UA 10.00 million to the Republic of Mozambique for the purposes specified in this document and subject to the conditions stipulated herein.

Appendix I. Country's comparative socio-economic indicators

| | Year | Mozambique | Africa | Developing Countries | Developed Countries |
|---|-----------|------------|---------|----------------------|---------------------|
| Basic Indicators | | | | | |
| Area ('000 Km²) | 2016 | 799 | 30,067 | 97,418 | 36,907 |
| Total Population (millions) | 2016 | 28.8 | 1,214.4 | 6,159.6 | 1,187.1 |
| Urban Population (% of Total) | 2016 | 31.4 | 40.1 | 48.7 | 81.1 |
| Population Density (per Km²) | 2016 | 36.6 | 41.3 | 65.1 | 33.8 |
| GNI per Capita (US \$) | 2015 | 580 | 2 153 | 4 509 | 41 932 |
| Labor Force Participation * - Total (%) | 2016 | 79.1 | 65.7 | 63.5 | 60.0 |
| Labor Force Participation ** - Female (%) | 2016 | 82.3 | 55.7 | 48.9 | 52.1 |
| Sex Ratio (per 100 female) | 2016 | 95.7 | 100.1 | 106.0 | 105.0 |
| Human Develop. Index (Rank among 187 countries) | 2015 | 181 | ... | ... | ... |
| Popul. Living Below \$ 1.90 a Day (% of Population) | 2008 | 68.7 | ... | 21.1 | ... |
| Demographic Indicators | | | | | |
| Population Growth Rate - Total (%) | 2016 | 2.8 | 2.5 | 1.3 | 0.6 |
| Population Growth Rate - Urban (%) | 2016 | 3.4 | 3.6 | 2.4 | 0.8 |
| Population < 15 years (%) | 2016 | 45.1 | 40.9 | 27.9 | 16.8 |
| Population 15-24 years (%) | 2016 | 20.1 | 19.3 | 16.9 | 12.1 |
| Population >= 65 years (%) | 2016 | 3.4 | 3.5 | 6.6 | 17.2 |
| Dependency Ratio (%) | 2016 | 94.2 | 79.9 | 54.3 | 52.0 |
| Female Population 15-49 years (% of total population) | 2016 | 23.1 | 24.0 | 25.7 | 22.8 |
| Life Expectancy at Birth - Total (years) | 2016 | 55.8 | 61.5 | 69.9 | 80.8 |
| Life Expectancy at Birth - Female (years) | 2016 | 57.0 | 63.0 | 72.0 | 83.5 |
| Crude Birth Rate (per 1,000) | 2016 | 38.4 | 34.4 | 20.7 | 10.9 |
| Crude Death Rate (per 1,000) | 2016 | 11.0 | 9.1 | 7.6 | 8.6 |
| Infant Mortality Rate (per 1,000) | 2015 | 56.7 | 52.2 | 34.6 | 4.6 |
| Child Mortality Rate (per 1,000) | 2015 | 78.5 | 75.5 | 46.4 | 5.5 |
| Total Fertility Rate (per woman) | 2016 | 5.2 | 4.5 | 2.6 | 1.7 |
| Maternal Mortality Rate (per 100,000) | 2015 | 489.0 | 476.0 | 237.0 | 10.0 |
| Women Using Contraception (%) | 2016 | 18.7 | 31.0 | 62.2 | ... |
| Health & Nutrition Indicators | | | | | |
| Physicians (per 100,000 people) | 2005-2015 | 5.5 | 41.6 | 125.7 | 292.2 |
| Nurses and midwives (per 100,000 people) | 2005-2015 | 40.1 | 120.9 | 220.0 | 859.4 |
| Births attended by Trained Health Personnel (%) | 2010-2015 | 54.3 | 53.2 | 69.1 | ... |
| Access to Safe Water (% of Population) | 2015 | 51.1 | 71.6 | 89.4 | 99.5 |
| Access to Sanitation (% of Population) | 2015 | 20.5 | 39.4 | 61.5 | 99.4 |
| Percent. of Adults (aged 15-49) Living with HIV/AIDS | 2015 | 10.5 | 3.4 | ... | ... |
| Incidence of Tuberculosis (per 100,000) | 2015 | 551.0 | 240.6 | 166.0 | 12.0 |
| Child Immunization Against Tuberculosis (%) | 2015 | 95.0 | 81.8 | ... | ... |
| Child Immunization Against Measles (%) | 2015 | 85.0 | 75.7 | 83.9 | 93.9 |
| Underweight Children (% of children under 5 years) | 2010-2015 | 15.6 | 18.1 | 15.3 | 0.9 |
| Prevalence of stunting | 2010-2014 | 43.1 | 33.3 | 25.0 | 2.5 |
| Prevalence of undernourishment (% of pop.) | 2015-2016 | 25.3 | 16.2 | 12.7 | ... |
| Public Expenditure on Health (as % of GDP) | 2014 | 3.9 | 2.6 | 3.0 | 7.7 |
| Education Indicators | | | | | |
| Gross Enrolment Ratio (%) | | | | | |
| Primary School - Total | 2010-2016 | 105.8 | 101.2 | 104.9 | 102.4 |
| Primary School - Female | 2010-2016 | 101.2 | 98.4 | 104.4 | 102.2 |
| Secondary School - Total | 2010-2016 | 32.4 | 52.6 | 71.1 | 106.3 |
| Secondary School - Female | 2010-2016 | 31.1 | 50.2 | 70.5 | 106.1 |
| Primary School Female Teaching Staff (% of Total) | 2010-2016 | 43.1 | 47.1 | 59.8 | 81.0 |
| Adult literacy Rate - Total (%) | 2010-2015 | 58.8 | 66.8 | 82.3 | ... |
| Adult literacy Rate - Male (%) | 2010-2015 | 73.4 | 74.3 | 87.1 | ... |
| Adult literacy Rate - Female (%) | 2010-2015 | 45.5 | 59.4 | 77.6 | ... |
| Percentage of GDP Spent on Education | 2010-2015 | 6.5 | 5.0 | 4.0 | 5.0 |
| Environmental Indicators | | | | | |
| Land Use (Arable Land as % of Total Land Area) | 2014 | 7.2 | 8.7 | 11.2 | 10.3 |
| Agricultural Land (as % of land area) | 2014 | 63.5 | 41.7 | 37.9 | 36.4 |
| Forest (As % of Land Area) | 2014 | 48.5 | 23.2 | 31.4 | 28.8 |
| Per Capita CO2 Emissions (metric tons) | 2014 | 0.2 | 1.1 | 3.5 | 11.0 |



Sources : AfDB Statistics Department Databases; WB: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.: Last updated June 2017 ;
Data Not Available. * Labor force participation rate, total (% of total population ages 15+) Note n.a.: Not Applicable, ** Labor force participation rate, female (% of female population ages 15+)

Appendix II. Table of ADB's portfolio in the country

| # | Sector | Loan Number | Project Name | Approval | Closing | Loan Amount | Disb. Rate | Uncommitted |
|----|-------------|---------------|--|------------|------------|-------------|------------|-------------|
| 1 | AGRICULTURE | 2100150020395 | MASSINGIR DAM EMERGENCY REHABILITATION PROJECT | 15.07.2009 | 31.12.2017 | 13.30 | 93% | 0.15 |
| 2 | | 2100150029094 | MASSINGIR DAM EMERGENCY REHABILITATION PROJECT SUPPLEMENTARY | 22.05.2013 | 30.06.2018 | 22.01 | 56% | 2.27 |
| 3 | | 2100150027693 | BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT | 26.09.2012 | 30.06.2019 | 16.53 | 79% | 2.67 |
| 4 | | 5565130000001 | BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT | 26.09.2012 | 30.06.2019 | 9.23 | 42% | 2.86 |
| 5 | | 5565155000051 | BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT | 26.09.2012 | 30.06.2019 | 1.95 | 7% | 1.81 |
| 6 | | 2100150027945 | SUSTAINABLE LAND & WATER RES. MGT PROJECT (SLWRMP) PPCR | 31.10.2012 | 31.12.2018 | 2.10 | 66% | 0.30 |
| 7 | | 5565155000201 | SUSTAINABLE LAND & WATER RES. MGT PROJECT (SLWRMP) PPCR | 31.10.2012 | 31.12.2018 | 11.18 | 46% | 2.46 |
| 8 | | 5600155003901 | FEASIBILITY STUDIES FOR BUILDING CLIMATE RESILIENCE OF LIMPO | 01.12.2014 | 31.12.2017 | 2.88 | 23% | 0.59 |
| 9 | | 5700155002151 | FEASIBILITY STUDIES FOR BUILDING CLIMATE RESILIENCE OF LIMPO | 03.10.2014 | 31.12.2018 | 0.67 | 11% | 0.37 |
| 10 | | 2100150034697 | COFAMOSA IRRIGATION PROJECT - PPF | 24.11.2015 | 30.06.2017 | 0.82 | 18% | 0.12 |
| 11 | MINERAL RES | 2000120004119 | MOMA MINERAL SANDS EXPANSION PROJECT | 27.03.2015 | 29.04.2017 | 0.45 | 100% | 0.00 |
| 12 | ENERGY | 2100150030595 | ENABLING LARGE SCALE GAS & PWR INVESTMNT | 18.12.2013 | 30.06.2018 | 9.95 | 1% | 9.84 |
| 13 | SOCIAL | 2100150030643 | CONSOLIDATION WOMEN'S ENTREPRENEURSHIP | 18.12.2013 | 31.12.2018 | 1.24 | 46% | 0.00 |
| 14 | | 2100155026666 | CONSOLIDATION WOMEN'S ENTREPRENEURSHIP | 18.12.2013 | 31.12.2018 | 2.56 | 23% | 0.90 |
| 15 | | 2100155032268 | JOB CREATION AND LIVELIHOOD IMPROVEMENT | 18.05.2016 | 30.12.2021 | 4.53 | 5% | 3.97 |
| 16 | TRANSPORT | 2100150013143 | MONTEPUEZ-LICHINGA ROAD PROJECT | 27.10.2006 | 30.06.2018 | 30.10 | 67% | |
| 17 | | 2100150023096 | SUPPLEMENTARY LOAN TO MONTEPUEZ - LICHINGA ROAD PROJECT | 26.10.2010 | 30.06.2018 | 32.65 | 67% | 3.74 |
| 18 | | 2100150020398 | MULTI-NACALA CORRIDOR PROJECT (MOZAMBIQUE) | 24.06.2009 | 01.07.2018 | 102.72 | 40% | 48.87 |
| 19 | | 2100150028343 | NACALA TRANSPORT CORRIDOR PHASE-III | 05.12.2012 | 31.12.2018 | 38.65 | 13% | 6.69 |
| 20 | | 2100155024216 | NACALA TRANSPORT CORRIDOR PHASE-III | 05.12.2012 | 31.12.2018 | 0.18 | 19% | 0.15 |
| 21 | | 5150155000401 | MTWARA DEVELOPMENT CORRIDOR | 29.10.2012 | 31.12.2017 | 1.30 | 72% | 0.34 |
| 22 | | 2100150036499 | MUEDA-NEGOMANO ROAD PROJECT | 09.12.2016 | 31.12.2022 | 51.28 | 0% | 0.00 |
| 23 | | 2100155033673 | MUEDA-NEGOMANO ROAD PROJECT | 09.12.2016 | 31.12.2022 | 2.24 | 0% | 0.00 |
| 24 | | 2000130017040 | NACALA RAIL CORRIDOR & PORT PROJECT-CORR.LOGISTICO INTEGRADO | 16.12.2015 | 15.01.2028 | 79.13 | 0% | 0.00 |
| 25 | | 2000130015333 | NACALA RAIL & PORT PROJECT-CDN | 16.12.2015 | 10.04.2020 | 59.41 | 0% | 0.00 |
| 26 | | 2000130015333 | NACALA RAIL & PORT PROJECT-VALE LOGISTICS LTD (VLL) | 16.12.2015 | 10.04.2020 | 61.57 | 0% | 0.00 |
| 27 | WATER | 2100150023298 | NATIONAL RURAL WATER SUPPLY PROGRAM | 09.11.2010 | 30.09.2017 | 5.27 | 94% | 0.21 |
| 28 | | 5800155000601 | NATIONAL RURAL WATER SUPPLY PROGRAM | 09.11.2010 | 30.09.2017 | 5.04 | 89% | 0.01 |
| 29 | | 5600155004651 | URBAN SANITATION FOR I'BANE AND CHIMOIO | 14.07.2016 | 31.12.2018 | 1.34 | 0% | 0.00 |

Appendix III. Key related projects financed by the Bank & other development partners in the country

A.2.4: Sector donors with areas of focus

| <i>Intervention by Development Partner</i> | <i>Project/Programme objectives</i> | <i>Alignment to growth areas in PQG</i> |
|--|--|---|
| AFDB | | |
| Consolidation Women's Entrepreneurship Project | To empower and enhance rural women's agricultural productivity and marketing skills in Manica and Sofala Provinces | Food Security & Entrepreneurship |
| Sustainable Land and Water Resources Management Project (SLWRMP) | To strengthen capacity of communities to address inter-linked challenges of adverse impacts of climate change, rural poverty, food insecurity and land degradation | Agriculture & Food Security |
| Job Creation and Livelihood Development Project | Supporting Job Creation through Value Chains(poultry, agriculture & LMO) | Jobs /Entrepreneurship & Food Security /information |
| Drought Recovery & Agriculture Resilience Project (to be approved) | To strengthen capacity of communities to address inter-linked challenges of adverse impacts of climate change, rural poverty, food insecurity and land degradation | Agriculture & Food Security |
| DFID | | |
| Skills for Employment (S4E) programme | To reduce skills failures by linking specific areas of labour force supply with demand (employers and training providers) | Employment & SME Development / TVET |
| WB | | |
| Higher Education, Science and Technology Project (HEST) | Scale-up HEST / strengthening the collaboration between the public and private sectors in skills | TVET/ Job creation |
| Support to Higher Education - Eduardo Mondlane University | HEST/Establishment of a Centre of Excellence | Job creation/ Skills |
| UniLúrio (direct support) | | |
| Partner | Activity | |
| FDI | Establishment of a Multidisciplinary Laboratory | |
| OSOL ZSL -EU via | Research on fish. aggregations | |
| Rufford Foundation | Project: "Conservation and Management of Reef Sharks in the Western Indian Ocean through Scientific and Local Community Collaborative Actions | |
| Disney Conservation Fund | Environmental education in sharks | |
| USAID | (Partnerships for Enhanced Engagement in Research (PEER) | |
| CDBT | 4 Bachelor Thesis and 1 Master's Degree | |
| FDI | Pedagogical Workshop of Agricultural Technologies | |
| FDI | Demonstration fields for the identification of sustainable irrigation & water management | |
| FDI | Establishment of nurseries and greenhouses | |
| DANIDA | Support to the undergraduate course in nutrition | |

Appendix IV. Justification for 100% projects' cost financing including VAT

Context. The Government of Mozambique has submitted a request to the Bank Group to finance 100% of the projects' costs, including VAT and duties, for projects approved in 2018 and 2019. This would bring the practice of the Bank in line with other development partners such as the World Bank and address some emerging project implementation issues. The Policy on expenditure eligible for Bank financing¹⁵ (2008) allows the Bank Group to waive the principle that its projects are exempt from duties and taxes on a case-by-case basis, in cases where (para 4.2.1 of the mentioned policy):

(i) the country's tax system has a reasonable level of tax and duty rates; and (ii) the taxes and duties do not constitute a significant proportion of project costs or are not specifically directed at Bank-financed projects, activities or expenses.

This annex considers the justification to accede to this request on grounds of improved project implementation during a period of tight fiscal space and shrinking departmental budgets.

The fiscal context. Mozambique is facing a difficult fiscal outlook, with the suspension of direct budget support by the all development partners and the IMF financing programme going-off track in April, 2016. The suspension of these financing programmes were partly a consequence of the discovery of previously undisclosed commercial debt obligations, putting public debt on an unsustainable path and requiring fiscal consolidation of the public budget, as well as contributing to a weakening of the exchange rate.

In October 2016 the Government informed creditors that it would not be able to service the commercial debt, but it would remain committed to its concessional lending partners. In January 2017 the country defaulted on part of its commercial debt service, which led to a downgrade of Mozambique's credit rating to "selective default", in turn affecting investment flows into the country. The default was on its sovereign bond, and the Government of Mozambique remains honouring its financial obligations with DFIs.

Moreover, delays in start-up of the natural-resources based mega-projects in Mozambique mean that expected revenues and signature bonuses are moved further out in the future. As seen in Table 1 below, income tax and VAT collection have steadily fallen between 2014 and 2016 as a percentage of GDP.

Policy response and implications. The Government undertook a gradual fiscal consolidation in 2016 and 2017, expected to continue into 2018, implementing expenditure cuts on targeted areas as well as clearing execution of commitments to domestic suppliers. The investment budget fell by 7 percentage points of the GDP between 2014 and 2016. Budget reductions means that there will be continued uncertainty over the quarterly budget transfers to sector ministries, including for compensating for foregone taxes and duties for projects funded by development partners. It is estimated that in August 2017 total public arrears to the private sector has surpassed USD 500 million.

Bank-funded projects in Mozambique have already experiencing challenges relating to co-financing of VAT and other expenses as well as with VAT reimbursement to private

¹⁵ BD/WP/2007/106/Rev.2

operators. At least 14 active Bank projects have reported arrears in payment of VAT from Government, causing significant delays in project implementation.

Table 1: Mozambique's budget position (figures in % of GDP).

| | 2014 | 2015 | 2016 | 2017 (Law.) | 2018 (Prop.) |
|------------------------------------|------------|-----------|-----------|-------------|--------------|
| TOTAL REVENUES | 29 | 26 | 24 | 23 | 23 |
| <i>Income taxes</i> | 12 | 10 | 9 | 8 | 8 |
| <i>Taxes on goods and services</i> | 13 | 11 | 10 | 10 | 10 |
| <i>VAT revenues</i> | 9 | 8 | 7 | 6 | 6 |
| <i>Trade taxes</i> | 2 | 2 | 2 | 2 | 2 |
| | | | | | |
| TOTAL SPENDING | 42 | 31 | 34 | 34 | 31 |
| <i>Current spending</i> | 22 | 20 | 21 | 20 | 19 |
| <i>Investment spending</i> | 16 | 11 | 9 | 10 | 8 |
| <i>Financial operations</i> | 3 | 1 | 2 | 2 | 1 |
| | | | | | |
| BALANCE BEFORE GRANTS | -12 | -5 | -6 | n/a | n/a |
| <i>Grants</i> | 5 | 3 | 2 | 2 | 2 |

Source: conta geral do estado (2012, 2014, 2016) e orçamento de estado (2017 e 2018)

Compliance with Bank policy requirements. The request for the Bank to cover tax and duties on project activities is consistent with the conditions laid out in the policy:

1. Tax and duty rates in Mozambique are broadly in line with continental average. VAT rates, at 17% are slightly above the SADC average but broadly in line with similar economies in the continent (see table 2 below).

Table 2: Comparative VAT rates

| | | | | |
|-------------------|------------|--|-----------------|------------|
| Mozambique | 17% | | Tanzania | 18% |
| Ghana | 17.5% | | Kenya | 16% |
| Cote d'Ivoire | 18.0% | | RSA | 14% |
| Zambia | 16% | | Namibia | 15% |

2. Taxes and duties are estimated to amount to around 10% of total project costs in the UNILúrio project, with the infrastructure & goods components attracting most duties.
3. Charging of taxes and duties are not specifically directed at Bank projects; in fact the World Bank already covers these expenditures under its projects in Mozambique.
4. The project will benefit from the Government Decree 13/2016, art. 15 establishing that infrastructure and its operation and maintenance are covered by an especial exemption of 60% of the total cost.

Table3 Cost by expenditure category (VAT)

| Expenditure categories | Total | | Foreign exch | Local (excl. taxes) | Taxes |
|------------------------|--------------|--------------|--------------|---------------------|-------------|
| | Amount | % | | | |
| A. WORKS | 3.30 | 29.7 | 0.32 | 2.76 | 0.46 |
| B. GOODS | 3.87 | 34.7 | 2.88 | 0.33 | 0.55 |
| C. TRAINING | 1.28 | 11.5 | 0.76 | 0.52 | 0 |
| D. SERVICES | 1.34 | 12.2 | 0.54 | 0.57 | 0.10 |
| E. OPERATIONS | 1.31 | 12.0 | - | 1.31 | 0 |
| Total costs | 11.10 | 100.0 | 4.5 | 5.49 | 1.11 |

The UNILURIO project will improve professional skills in agriculture and engineering and thus will generate economic and developmental benefits in the long term by raising labour productivity and widening economic opportunities. However, by nature it is not expected to generate short to medium term revenue gains for the Government. It makes sense to ease its implementation by allowing it to cover VAT and duty costs over 2017 and 2018.

The requested exception should be considered as a temporary measure to be applied only in 2017 and 2018, strictly on a case by case basis, to reflect the current macroeconomic and fiscal conjuncture and to support the Government in its re-engagement with International Financial Institutions and with creditors, while ensuring smooth project implementation. Therefore, the above-mentioned context provides a case for the Bank Group to provide a waiver of the co-financing requirement and non-tax payment principle for the current UniLúrio project. At Mid-term, an assessment of the macro-economic situation will guide whether to continue or not.

Appendix V. Map of the Project Area

