



# 11TH EUROPEAN DEVELOPMENT FUND (2014-2020)

# NATIONAL INDICATIVE PROGRAMME

# **FOR**

THE REPUBLIC OF MAURITIUS

#### **GENERAL CLAUSES**

The European Commission on behalf of the European Union and the Government of the Republic of Mauritius hereby agree as follows:

(1) The European Commission, represented by Mr Neven Mimica, Commissioner for International Cooperation and Development, and the Government of the Republic of Mauritius, represented by H.E. Mrs Bibi Ameenah Firdaus Gurib-Fakim, President of the Republic of Mauritius, hereinafter referred to as the Parties, determined the general orientations for cooperation for the period 2015-2020.

These orientations which are included in the National Indicative Programme, concern the European Union Aid in favour of the Republic of Mauritius and were drawn up in accordance with the provisions of Articles 2 and 4 of Annex IV to the ACP-EC Partnership Agreement, signed in Cotonou on 23 June 2000, revised and signed in Luxemburg on 25 June 2005 and revised and signed in Ouagadougou on 22 June 2010.

The National Indicative Programme, is annexed to the present document.

- (2) As regards the indicative programmable financial resources which the European Union envisages to make available to the Republic of Mauritius for the period 2015-2020, an amount of EUR 9.9 million is foreseen for the allocation referred to in Article 3.2 (a) of Annex IV of the ACP-EC Partnership Agreement (A-allocation). A B-allocation referred to in Article 3.2 (b) can be established to cover unforeseen needs. This allocation is at EUR 0 until a need arises. These allocations are not entitlements and may be revised by the Commission, following the mid-term and end-of-term reviews, in accordance with Article 5.7 of annex IV of the ACP-EC Partnership Agreement.
- (3) The A-allocation is destined to cover macroeconomic support, sectoral policies, programmes and projects. The National Indicative Programme concerns the resources of the A-allocation. It also takes into consideration financing from which the Republic of Mauritius benefits or could benefit under other European Union resources. It does not pre-empt financing decisions by the Commission.
- (4) The B-allocation is destined to cover unforeseen needs such as humanitarian, emergency and post emergency assistance, where such support cannot be financed from the EU budget, contributions to internationally agreed debt relief initiatives and support to mitigate exogenous shocks. The B-allocation shall be established according to specific mechanisms and procedures and does therefore not constitute a part of the programming.

- (5) Following the entry into force on 1 March 2015 of the Internal Agreement between the Representatives of the Governments of the Member States of the European Union, meeting with the Council, on the financing of European Union Aid under the multiannual financial framework for the period 2014 to 2020, financing decisions for projects and programmes can be taken by the Commission at the request of the Government of the Republic of Mauritius within the limits of the A- and B-allocations referred to in this document. The respective projects and programmes shall be implemented according to the 11<sup>th</sup> EDF implementing rules and financial regulation.
- (6) The European Investment Bank may contribute to the implementation of the present National Indicative Programme by operations financed from the Investment Facility and/or from its own resources, in accordance with Articles 2c and 3 of the 11<sup>th</sup> EDF multi-annual financial framework for the period 2014-2020.
- (7) In accordance with Article 5 of Annex IV to the ACP-EC Partnership Agreement, the National Indicative Programme as well as the A-and B-allocations can be revised following the mid-term review and the end-of-term review or ad hoc reviews.

Done at Brussels, on 16 June 2016, in two originals in the English language.

FOR THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION FOR THE GOVERNMENT OF THE REPUBLIC OF MAURITIUS

Dunca

Neven Mimica
Commissioner for International
Cooperation and Development

Bibi Ameenah Firdaus Gurib-Fakim The President

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### **Acronyms**

ACP Africa Caribbean Pacific

AFD Agence Française de délevopment

AfDB African Development Bank

AMSP Accompanying Measures for Sugar Protocol countries

CBBR Centre for Biomedical and Biomaterials Research

CPE Certificate for Primary Exams

CSP Country Strategy Paper EC European Commission

EDF European Development Fund

i-EPA interim Economic Partnership Agreement

ESTP Economic and Social Transformation Plan

EU European Union

FDI Fashion and Design Institute

GCCA Global Climate Change Alliance

GDP Gross Domestic Product

GTER Gross Tertiary Enrolment Rate

ICT Information and Communication Technology

MDG Millennium Development Goals

MGI Mahatma Gandhi Institute Tertiary Section

MOEHR Ministry of Education and Human Resources

MRC Mauritius Research Council

MTESRT Ministry of Tertiary Education Science Research and Technology

MSIRI Mauritius Sugar Industry Research Institute

NAO National Authorising Office

NAVFOR European Union Naval Force Atlanta

NIP National Indicative Programme

OECD Organisation of Economic Cooperation and Development

OUM Open University of Mauritius

PANAF Pan-African

PISA Program for International Student Assessment

RDWG Research and Development Working Group

RTI Rabindranath Tagore Institute

SIDS Small Islands Development States

SIGS SME Innovation Grant Scheme

SME Small and Medium Enterprises

SRC Sector Reform Contract

TCF Technical Cooperation Facility

TEC Tertiary Education Commission

TEI Tertiary Education Institutions

UNEP United Nations Environment Programme

UOM University of Mauritius

UK United Kingdom

UTM University of Technology

## Mauritius National Indicative Programme 2015 – 2020 Summary

Mauritius is a stable democracy and is classified among Africa's most liberal and competitive economies; notwithstanding the 2008 global financial crisis the country enjoyed a strong economic development. Mauritius embarked in a comprehensive economic and social reform programme aiming at transforming from a mono-sector / mono-crop economy (agriculture-sugar) to a diversified economy (manufacturing and services).

The graduation as Upper Middle Income Country (UMIC) and the application of the differentiation principle, have drastically reduced the 11<sup>th</sup> EDF envelope (EUR 9.9 million) compared to the past EU support (10<sup>th</sup> EDF EUR 76 million and Sugar Protocol EUR 278 million). For these reasons it was agreed with the Government to focus on one sector only namely Tertiary Education (including Research and Innovation).

The general objective of the 11<sup>th</sup> EDF is to assist Mauritius to evolve from UMIC to High income Country by improving the relevance, quality and equity in tertiary education and research, which are seen as key areas to transform Mauritius into a knowledge based and innovative society.

- For Tertiary Education: there are two main objectives to address: i) to increase the relevance of the university studies to the demands of the labour market and ii) improve equity so that vulnerable and low income families get equal access to University education.
- Research and Innovation: aims at i) boosting research through operationalization of the Mauritius Research and Innovation Fund and to ii) increase the number of research proposals that obtain financing.

It was also agreed to foresee funding for a technical cooperation facility to service the formulation / implementation of projects and to provide appropriate technical support to the Government in areas of mutual interest related to EU policies.

Civil society will be part of the dialogue during formulation and implementation of the programmes and domestic policies, however direct support to CSO will be ensured through the envelopes under the thematic budget line "Civil society organisations and Local Authorities".

Table 11th EDF Allocation

|                      | 11th EDF Initial amount | % of Envelope A |
|----------------------|-------------------------|-----------------|
| A- Envelope          |                         |                 |
| - Tertiary Education | EUR 7.9 million         | 80%             |
| - TCF                | EUR 2 million           | 20%             |

#### 1. The overall lines for EU response

The Republic of Mauritius<sup>1</sup> comprises the main island Mauritius, Rodrigues and outer islands, totalling 1.29 million inhabitants. It is currently viewed as one of the best performing countries in Africa, gaining international recognition and praise for its timely and effective economic policy, good governance, well run institutions, sound public finance management, well run democracy, well respected human rights and effective electoral systems, and good performance on Millennium Development Goals, (MDG) among others. Over the past two decades, the economic development of Mauritius has been characterised by wide-ranging structural reforms, supported by prudent policies that have established Mauritius as a top regional economic performer in the African region, as the economy grew strongly and attracted high capital inflows.

The cooperation between the European Union (EU) and Mauritius has always been close and fruitful. It should also be noted that Mauritius has always shown very good performance for the implementation of European Development Fund (EDF) and other budget lines funded programmes. Mauritius has received top up funds for the 9<sup>th</sup> EDF Mid Term Review and End of Term Review and the 10<sup>th</sup> EDF Mid Term Review.

Beyond development cooperation, Mauritius and the EU enjoy excellent relations on a number of areas of mutual interest: (i) political dialogue including United Nations (UN) related matters; (ii) promotion of maritime security and fight against piracy (the EU and Mauritius have signed an agreement for the transfer of suspected pirates apprehended by EU Naval Force Atlanta - NAVFOR); (iii) trade relations and Economic Partnership Agreements (EPA) where Mauritius is amongst the four signatories of the sole interim-Economic Partnership Agreements (i-EPA) being implemented in sub-Saharan Africa and is the engine of this group; (iv) fight against climate change (Mauritius is a strong advocate of the fight against climate change within all regional and international organisations and a natural ally of the EU); (v) policy dialogue on energy with focus on renewable energies; (vi) fisheries (Mauritius has a Fisheries Partnership Agreement with the EU and its implementing Protocol will be renegotiated in 2016); (vii) people to people relations (Mauritius is a pilot country for the Schengen visa waiver).

Mauritius benefits from political stability and a stability oriented macroeconomic policy is in place. Mauritius is an Upper Middle income country with a per capita Gross Domestic Product (GDP) of USD 9 160 in 2013<sup>2</sup>. The country successfully diversified from sugar into textiles and tourism, and more recently communication and financial services<sup>3</sup>. In the mid-2000s, the country had to face a triple exogenous shock, in the form of high oil prices and loss of the trade preferences under the Multi Fibre Agreement and the Sugar Protocol (36% cut in terms of prices), which necessitated the implementation of a new economic model containing deep structural reforms. These ambitious and comprehensive reforms were embodied in a ten year economic and social reform programme, which started implementation in 2006. During the period 2008/9 the rate of growth declined in the face of the recent global downturn, but the authorities successfully cushioned its impact with a comprehensive

<sup>&</sup>lt;sup>1</sup> The word Mauritius refers to the Republic of Mauritius in the text, except if stated otherwise

<sup>&</sup>lt;sup>2</sup> Source IMF (2014)

<sup>&</sup>lt;sup>3</sup> The main contributors to GDP are as follows: manufacturing sector (17%), real estate (13%) and financial services (10%)

policy package that included fiscal stimulus, monetary easing, ensuring foreign exchange liquidity, strengthening the social safety net, and measures facilitating private sector debt restructuring and preservation of jobs. These policy responses led to a growth rate of average 3.2% over the past three years, which is a satisfactory performance, given the context. The resilience of the Mauritian economy to the global crisis can be understood as a combination of a number of factors including: (i) political stability (ii) reforms to sustain long-run growth which accelerated in 2006; a (iii) timely, targeted and temporary short-run response to the crisis; (iv) institutional arrangements to face the crisis that promoted private-public sector collaboration and formalized a social contract; and (v) strong partnership with development partners.

Mauritius still faces a number of challenges, which are both endogenous and exogenous in nature. While Mauritius is an Upper Middle Income Country, it still suffers from development challenges which are inherent to Small Islands Developing States (SIDS), as highlighted in the Cotonou Agreement (Article 89). The economic prospects of Mauritius are strongly tied to external vulnerabilities. The country is ranked as a highly vulnerable country according to the Environmental Vulnerability Index established by the United Nations Environment Programme (UNEP). This is motivated by the small land area, vulnerability to climate change and natural disasters cyclones, flash floods, droughts and tsunamis. In terms of economic vulnerability, Mauritius suffers from the remoteness of the island given the distance from markets. The economy is highly vulnerable to external shocks as it heavily relies on imports for oil, all raw materials, and is also a Net Food Importing Developing Country. The high exposure of Mauritius to the economic trend in the Eurozone poses also a risk as highly dependent on the European Union for its exports (70%), foreign direct investment (around 60%) and tourism (70%). Mauritius exports products in Euro and has to pay for its imports in terms of US dollars. The economic situation in Europe has a direct impact Mauritius. While the country is seeking to diversify its markets, structural adjustments will deliver positive results only in the medium to long term.

At the internal level, the country needs to step up significantly its infrastructure and heavy investments are needed in the infrastructure sector over the next 10 years, including in the fields of water and energy. The education outcomes and quality of human capital also need to be reformed to reduce the existing skills mismatch and youth unemployment and obtain the quality labor force that will service a High Income Country. The current problem of high youth unemployment that Mauritius is facing is a result of this situation. The country also needs to invest in research and innovation. In terms of public sector, there should be a deep reform of the parastatal sector in terms of financial performance and governance, as well as improved performance of civil servants, in order to arrive at an efficient public sector. The country also needs to invest in connectivity, namely transport and Information and Communication Technology (ICT) - related fields.

Despite the above challenges, Mauritius seeks to graduate from an Upper Middle Income Country to a High Income Country, and needs to put in place the right policies in order to unlock the potential for further growth while ensuring social equity and sustainable development. On 27 January 2015, the Government Programme 2015-2019 was presented. The main axes of the new Government programme are to:

- transform Mauritius into a forward looking, environmentally sustainable, economically vibrant and innovative country with modern infrastructure, global connectivity, high skills and technology
- improve quality of life, accelerate social integration, strengthen democracy and ensure independent functioning of institutions
- conduct business on the principles of discipline, transparency, accountability and exemplary governance
- ward off unemployment and implement better housing policy
- promote healthy business climate
- distribute national wealth equitably

Donor coordination is led in the country by the Ministry of Finance and Economic Development, and the donors present in the Republic of Mauritius abide by the principles of aid effectiveness by ensuring complementarity between interventions.

With respect to the EU minimum standards of good governance in tax matters<sup>4</sup>, which include transparency, exchange of information and fair tax competition, Mauritius is making progress.

On transparency and exchange of information the Organisation for Economic Cooperation and Development's (OECD's) Global Forum on Transparency and Exchange of Information for Tax Purposes has rated Mauritius as 'largely compliant'. The OECD has found that Mauritius has in place a proper system for accessing and exchanging tax information. It encouraged Mauritius to improve its legal and regulatory framework for exchange of information and to address any recommendations.

In line with the reference in the Country Strategy Paper / National Indicative Programme for 2008-2013 to "keep the tax regime and practices free from harmful features", the Commission encourages Mauritius to take the necessary steps, already identified, to finally fully comply with the minimum standards of EU good governance in tax matters by addressing the remaining issues related to fair tax competition.

#### 1.1 Strategic objectives of the EU's relationship with the partner country

The cooperation between the European Union and the Republic of Mauritius has been characterised by fruitful policy dialogue at cooperation level and political dialogue at high level of the Government. The successful outcomes of the Article 8 Political Dialogue undertaken since 2011 have shown the high commitment of the Government of Mauritius to constructively discuss with the EU.

The Government has highlighted a number of times that the EU is a major partner and EU support under the 10<sup>th</sup> EDF contributed to the sustainable economic development of the Republic of Mauritius, as the main focus was support to the economic and social reform programme through the general budget support instrument. Since 2007 to December 2013, more than EUR 300 million have been disbursed as general budget support to the National Treasury of the Government of Mauritius. These funds

<sup>&</sup>lt;sup>4</sup> Commission recommandation C(2012)8805 regarding measures intended to encourage third countries to apply minimum standards of good governance in tax matters.

originated from a combination of European Development Fund (29%) and thematic budget lines, namely Accompanying Measures for Sugar Protocol countries (AMSP) (70%) and Global Climate Change Alliance (1%). The last AMSP allocation of EUR 81.8 million and the last 10<sup>th</sup> EDF allocation of EUR 6.1 million have been disbursed since 2013 and the final payments are scheduled for 2016. There is consensus that the EU grant support has provided a significant leverage effect for difficult reforms to be undertaken, and the track record shows that the reforms and key results expected have been achieved in the majority of cases. As was the case for the sugar reform over the period 2006-2014, the European Union can play a facilitator role for key reforms to be unlocked in the education sector.

Since the publication of the Agenda for Change and the application of the differentiation concept, the European Union has been sensitising the Government of Mauritius on the impact on the level of bilateral allocation under the EDF between EU and the Republic of Mauritius. The allocation for the 11<sup>th</sup> EDF bilateral envelope to the Republic of Mauritius is EUR 9.9 million for the period 2014-2020.

Following the announcement of the proposal for the bilateral allocation, the policy dialogue with the Government of the Republic of Mauritius, and other key stakeholders (private sector, civil society, development partners and academia) has since then been focussed on the choice of the appropriate concentration sector that will maximise the impact of the EU bilateral cooperation over the period 2014-2020. These discussions have also included the larger offer of the European Union for Mauritius, which ranges from the regional 11<sup>th</sup> European Development Fund to the thematic budget lines, and blending operations with the European Investment Bank actions, among others.

#### 1.2 Choice of sectors

The Republic of Mauritius fares well on the Education for all indicators and Mauritius has long reached the Millennium Development Goals (MDG) on education, including gender parity in education. Education is free at primary and secondary level, and Mauritius has a net primary enrolment ratio of 97 percent (2013) with no gender disparity in education. Mauritius ranked 63<sup>rd</sup> in the UN Human Development Index of 2014, against 77<sup>th</sup> in 2011, and ranks among countries with a high human development level. This is in large part due to the provision of free education which translates into good education indicators. The Gross Enrolment Rate at Tertiary level (GTER) has been constantly improving since the past decade, and increased from 15.1% in 2000 to 50.1% in 2013. In absolute terms, the number of students in the tertiary education sector increased from 16,735 in 2000 to 50,579 in 2013.

However, despite these positive results, there are still issues in the quality of learning outcomes at all levels. Mauritius still lags behind other middle-income countries in terms of learning achievements. A comparison of reading and math scores across countries in the 2009 Program for International Student Assessment (PISA) shows that Mauritius scored below comparable countries such as Malaysia, Costa Rica and Chile, as the Mauritius education system remains biased toward rote learning rather than the type of skills required by the labour market. PISA also showed that a large segment of the population lacks adequate literacy and math skills, which is strongly correlated with high unemployment and poverty rates, and therefore poses a major constraint on economic progress going forward.

There is significant work to be done in the education sector including in the tertiary sector in order to unlock the true potential of the Republic Mauritius as a knowledge based centre. The multiplier effects of this sector are non-negligible, as reinforcing the education sector would generate investments, create jobs, and also serve the regional integration purposes of Mauritius, if the students from the African continent are tapped. The skills mismatch existing in Mauritius might also be mitigated if the necessary measures are taken in the relevant education sector.

Poor education outcomes undermine the quality of the labour force, and undermine the efforts of Mauritius to develop important sectors because of limitations in the pool of skilled workers. According to the World Bank <sup>5</sup> the most far-reaching phenomena influencing Mauritian economy is the ongoing transition from an economy based on low value added manufacturing to one in which technology and innovation will play a major role for future growth. There are some early indications that the current labour supply is only partially prepared for that purpose, thereby pointing to the existence of a skills mismatch in the economy. One of the indicators of the skills mismatch is the level of youth unemployment, which is quite high. Out of the 44,500 unemployed surveyed in June 2014, around 18,800, i.e. 42% of them were aged below 25 years.

Even though education achievements are improving markedly and there are growing cohorts with a high school degree, the lack of highly qualified labour might hinder the early development of high value industries. There are two types of skills mismatch prevailing in the country: either the existing Curricula do not match needs of companies or there is absence of offer at the level of university in programmes in critical fields.

While there has been increased access to education, thereby expanding skills and employment opportunities, it is still seen that educational outcomes are correlated with the socio economic factors. Children from low income families tend to have a low school completion rate.

The Government is committed to improve education at all levels in an inclusive and equitable manner. There are a number of initiatives on going to facilitate access to pre-primary, primary, secondary and tertiary education to children from vulnerable groups, as well as increasing the education outcomes for these children. Children attending schools (from primary to tertiary level education) are provided free transport through Government funding. One of the latest examples relates to the setting up of a scholarship scheme for tertiary education for children from vulnerable groups, announced in the Budget 2014, whereby various scholarships and financial assistance schemes (loans and grants) support students from low income groups. There is wide consensus among stakeholders, Government and development partners, that reforms in the education sector is a priority issue to be tackled to improve the skills base, which will contribute to enhancing the growth potential of Mauritius. This has been labelled as a core transformation requirement and the need to deliver quality and equitable results in the education sector is recognised by all.

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<sup>&</sup>lt;sup>5</sup> Mauritius Systematic Country Diagnostic (2014)

Government also announced, in the Budget 2015, the setting up of three polytechnics to improve employability and adaptability of students for the world of work.

The World Bank also highlighted that the gap in innovation is a significant barrier to the upgrading and diversification of the economic base of Mauritius. Mauritius ranks 81<sup>st</sup> in the innovation ranking of the 2013-14 global competitiveness index, showing that the environment for developing knowledge-intensive sectors remains weak, particularly because of the relatively underperforming quality of the scientific research institutions, limited collaboration between business and universities and difficulties to retain talent. Improvement in the innovation area would open great opportunities for linking to global value chains and additional regional integration.

The Ministry of Finance and Economic Development proposed that the EU intervention be focussed on the education sector, where there were a number of important reforms that still needed the support of a key development partner like the European Union. The EU has been present in the education sector since 2007 supporting reforms in the pre-primary and primary education sectors through the general budget support aid modality coupled with an established policy dialogue. In 2007 and 2008, the EU support focussed on improving the educational outcomes in the primary sector for vulnerable groups. Between 2009 and 2012, access to pre-primary education was monitored, specifically for the children from vulnerable groups. Between 2013 and 2015, the reform of the primary education end of cycle exams and an improvement in access to secondary education are the key results being expected through the EU support programme.

The Government programme 2015-2019 also aims to deliver a high standard of academic education and skills for the youngsters. It recognises that to achieve meaningful change, technology, communication and innovation will constitute key drivers.

It is clear that there are three critical constraints currently being faced at human resources development level in Mauritius in relation to the objective of becoming a High Income Country in the near future:

- (i) Relevance of tertiary education, particularly on skills mismatch need to be addressed
- (ii) Equity aspects of tertiary education need to be addressed
- (iii) Research, and innovation development needs to be addressed

The insularity constraints on Mauritius may be alleviated by fully exploiting the intangible nature of information and communication technologies for the benefit of education through distance learning, collaborative research through high throughput research networks as well as growth and jobs through remote performance of professional services to distant clients.

Tertiary education sector and research, development and innovation had been identified from the very outset as a possible key sector for the future economic and social development of Mauritius, and a key factor in achieving both equitable and sustainable development. The creation of a Ministry responsible for Technology, Communication and Innovation highlights the commitment of the Government in its endeavour to promote innovation.

It is therefore agreed by the Government of the Republic of Mauritius and the European Union that the focus of the EU bilateral cooperation under the 11<sup>th</sup> EDF will be mainly tertiary education sector, including research and innovation. After consultations with the Ministry of Finance and Economic Development, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research and the Ministry of Technology, Communication and Innovation, including Mauritius Research Council (MRC), it has been confirmed to focus on tertiary education sector, research and innovation. These represent critical ingredients for the transformation of Mauritius into a High Income Country, which is the overall objective of the 11<sup>th</sup> EDF cooperation and the logical evolution after the past EU support in pre-primary and primary/secondary education.

The aid modality will be determined during identification/formulation, though the Government of the Republic of Mauritius has requested a Sector Reform Contract as aid modality.

The specificity of the island of Rodrigues could also be taken on board during the implementation of this National Indicative Programme (NIP).

Provision will be made within the NIP for a Technical Cooperation Facility.

This proposal for intervention encompasses the findings during consultations held with the Government, the private sector, development partners and academia. It was found that there was significant work to be done in the education sector including in the tertiary sector in order to unlock the true potential of the Republic Mauritius as a knowledge hub capable of attracting a significant number of foreign students. The multiplier effects of this sector are non-negligible, as reinforcing the education sector would generate investments, create jobs, and also serve the regional integration purposes of Mauritius, if the students from the African continent respond.

This proposal will be in line with the 'Agenda for Change', where education builds the foundation for inclusive and sustainable growth for human development. The Agenda for Change states that: 'The EU should enhance its support for quality education to give young people the knowledge and skills to be active members of an evolving society'.

#### 1.2.1. Tertiary Education sector

In Mauritius, tertiary education as well as scientific research falls under the aegis of the Ministry of Education and Human Resources, Tertiary Education and Scientific Research. The tertiary education sector comprises public as well as private institutions providing an array of courses, from Certificate to Doctorate Level. There are four public universities, three publicly funded tertiary education institutions (TEIs) as well as 52 private TEIs.

The Tertiary Education Commission (TEC) regulates the private tertiary education institutions and allocates funding to the public tertiary education institutions. There are a number of challenges in the tertiary education sector. The first and key challenge is the skills mismatch in the labour market, which is also linked to the youth unemployment. For example, there is a scarcity of engineers specialised in building

and infrastructure, despite the need in this sector. There are also few opportunities to develop skills in cultural and creative industries, which are an important and growing sector for the innovation economy and particularly for the employment of young people and women. This type of skills mismatch can be remedied by improving the relevance of tertiary education to make it more responsive to the needs of the labour market. This would imply improving supply of courses at University level that match the demands for the labour market. In this context, the Ministry will encourage more linkages between all tertiary education institutions and business and social partners.

The potential of accessing tertiary education abroad through e-learning should be exploited.

The second key challenge is to ensure equitable access to tertiary education. The Gross Tertiary Enrolment Rate, which measures the total number of Mauritians enrolled in tertiary education, both locally and overseas, as a percentage of the population aged 20-24 years, stood at 50.1% in 2012 (of which 81% locally and 19% abroad). The ambition of the Government of Mauritius is to achieve one graduate per family in the long term.

The third challenge is to enhance the quality of tertiary education to attain international standards, namely by improving effectiveness and efficiency of tertiary education institutions. This challenge is being addressed by the Government of Mauritius.

The Ministry of Education and Human Resources, Tertiary Education and Scientific Research is also working on the strengthening of governance structures and financial management in public tertiary education institutions to ensure financial efficiency. On 2 August 2013, the Government of the Republic of Mauritius approved the **Tertiary Education Strategic Plan 2013-2025** geared towards transforming Mauritius into a knowledge-based economy by 2025. The plan focuses on five main goals to create and maintain a conducive environment to make Mauritius a centre of knowledge of high quality and values, strongly anchored in science, technology and innovation while ensuring equitable access to tertiary education to every citizen. It also explains the strategies and activities to achieve these goals.

The first goal provides for increasing access to tertiary education to achieve the enrolment of 68,000 students by 2025, including secondary school leavers, students enrolled in continuous professional development, lifelong learning and upgrading of qualifications.

The second focus area of the plan is to achieve high quality standards of tertiary education and improve the ranking of tertiary education institutions as well as ensure the relevance of tertiary education programmes to economic and social needs of the country and the region.

The third goal sets out to transform Mauritius into a prime destination for higher learning by attracting some 100,000 international students by 2025 and encouraging international tertiary institutions of high reputation, including renowned institutions among the 500 top ranking universities, to set up local campuses/units or partnerships in Mauritius.

Strategic goal number four outcome calls for the enhancement of research and innovation and aims at increasing the percentage of the budget allocated to research from the present 0.3% to 1% by 2025; increase by 75% the number of publications and patents by local researchers by 2025; encourages private sector participation in research while rationalising research and innovation to respond to economic and social needs.

The final goal of the plan is to strengthen governance and financial sustainability through the introduction of a Tertiary Education Act and the establishment of well-defined performance indicators for publicly funded tertiary education institutions and mechanisms to link funding to quality improvement.

Several initiatives will be implemented to meet the five goals of the strategic plan. They comprise namely the development of modern infrastructure, the establishment of relevant legal and regulatory frameworks, the setting up and implementation of appropriate mechanisms, encouraging institutional networking, capacity building, and the introduction of several schemes to ease access to tertiary education for local students and community, among others.

#### 1.2.2 Science, Research, Technology and Innovation

Science and research are the basis for innovation, which is critical for future economic growth. Mauritius has recognised this and wants to promote science, technology and innovation as key drivers of a knowledge-based economy, promote economic growth, and enhance the quality of life of the nation. As highlighted in Section 1.2.1 above, there is a growing recognition that research and innovation will assist Mauritius to move forward from the Middle Income Economy status, like many countries have done, e.g. Singapore, Dubai, Barbados, etc.

Research in Mauritius is mainly conducted by government institutions, parastatal bodies and academic institutions. The main institution for coordinating research and innovation is the MRC. Other institutions also involved in research and innovation are the public universities, including the University of Mauritius. The latter houses the Centre for Biomedical and Biomaterials Research (CBBR), which is a research centre set up in 2010 pooling together researchers from Biosciences, Biotechnology, Bioengineering, Bioinformatics, Chemistry and Pharmaceutical expertise, Research in publicly-funded tertiary education institutions is almost exclusively funded by the Government. The Mauritius Cane Industry Authority is active in research in the cane sector, and has received EU funding for implementation of research projects under thematic budget lines. Furthermore there is the Food and Agricultural Research and Extension Institute as well as the Mauritius Oceanography Institute which are mandated to undertake research in the field of Agriculture and Ocean Resources respectively.

In the Programme Based Budget for 2014, the Ministry of Tertiary Education identified some key challenges in the research and innovation sector. These relate namely to the involvement of private sector participation in research, increasing public expenditure in research, encouraging a culture of research as well as promoting science, technology and innovation.

One of the activities under the above mentioned Tertiary Education Strategic Plan is to formulate a national science, technology and innovation policy to optimise impact of science and technology on socio economic development. Although many Science Technology and Innovation programmes and supporting institutions are in place, there is still room for improvement of the transfer of knowledge and technologies from academia to application in the private sector. In February 2014, the Ministry of Tertiary Education, Science, Research and Technology drafted a Science, Technology and Innovation Policy (STI) and Strategic plan (2014-2025). The overall objective of this draft strategic plan is to formulate a framework to use as key drivers to achieve a knowledge-based economy and promote economic growth while enhancing quality of life of the nation. The specific objectives of this plan are as follows:

- a) Increase efficiency of local public and private institutions in using science, technology and innovation to achieve societal and economic development in a sustainable manner.
- b) Increase the competitiveness of sectors of the economy by promoting the use of science, technology and innovation.
- c) Support technological transformation, capacity-building and innovation.
- d) Improve linkages between the research and business sectors.
- e) Develop regional/international collaboration.
- f) Strengthen the Science, Technology and Innovation research capability in tertiary education and research institutions.
- g) Embed the culture of research and development in small and medium sized enterprises.
- h) Strengthen support to researchers and research students.

In order to achieve these objectives, focus will be placed on:

- 1. Upgrading human competencies in the science, technology and innovation sector
- 2. Upgrading the public research sector
- 3. Consolidating the link between Science and Society
- 4. Promoting technology absorption and innovation.
- 5. Enhancing investment in Research and Innovation
- 6. Meeting the challenges through enhanced research
- 7. Promoting science, technology and innovation initiatives in Africa
- 8. Strengthening governance and financial sustainability

The MRC has been consulted on the draft Science, Technology and Innovation Policy and Strategic plan (2014-2025), in order to obtain the views of stakeholders on the proposed strategic plan.

With the creation of the Ministry of Technology, Communication and Innovation in December 2014 the STI Policy and Innovation Policy and Strategic Plan has been consolidated into the National Innovation Framework (NIF).

There are some examples whereby Mauritius has successfully used research to increase its value added in a specific sector. One of these examples is the sugar sector, for which the EU supported a comprehensive sugar sector reform since 2006. In the sugar sector, the role of the Mauritius Sugar Industry Research Institute (MSIRI) has

been instrumental in reforming the sector from a sugar industry to a cane industry, whereby the use of by-products of sugar cane is optimised. Established since 1953, the MSIRI has conducted research on canes to enhance the cost effectiveness and competitiveness of the cane industry. Its research also involved engineering options for improving the efficiency of factories and for value additions to the co-products. The success of the MSIRI lays in the fact that it maintains an effective interaction with the agricultural sector and with national and international bodies. Since 2011, the MSIRI has been renamed Mauritius Sugarcane Industry Research Institute, and operates under the Mauritius Cane Industry Authority.

#### 2. Financial Overview

The envelope for Mauritius under the 11<sup>th</sup> EDF for the period 2014-2020 will be EUR 9.9 million. The financial envelope will be allocated as follows:

Tertiary Education sector, including research and innovation: EUR 7.9 million (80%

of total)

Technical Cooperation Facility : EUR 2 million (20% of

total)

## 3. EU support per sector (indicative amount 7.9 million €)

#### 3.1 Overall Objective

The overall objective of the EU response strategy under the 11<sup>th</sup> EDF will be to support the objective of the Republic of Mauritius to evolve from a Middle Income Country to a High Income Country.

#### 3.2 Specific objective

The **specific objective** under 11<sup>th</sup> EDF will be to improve the relevance, quality and equity in tertiary education and research, thereby contributing to transforming the Republic of Mauritius into a knowledge-based and innovative society

The expected results and indicators presented below are provisional and will be used as a framework to appraise specific operations. During implementation these indicators will be fine-tuned to be measurable, achievable and time bound. It is worth noting that the Ministry of Tertiary Education, Science, Research and Technology has initiated in October 2014 an EU funded study to produce an Action Plan for the Tertiary Education Strategy 2013-2025. This Action Plan will contribute to the identification and formulation process during the implementation of the 11<sup>th</sup> EDF.

## 3.3 The main expected results

# 3.3.1 Tertiary education sector

Under the tertiary education sector, there are two main expected results. The first one is to increase the relevance of tertiary education, namely through an adaptation of tertiary studies to the demands of the labour market and thereby enhancing the employability of graduates upon the completion of their studies. This result will contribute to reduce the high level of unemployment existing among the youth since the past few years in the country.

The second result will be to increase the equity in tertiary education, so that the vulnerable sections of the population, namely students coming from low income families get access to tertiary education.

These two results stem directly from the Tertiary Education Sector Strategy's priorities. The Plan lays emphasis on the increasing employability of graduates through effective linkages with the private sector to obtain key information on labour market needs. According to this Strategy, skills mismatch should be addressed through consultations with private sector, work placements and internship schemes. The private sector should play a more active role in defining needs and skills requirements. In the current labour market, it is necessary to establish formal linkages between tertiary education institutions and business to integrate the concept of employability in the development of academic programmes.

The Tertiary Education Strategic Plan also includes the objective of ensuring equity in the tertiary education sector. Provision is made to encourage access of students from vulnerable sections of the population to tertiary education, namely through support schemes including award of scholarships. The Plan also provides for children with special education needs, for gender mainstreaming policies for all tertiary education institutions, for equal opportunity policies for tertiary education institutions. Special mention is made to provide facilities to tertiary education to students from Rodrigues and other outer islands, which are remote areas.

#### 3.3.2 Research and Innovation

The expected result under research and innovation is to setup a stronger policy and institutional structure. Under the 11<sup>th</sup> EDF, the necessary policy and institutional framework to be put in place for the development of research and innovation, including funding, will be taken into consideration. This result will serve five objectives of the National Innovation Framework, namely (i) identify measures to increase the competitiveness of the local industrial sector by promoting the use of technology and innovation; (ii) identify measures to increase the efficiency of local research and research-related institutions to achieve social and economic development in a sustainable manner; (iii) devise policies and identify institutions to support the technological transformation, capacity building and innovation of enterprises; (iv) improve linkages between the research and business sectors; and (v) enhance national, regional and international dialogue in innovation.

One of the strategic goals of the Tertiary Education Sector Strategic Plan is to strengthen capacity for research and innovation to respond to economic and social needs. One of the activities to achieve this was to rationalise research by creating a national research and innovation platform and a national research and innovation fund. Between 2010 and 2012 the estimated average government expenditure as a percentage of GDP on Research and Development averaged to 0.4 % (average of 1.2 billion rupees annually). In the Budget 2014, the Government proposed some measures to boost Research and Development, namely funds for research and development and facilities for exchange programmes with internationally reputed universities and lecturers.

#### 3.4 Proposed main indicators for each result

The main indicators for measuring the aforementioned results are contained in the sector intervention framework in Annex 3.

#### 3.4.1 Tertiary Education

(i) Percentage of graduates from public funded institutions who are employed within the scope of their programme within two years of graduation.

The main aim of this indicator is to improve the relevance of tertiary education and assess the skills mismatch in the economy as well as try to remedy this situation.

In 2011, a Tracer Study undertaken by the Tertiary Education Commission revealed that in general, it took about 2 years for the near-totality of graduates (98.0%) to secure a job, irrespective of the field of study and gender. One of the objectives under the 11<sup>th</sup> EDF will therefore be to contribute to graduates securing employment within the scope of their programme.

(ii) Number of new study programmes mounted in the public universities, which address the skills mismatch in private and public universities and research and innovation sectors which are industry driven.

As mentioned in section 3.3.1 above, a closer link between tertiary education institutions and business needs to be established in order to enhance the employability of graduates. This Key Performance indicator will measure the results from the closer linkages.

In order to determine the skills mismatch existing in various sectors, the Government of Mauritius will be encouraged to undertake a structured assessment of the needs of the economy, specifically given that there are new poles of growth foreseen in the future, namely the ocean economy.

(iii) Number of scholarships given to children from low income families for undergraduate studies.

Announced in the Budget Speech 2013, the Guidelines of the Scholarship Scheme to children from vulnerable families were finalized in September 2013. However, this scheme could not be implemented in 2013 because the enrolment for tertiary courses for the year 2013 had already lapsed. The Scheme has been launched in January 2014 and covers students who are registered under the Social Register of Mauritius with a monthly family income threshold of MUR 10,000 (approximately EUR 250). The guidelines for the eligibility criteria for the students to be able to access the scholarship, detail the academic achievements required from the students at secondary 'A' levels, as well as the need to have secured an entry already in a course that is part of a priority field, of a recognised Tertiary Education Institution.

The sources of verification for the indicators for the tertiary education part will be reports from public universities, tracer studies carried out by the Tertiary Education Institutions, reports from Government and reports from Tertiary Education Institutions.

#### 3.4.2 Research and Innovation

(i) Extent to which the National Innovation Programme is being operationalised, including the setting up of the National Research and Innovation Fund

The Ministry of Technology, Communication and Innovation has initiated a National Innovation Framework since April 2015. The main objectives of the Framework are as follows:

- (i) Identify measures to increase the competitiveness of the local industrial sector, including agriculture, by promoting the use of technology and innovation;
- (ii) Identify measures to increase the efficiency of local research and research related institutions to achieve social and economic development in a sustainable manner;
- (iii) Devise policies and identify institutions to support the technological transformation, capacity building and innovation of enterprises;
- (iv) Improve linkages between the research and economic sectors, including the agriculture sector; and
- (v) Enhance national, regional and international dialogue in innovation.

The overall objective of the NIF is to generate key pillars for future robust growth of the Republic of Mauritius. It is also worth noting that the National Innovation Framework, which is currently being finalised, encompasses all the schemes related to research and innovation, including National Innovation Programme. The latter which focuses on a holistic approach to research and innovation will cluster all schemes which are currently being implemented by other organisations and provide the following facilities to the beneficiary:

- (i) Grants
- (ii) Loans
- (iii) Fiscal incentives
- (iv) A combination of the above

The National Innovation Programme will take into account funding aspects of the research and innovation from several sources (public and private), including the objective of setting up the National Research and Innovation Fund.

In March 2014, the MRC Act was amended to introduce the National Research and Innovation Fund, which has the following objectives:

- the funding of research and development, and innovation so as to encourage innovation in Mauritius,
- increase investment by the public and private sectors in research and development and make Mauritius more competitive internationally in that field;
- promoting the technological advancement of the public and private sectors through a focus on innovation; and
- creating an environment that is conducive to increasing the commercialisation of new processes and product technologies.

In the above context, a new funding scheme (the Collaborative Research and Innovation Grant Scheme was put in place by the Ministry of Finance and Economic Development in 2014 to increase the competiveness of Mauritius by bridging the gap between researchers in Academia/Public Sector and business. The scheme is presently

being managed by the MRC and a Research and Development Working Group has been set up to oversee the scheme.

The competitive process for application of the fund and criteria for selection of projects/activities has already been developed. So far, there are nine (9) ongoing projects under this scheme. A system for management of the fund including the monitoring of projects, formulation of performance indicators, auditing of the system and ensuring judicious use of the funds has already been developed and is being implemented. It should be highlighted that the CRIGS forms part of the National Innovation Programme. The latter will focus on a holistic approach to research, as compared to the other existing schemes.

The Government Program 2015- 2019 lays emphasis on stimulating innovation and growth of the economy through Small and Medium Enterprises (SMEs). In line with this initiative, the Research and Development Working Group (RDWG) launched the SME Innovation Grant Scheme (SIGS) in May 2015. The SIGS is dedicated to SMEs and start-up companies or a consortium of SMEs and start-up companies registered and operating in the Republic of Mauritius. The SIGS prioritises early stage funding of a maximum of up to MUR 1 Million (approx. EUR 25,000) for (innovative Research and Development) ultimately leading to development of prototypes, new processes and/or techniques having high societal relevance. As an example of eligible projects, the RDWG has invited SMEs to submit project proposals under the following theme: 'Innovative and environment friendly alternatives to plastic bags', as incentive to find sustainable solutions as alternatives to plastic bags.

The 11<sup>th</sup> EDF will contribute to the necessary activities to be undertaken so that the projects under the National Innovation Programme become operational, including the aspect of funding.

(ii) The number of Research proposal that obtain funding, including from private sector.

These indicators have been put forward by the MRC. During the implementation of the 11<sup>th</sup> EDF, and for the formulation of the different programmes, the indicators to assess the results of each activity will be assessed based on the national budget document of the relevant year.

In pursuance of the Tertiary Education Strategic Plan's objective is to increase the number of publications and patents by local researchers by 75% by 2025. As at 2014, there were 200 scientific publications, including 120 international scientific copublications.

The sources of verification for the research component will be research proposals emanating from both public and private sectors as well as reports from MRC and other bodies.

The main indicators for measuring aforementioned results are contained in the sector intervention framework attached in Annex 3.

#### 3.5 Donor coordination and policy dialogue are:

Apart from the EU, three other donors are providing budget support, generally in the form of loans, namely the African Development Bank (AfDB), the Agence Francaise de Dévelopment (AFD) and the World Bank. The UN Development Programme (UNDP) is also present in Mauritius, and provides technical assistance. Coordination in this group is close and there is regular dialogue on the different interventions. The donor coordination extends outside the budget support operations also in the areas of technical assistance.

All five donors are active in the field of education, though with different focus. The AfDB has finalised its Country Strategy Paper (CSP) for the period 2014-2018 in 2014, which contains a pillar on education, science and technology. This relates namely to improvement of educational outcomes in the primary sector via higher involvement of the private sector, based on a United Kingdom (UK) model, and support to widen access and relevance of tertiary education, in relation to skills mismatch existing in the country. On the aspect of Technology and innovation, AfDB will contribute to bridge the gap between business and academia. These interventions are very much in line with the proposed EU 11<sup>th</sup> EDF programming, showing a consensus on the result of the analysis of the key challenges of the Mauritian economy. Both partners agreed to work in close collaboration in order to complement each other's interventions with mutually reinforcing actions.

The UK is very active in the tertiary education sector and in the promotion of linkages between British universities and local Tertiary Education Institutions in the Republic of Mauritius. So far 31 British universities are present in Mauritius. Since late 2014 the UK Foreign and Commonwealth Office is funding an audit of tertiary education institutions in Mauritius. The UK based Quality Assurance Agency has been chosen to conduct this audit. The findings will be available in 2015.

France is also very active in the tertiary education sector. The Service de Coopération et d'Action Culturelle actively promotes partnerships and linkages between French Universities and local universities. The AFD is doing some analytical work in the area of biotechnology. This would assist to inform possible future interventions in the research and development sector. The AFD has allocated a grant of EUR 1.5 million for professional training over the period 2014-2016.

The World Bank will prepare its Country Partnership Strategy for Mauritius as from 2015. In this context, it has initiated a country diagnostic assessment covering various areas of the Mauritian economy. The diagnostic assessment findings in the areas relevant to the 11<sup>th</sup> EDF will be taken into consideration when identifying and formulating programmes during the implementation of the 11<sup>th</sup> EDF.

The UNDP country Programme 2014-2016 contains a pillar for social inclusion and empowerment, where one of the areas of focus will be on fostering pro-poor and inclusive education in order to reduce inequalities in opportunities.

The European Union will liaise closely with these donors during the implementation of the 11<sup>th</sup> EDF, in order to ensure coherence and complementarity with the various

programmes. However, it will be up to the Government of the Republic of Mauritius to be in a leadership role for the overall donor coordination.

There will also be close coordination with the regional programmes funded by the European Union under the 11<sup>th</sup> EDF from which Mauritius can benefit. These relate mainly to the programmes to be funded under the Indian Ocean Commission as determined in the Regional Indicative Programme for the 11<sup>th</sup> EDF.

The policy dialogue will be held mainly with the Ministry of Finance and Economic Development, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research and the Ministry of Technology, Communication and Innovation. Other stakeholders like the MRC and the University of Mauritius, the Centre for Biomedical and Biomaterials Research, and any other department or agency concerned with the programme, will also be consulted. All the partners involved in the education sector would also be closely involved in the policy dialogue. The private sector, which is very active in policy dialogue with the Government on issues like skills mismatch and innovation, will be consulted in the design of programmes to be funded under the 11th EDF. The civil society will also be part of the dialogue during the implementation of the 11<sup>th</sup> EDF NIP. Trade unions and students associations exist and are well structured in the education sector. These consultations with Civil Society Organisations will assist in promoting a meaningful and structured participation of the civil society in the implementation of domestic policies. To the extent possible and when relevant; local authorities will be associated with the dialogue.

#### 3.6 The Government's financial and policy commitments are:

The Government's policy commitment to the education sector is quite prominent in most of the policy documents recently prepared by the Government of Mauritius. The economic and social reform programme of the Government of Mauritius, which is under implementation since 2006, highlights the need to reform the tertiary education, by implementing a national strategy for tertiary education that will enhance the ability of Mauritius to compete in the global economy.

The Government Programme 2012-2015, presented in April 2012, stated that the Government will introduce a Tertiary Education Bill which will provide a framework for the development and regulation of tertiary education in Mauritius. The Tertiary Education bill will also provide the Tertiary Education Commission with enhanced tools to ensure Quality Assurance across the tertiary educational sector.

The budget 2014, presented on 8 November 2013, contained a number of measures for the improvement of the tertiary education sector, with an emphasis on access and better quality. This policy document also included measures to boost innovation, which are captured in the proposed results and indicators at Section 3 above.

The commitment of the Government of Mauritius is also illustrated by the various strategic documents that exist in the education sector, namely:

- (i) The Tertiary Education Strategic Plan 2013-2025 dated July 2013.
- (ii) The Education and Human Resources Strategic Plan 2008-2020 dated October 2009.

(iii) The Science, Technology and Innovation Policy and Strategic Plan 2014-2025, draft of February 2014.

As per the budget 2014 documentation, the expenditure in the education sector, stood at 12.2% of total public expenditure in 2013. This represents the combined budgets of both the Ministry of Education and Human Resources and the Ministry of Tertiary Education, Science, Research and Technology. Besides the Ministry of Health and Quality of Life, the education budget is one of the largest budgets attributed to any sector. For 2014, the share of education in total expenditure is forecast to increase to 12.8%, thereby showing the sustained importance given to this sector by the Government. The tertiary education sector represents an average of 1% of public expenditure. The budget granted to the Ministry of Tertiary Education is detailed in the Table hereunder:

Table 1: Expenditure in the Tertiary Education Sector (2013-2015)

|   | 2013   | 2014   | 2015 (estimates) |
|---|--------|--------|------------------|
| Expenditure on Tertiary Education (MUR billion)                 | 1,047  | 1,320  | 1,491            |
| Total Expenditure in Education (MUR billion)                    | 12,827 | 14,522 | 14,871           |
| Tertiary Education as a % of total expenditure on education (%) | 8%     | 9%     | 10%              |

As it can be seen from Table 1 above, the share of expenditure on tertiary education in total education budget is increasing over the period 2013 to 2015.

The financial commitment of the Government is therefore established.

#### 3.7 Gender Mainstreaming

Gender forms an integral part of the programming exercise. The gender-disaggregated enrolment rate in public tertiary education institutions was as follows from 2011 to 2014:

Table 2: Enrolment in public tertiary education institutions 2011-2014

|        | 2011   | 2011/2012 |        | <u>/2013</u> | 2013/2014 |      |  |
|--------|--------|-----------|--------|--------------|-----------|------|--|
| Male   | 9 390  | 40%       | 9 438  | 40%          | 11 457    | 41%  |  |
| Female | 14 178 | 60%       | 14 292 | 60%          | 16 193    | 59%  |  |
| Total  | 23 568 | 100%      | 23 730 | 100%         | 27 650    | 100% |  |

As it can be seen from Table 2 above, the male enrolment stands at an average of 40% over the past three years, while female enrolment was 60% on average. During the identification and formulation of 11<sup>th</sup> EDF NIP programmes, due consideration will be given to restoring an adequate gender balance in the enrolment of boys in the tertiary education sector. For research and innovation, no statistics are available for number of researchers by gender. However there is a marked gender difference in the students taking science subjects as there are more boys than girls in highly technical scientific subjects. This will be taken into consideration during the implementation of the 11<sup>th</sup> EDF. During the identification and formulation due consideration will be

given to encouraging women to study science and technology related subjects and take part in research and innovation. Relevant bodies will be encouraged to publish gender disaggregated statistics, and gender parity in research will be an important consideration for the implementation of the 11<sup>th</sup> EDF funded programmes. These issues will also be followed through the Gender Action Plan till 2015 and through the successor to the Gender Action Plan for the period 2016-2020.

#### 3.8 The overall risk assessment of the sector intervention:

Table 3: Risk Assessment

| Risk  | Mitigation Measure  |
|---|---|
| Political/Policy Risk Economic priorities mandate of the Government might evolve and Tertiary Education and research could be superseded by other topics.  Technical Risk The successor strategy to the economic and social reform programme, might have different priorities | The European Union and its Member States will continue the fruitful political dialogue to advocate for tertiary education, research and innovation to be among the key priorities.  Policy dialogue will be held between the Ministry of Finance and Economic Development and the   |
| in the tertiary education sector and research and innovation than the ones chosen for the NIP.  | line Ministries to agree on the ultimate priorities as listed in the NIP.   |
| Financial Risk The Government and the private sector might find investment in research and innovation to be too expensive.  | The European Union, with other donors, will continue to impress upon the long term benefits of investment in research and innovation, especially for Mauritius which aspires to become a High Income Country. Awareness raising to promote participation by Mauritius research institutions in Horizon 2020 call for proposals will continue using existing African platforms and networks. Special care will be taken with respect to Intra-ACP or PANAF-financed calls for proposals. |
| Implementation Risk Following the elections in 2014, there are two separate ministries looking after tertiary education and research and innovation. Policy dialogue will have to be undertaken with both for close collaboration.,   | The European Union will hold close policy dialogue to identify clearly the interlocutors responsible for specific themes within tertiary education/science and research and innovation.   |

#### 4. Measures in favour of civil society

The support to the civil society on Mauritius will be done through the envelopes received under the thematic budget line "Civil Society Organisations and Local Authorities (CSO-LA)" over the period 2014-2017. The priority areas for the CSO-LA budget-line will be planned to ensure complementarity with the implementation of the bilateral envelope.

Because of the need to concentrate on tertiary education and science and research to deliver results, the initial bilateral allocation under the 11<sup>th</sup> EDF will not be used to support the civil society. However, it has to be emphasised that our support to civil society organizations in alleviating poverty under the 9<sup>th</sup> and 10<sup>th</sup> EDF Decentralised Cooperation Programme (phase I & II) have been successful; most of the time, demand for grants under the programme largely exceeded available budget.

#### 5. B Allocation

The B allocation is set at 0 and funds will be mobilised as and when needs arise. As a small island state, it should be highlighted that Mauritius is regularly affected by natural disasters like cyclones, flash floods and tsunamis.

#### 6. Support Measures

# 6.1 Measures to support or accompany the programming, preparation or implementation of actions

It was also agreed to foresee funding for a technical cooperation facility to service the formulation / implementation of projects and to provide appropriate technical support to the Government in areas of mutual interest related to EU policies.

#### 7. Other instruments

To the extent possible, the links with the EU programmes in the areas of tertiary education and research, such as Erasmus+, Intra-Africa Academic Mobility Scheme, Harmonization and Tuning initiative and Horizon 2020 will be strengthened so as to further assist the Government's objectives in the tertiary education, research and innovation sectors. Erasmus+ has programmes that promote mobility and capacity-building projects in the field of education, training and youth, as well as knowledge alliances fostering innovation in higher education, business and the broader socio-economic environment. A cross-cutting objective of the EU's Horizon 2020 is to foster international research and innovation cooperation with partners from countries such as Mauritius. Researchers may also get involved in international undertakings, in particular by connecting to EU's GEANT<sup>6</sup> and other international education and research networks. It should however be noted that there is heavy competition to access instruments like Erasmus+ and Horizon 2020.

There will be complementary support possibilities under the regional 11<sup>th</sup> EDF funding envelopes, including sub-regional and cross-regional envelopes.

<sup>&</sup>lt;sup>6</sup> GÉANT is the European communication network for research, education and public service, and aims to provide networking services for European researchers to access resources anywhere in the world.

## Attachments

- 1. Country at a glance
- 2. Donor matrix
- 3. Sector intervention framework and performance indicators
- 4. Indicative timetable for commitment of funds

Annex 1. Country at a glance

Annex 1. Country at a glance

| Table 1: National accounts and prices  | Table 1: National accounts and prices |       |       |       |       |       |       |  |  |  |
|--|---------------------------------------|-------|-------|-------|-------|-------|-------|--|--|--|
|  | 2008                                  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |  |  |  |
| Real GDP (% change p.a.)   | 5.5                                   | 3.1   | 4.2   | 3.6   | 3.4   | 3.2   | 3.5   |  |  |  |
| Real (nonoil) GDP (% change p.a.)  | 5.5                                   | 3.1   | 4.2   | 3.6   | 3.4   | 3.2   | 3.5   |  |  |  |
| Real GDP per capita (% change p.a.)  | 4.9                                   | 2.6   | 3.6   | 3.5   | 2.9   | 3.0   | 3.4   |  |  |  |
| Population (mid-year mio)  | 1.244                                 | 1.247 | 1.250 | 1.252 | 1.256 | 1.259 | 1.261 |  |  |  |
| GDP (€)  | 6593                                  | 6342  | 7306  | 8077  | 8933  | 9019  | 9575  |  |  |  |
| Gross domestic investment (% of GDP)   | 24.6                                  | 26.4  | 24.9  | 24.0  | 23.0  | 21.2  | 19.2  |  |  |  |
| Private  | 20.5                                  | 19.8  | 18.8  | 18.5  | 17.5  | 16.2  | 14.3  |  |  |  |
| Public   | 4.1                                   | 6.6   | 6.1   | 5.5   | 5.5   | 5.0   | 4.9   |  |  |  |
|  |                                       |       |       |       |       |       |       |  |  |  |
| Consumer price index (% change annual average)                                 | 9.7                                   | 2.5   | 2.9   | 6.5   | 3.9   | 3.5   | 3.2   |  |  |  |
| Nominal effective exchange rate (% change end of period)*                      | -1.6                                  | -3.4  | 1     | -4.6  | 1.2   | 1.5   | -0.4  |  |  |  |
| Real effective exchange rate (%change end of period)                           | 13                                    | 4.1   | 3.2   | 6.2   | 1.3   | n.a   |       |  |  |  |
| Table 2: Financial sector  |                                       |       |       |       |       |       |       |  |  |  |
| Net domestic assets of the banking sector (% annual changes)                   | 18.3                                  | 7.2   | 15.9  | 6.6   | 10.9  | 7.1   | 5.6   |  |  |  |
| Net foreign assets of the banking sector (% annual changes) **                 | 3.8                                   | -4.8  | 14.3  | -0.6  | 8.8   | 7.8   | 14.6  |  |  |  |
| Total regulatory capital to total assets                                       | 7.3                                   | 7.7   | 7.3   | 7.2   | 7.5   | 7.9   |       |  |  |  |
| Total exposure/total assets  | 54.9                                  | 40    | 46.7  | 52.6  | 55.8  | 58.6  |       |  |  |  |
| Table 3: External accounts (in Mio \$ )  |                                       |       |       |       |       |       |       |  |  |  |
|  | 2008                                  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |  |  |  |
| Current balance (including grants)   | -976                                  | -654  | -1003 | -1552 | -837  | -754  | -699  |  |  |  |
| Trade balance  | -1996                                 | -1549 | -1887 | -2351 | -2466 | -2271 | -2252 |  |  |  |
|  |                                       |       |       |       |       |       |       |  |  |  |
| Exports  | 2397                                  | 1931  | 2252  | 2560  | 2661  | 2872  | 3108  |  |  |  |
| (manufacturing sector accounts for around 40%-50% of total exports every year) |                                       |       |       |       |       |       |       |  |  |  |
| Imports  | 4392                                  | 3480  | 4139  | 4910  | 5128  | 5143  | 5361  |  |  |  |
| > Of which Oil   | 980                                   | 569   | 813   | 1089  | 1131  | 1147  | 1054  |  |  |  |
| Balance on services and income   | 795                                   | 680   | 702   | 678   | 1487  | 1609  | 1764  |  |  |  |
| Of which interest payments   |                                       |       |       |       |       |       |       |  |  |  |
| Balance on transfers   | 226                                   | 216   | 182   | 121   | 142   | -92   | -211  |  |  |  |
| Of which official transfers (net)  | ļ                                     |       |       |       |       |       |       |  |  |  |
| Capital and financial account  | 743                                   | 373   | 799   | 1363  | 1185  | 525   | 607   |  |  |  |
| Capital account (net)  | -1.4                                  | -1.9  | -4.8  | -1.8  | -8.1  | -4.0  | -4.8  |  |  |  |
| Financial account (net)  | 744                                   | 375   | 804   | 1365  | 1193  | 529   | 612   |  |  |  |
| Official financing (Long and medium term loans)                                |                                       |       |       |       |       |       |       |  |  |  |
| Private capital  |                                       |       |       |       |       |       |       |  |  |  |
|  |                                       |       |       |       |       |       |       |  |  |  |
| Short term capital   |                                       |       |       |       |       | L     |       |  |  |  |
| Short term capital   |                                       |       |       |       |       |       |       |  |  |  |
| Short term capital     Errors and omissions                                    | 231                                   | 279   | 204   | 189   | -348  | 229   | 92    |  |  |  |

| Memorandum items (% of GDP unless otherwise indicated)        |       |      |       |       | :    |      |      |
|---|-------|------|-------|-------|------|------|------|
| Gross international reserves (months of imports.)             | 3.8   | 5.2  | 5.0   | 4.6   | 4.9  | 5.2  | 6.2  |
| Current balance, including official transfers                 | -10.1 | -7.4 | -10.4 | -13.8 | -7.3 | -6.3 | -5.5 |
| Total donor support   |       |      |       |       |      |      |      |
| Of which official transfers                                   |       |      |       |       |      |      |      |
| ➤ Of which EU aid (disbursed)                                 |       |      |       |       |      |      |      |
| External debt   |       | 14.4 | 13.4  | 14    | 14.4 |      |      |
| External debts service paid                                   |       | 2.9  | 4.2   | 3.6   | 3.7  | 3.6  | 4.5  |
| Gross international reserves in US\$ mio                      | 1742  | 2313 | 2602  | 2778  | 3046 | 3491 | 3919 |
| Gross international reserves in months of prospective imports |       |      |       |       |      |      |      |
| Export volume (% GDP.)  | 51.1  | 47.1 | 50.9  | 51.8  | 52.9 | 47.3 | 49.9 |
| Import volume (% GDP.)  | 65.3  | 57.5 | 63.1  | 65.6  | 66.0 | 61.6 | 62.3 |
| Terms of Trade (%change p.a.)                                 | -11.3 | 5.7  | -9.6  | -2.4  | 0.9  | 6.0  | 0.6  |

<sup>\*</sup>Using the Mauritius Exchange Rate Index (MERI) 2, which is a weighted average of bilateral exchange rates for the Mauritian rupee and is based on the currency distribution of merchandise trade and tourism earnings. For 2013, figure is as at October 2013

<sup>\*\* 2011</sup> figures include Global Business Companies (GBCs) figures.

Annex 2: Donor Matrix

| DONOR   | African<br>Develop<br>ment<br>Bank | Agence<br>Francaise de<br>Développem<br>ent | European<br>Union | UNDP | World Bank | EIB |
|---|------------------------------------|---|-------------------|------|------------|-----|
| Education, Higher Education, Science, Technology and Research | X                                  | X   | X*                | X    | х          |     |
| Health  | X                                  | X   | X*                | X    | X          |     |
| Agro-Industry and Fisheries                                   |                                    | Х   | Х                 | X    | X          | X   |
| Tourism   |                                    | X   |                   | X    | X          | X   |
| Public<br>Infrastructure<br>and Transport                     | X                                  | Х   | Х                 |      | Х          | X   |
| ICT   | X                                  | X   |                   | X    | X          |     |
| Social Security   |                                    |   | X*                | X    | X          |     |
| Social<br>Integration and<br>Empowerment                      | X                                  |   | Х                 | X    | Х          |     |
| Environment and NDU   |                                    | Х   | X                 | Х    |            |     |
| Energy  | Х                                  | Х   | X*                | X    | X          | X   |
| Industry and SME  |                                    | Х   |                   | X    | X          |     |
| Financial Sector  |                                    | X   | :                 |      |            |     |
| Public Finance<br>Management                                  | X                                  | Х   | X*                | X    |            |     |
| Public Sector   |                                    |   | X*                | X    | X          | -   |
| Private Sector  |                                    | X   |                   |      |            | X   |
| Water and<br>Sanitation                                       | X                                  | Х   | X                 | X    |            | X   |
| Urban Development   | X                                  |   | ort programmes    |      |            | X   |

<sup>\*</sup> Through EU general budget support programmes

#### **Annex 3 Sector Intervention Framework**

# Sector: Tertiary Education sector, Research and Innovation

**Overall Objective:** The overall objective of the EU response strategy under the 11<sup>th</sup> EDF will be to support the objective of the Republic of Mauritius to evolve from a Middle Income Country to a High Income Country.

**Specific objective**: The **specific objective** under 11<sup>th</sup> EDF will be to improve the relevance, quality and equity in tertiary education and research, thereby contributing to transforming the Republic of Mauritius into a knowledge-based and innovative society

| Expected Results  | Indicators   | Means of Verification  |
|---|--|--|
| TERTIARY EDUCATION  |  |  |
| a) Increase the relevance of tertiary education, namely through an adaptation of tertiary studies to the demands of the labour market, thereby enhancing the employability of graduates upon the completion of their studies. | from public funded institutions who are employed within the scope of their programme within two years of graduation  The base line will be | - Reports from public universities - Tracer studies carried out by Tertiary Education Institutions |

| b) Increase the equity in tertiary education, so that the vulnerable sections of the population, namely students coming from low income families get access to tertiary education.  | 3.Number of scholarships given to children from low income families for undergraduate studies.  The baseline for this indicator for 2013 is: 150  | - Reports from Government - Reports from Tertiary Education Institutions   |
|---|---|--|
| RESEARCH AND INNOVAT c) Stronger policy and institutional structure. The necessary policy and institutional framework to be put in place for the development of research and innovation, including funding.  Enhanced Research- Business Linkages | 4. Extent to which the National Innovation Programme is being operationalised, including the setting up of the National Research and Innovation Fund.  5. The number of Research proposal that obtain funding, including from private sector.  Baseline for 2014 is 31 - 31 | - Research proposals emanating from both public and private sectors - Reports from Mauritius Research Council and other bodies |

The results, indicators, and means of verification specified in the present annex may need to evolve to take into account changes during the implementing period.

 $<sup>^7</sup>$  Another possibility is the 'Percentage of students' completing tertiary education who come from the poorest 20% of the population segment'

# Annex 4 Indicative Time Table for Commitments (the amounts mentioned below are indicative)

| Sector  | Indicative allocation | 2014 | <u>2015</u> | 2016        | 2017          | <u>201</u><br><u>8</u> | 2019 | <u>2020</u> |
|---|-----------------------|------|-------------|-------------|---------------|------------------------|------|-------------|
| Tertiary Education,<br>including Research and<br>Innovation | €7.9 million          |      |             |             | € 7.9 million |                        |      |             |
|   |                       |      |             |             |               |                        |      |             |
| Technical Cooperation Facility                              | €2 million            |      |             | €2 million  |               |                        |      |             |
| Total   | € 9.9 million         |      |             | € 2 million | € 7.9 million |                        |      |             |