The Republic of Mauritius is an island country off the southeast coast of Africa, with a population of approximately 1.3 million people. Since its independence in 1968, Mauritius has developed tremendously from a low-income, agriculture-based economy to a middle-income diversified economy. The economy is principally based on tourism, textile manufacturing, sugar and financial services (FAO 2012). In recent years, information and communication technology, seafood, hospitality, property development, healthcare, renewable energy and education and training have emerged as important sectors, attracting substantial investment from both local and foreign investors.

The government has steered a programme aimed at shifting from previous development patterns which depended largely on low cost, low-technology, low-skill products and an unlimited supply of adaptable labour, towards an economy focusing on high technology, finished goods, high skill levels and services. The economy of Mauritius has made significant steps in adapting to the new global knowledge economy by promoting the development of a more diversified production system using high-technology inputs and building a knowledge-based workforce (Zafar 2011, Bailey et al. 2011).

Mauritius had an estimated total GDP of $19.28 billion in 2011 (CIA 2012), with a GDP per capita of over $7,488. It is one of the world’s top luxury tourism destinations and has a wide range of natural attractions. Mauritius received the world leading island destination award in 2012 (Acanchi 2012). According to the UNDP 2009 report, social development indicators in the Mauritius economy display a relatively high level of equality, balance and equitable growth impact across the different social strata. With the highest human development index in sub-Saharan Africa, the economy shows a relatively good distribution of wealth, especially when compared to other African countries such as South Africa and Botswana (which both have high GDPs but lower HDIs).

Mauritius is a multi-party democratic republic. The president is the head of state, and the prime minister is the head of government. The prime minister is assisted by a council of ministers (US Department of State 2012).
Higher education landscape

Higher education is provided by eleven public institutions (of which two are universities) and 55 private universities. The public institutions that will be analysed in this study are the University of Mauritius and the University of Technology.

Brief historical overview of higher education

Tertiary education started in 1924 with the College of Agriculture, and has since developed into a diversified system composed of public, private, regional and international institutions catering for a wide range of courses, programmes, diplomas and degrees (Mohamedbhai 2006). As in most African countries, it was not until after independence that the higher education system really became a national priority.

Tertiary education in Mauritius encompasses a wide range of institutions with diverse characteristics. Some institutions provide all levels of tertiary education in a range of disciplines, while others focus their activities on only one or two areas at certain levels. A number of the institutions providing tertiary education are international institutions that offer education via distance methods (Mohamedbhai 2006). Within the public sector, five key institutions are evident: the University of Mauritius (UoM), the University of Technology (UTM), the Mauritius Institute of Education (MIE), the Mahatma Gandhi Institute (MGI) and the Mauritius College of the Air (MCA). There are other higher education providers which are not under the umbrella of the Tertiary Education Commission. These include the Swami Dayanand Institute of Management, the Institut Superieur de Technologie, the Industrial and Vocational Training Board, the Mauritius Institute of Health, the School of Nursing and the Council of Legal Education. There is also an Industrial and Vocational Training Board that provides mainly vocational courses.

The University of Mauritius was established in 1965 and initially consisted of three schools: agriculture, administration and industrial technology. However, in recent years the UoM has expanded: it now comprises five faculties and is the largest provider of higher education in Mauritius, with a strong research focus.

Two state institutions, the Mauritius Institute of Public Administration and Management (MIPAM) and the State Information Training Centre (SITRAC Ltd), were merged to form the Mauritius University of Technology (UTM), which opened its doors to students in September 2001. This university’s vision is ‘to become a University of national, regional and international renown, providing multi-level quality tertiary education and training including continuing professional education geared towards sustained capacity-building for increasingly technology-driven and enterprise-based developments’ (University of Technology, Mauritius 2012).

National higher education policy context

In spite of the impressive socio-economic developments experienced by most sectors in Mauritius, education in general seems to have lagged behind. In a recent World Economic Forum report (WEF 2012), it was observed that ‘educational enrolment rates remain somewhat low, especially at the university level; education spending is low; and the educational system gets mediocre marks for quality’. This supports recent calls on government and other stakeholders for education (and higher education in particular) to receive new impetus (African Development Bank 2009). The ADB further indicates in its report that, while there is a need to improve access to higher education and its skills base, the sector will have to forge closer ties with the world of business and industry in order for the country to make the transition to a knowledge hub for the region.

Higher education in Mauritius is governed by the Tertiary Education Commission (TEC), which was created in 1988 as an independent body under the Ministry of Education. The commission’s main responsibilities at that time were to develop and co-ordinate post-secondary education in Mauritius and to allocate government funds to the institutions under its jurisdiction. There were no private tertiary institutions at that time and no provision was made for private higher education institutions (The Ministry of Education and Scientific Research 2004). The TEC has since evolved and the accreditation of both public and private tertiary institutions in Mauritius now falls within its mandate (Mohamedbhai 2006). The TEC has been enshrined in a five-year strategic plan with the
main vision to ‘make Mauritius the intelligent Island of the region in the Global Village’, and a clear mission to ‘position Mauritius in the region as a world class knowledge hub and the gateway for post-secondary education’ (TEC 2007:5).

The main responsibilities of the TEC are to:

- register and accredit private universities and other post-secondary institutions;
- recognise and determine the equivalence of academic qualifications in post-secondary institutions inside and outside Mauritius; and
- promote and maintain high-quality standards in post-secondary education institutions through quality assurance and accreditation mechanisms.

These responsibilities are linked to specific goals, including to:

- provide the environment necessary to create a regional knowledge hub and a centre for higher learning and excellence in Mauritius;
- increase access to post-secondary education through the establishment of open and distance learning;
- align post-secondary education with international standards and quality;
- promote regional and international collaboration and co-operation through student diversity and relationships with institutions abroad; and
- advocate, nurture and promote principles of good governance, transparency and accountability in the post-secondary education system.

In 2001 the Mauritius Qualifications Authority was established. Its function is to evaluate and recognise qualifications awarded by training institutions running technical schools and vocational courses.

**Size and shape of higher education**

Although Mauritius has more private than publicly funded universities, the percentage of students enrolled at private universities is lower than that of students enrolled at public institutions. This finding is echoed by previous studies (Mohadeb 2010), which revealed that the ‘five higher education institutions taken together (UoM, Mauritius Institute of Education, Mahatma Gandhi Institute, Mauritius College of the Air and UTM), accounted for 42 per cent of the higher education student population with 14 036 students and accounted for 91 per cent of the enrolment in the public institutions.’ According to data provided by the Ministry of Education and Human Resources, 33.6 per cent of the students in Mauritius are currently studying at international universities.

<table>
<thead>
<tr>
<th>Type of higher education institution</th>
<th>Number of institutions</th>
<th>Percentage of students enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publicly-funded tertiary education institutions (including the two universities)</td>
<td>11</td>
<td>49.1</td>
</tr>
<tr>
<td>Publicly-funded technical universities</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Privately-funded accredited universities or colleges</td>
<td>55</td>
<td>17.3</td>
</tr>
<tr>
<td>Distance education</td>
<td>N/A</td>
<td>9</td>
</tr>
<tr>
<td>Overseas</td>
<td>N/A</td>
<td>33.6</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

*Sources: SARUA MoE questionnaires (2011)*

Other studies on the size, shape and participation of higher education in Mauritius identified similar trends: for example, that nearly half of all students in tertiary education (46.5 per cent) were in public higher education institutions, while 53.5 per cent were in private and foreign institutions. The UoM is reported to be the largest supplier of tertiary education locally, accounting for 22.2 per cent of total higher education enrolment, as opposed to about 5 per cent for the UTM.
12 per cent for the Mauritius Institute of Education, 2 per cent for the Mahatma Gandhi Institute and 1.2 per cent for the Mauritius College of the Air (Mohadeb 2010).

Demand for higher education

Tertiary education is becoming increasingly important for the growing economy of Mauritius. In 2010, 78 per cent of the students who wrote their high school exams passed and were ready to go to university (Mauritius examination syndicate n.d.). There were 11 200 students who applied for undergraduate studies: 71.4 per cent applied to the University of Mauritius and 28.6 per cent applied to the University of Technology. Just under 50 per cent of the students who applied to UoM met the criteria of admission, but could not be accepted due to infrastructural constraints. 31 per cent of the students who applied to UTM were admitted as first-year students. A larger proportion (69 per cent) of students who applied for postgraduate studies at UoM and UTM were admitted. The University of Mauritius admitted 57.4 per cent of the students who had applied. Increasing access is one of the goals stated in the UoM Strategic Plan 2006-2015.

Student profile

The data provided by the two universities indicated 91.6 per cent of the students are contact students. The University of Technology does not offer distance education, therefore the 8.4 per cent of the students who study via distance are all enrolled at UoM. The UoM did not present data on the number of students per nationality, but at UTM it was reported that 99.7 per cent of the students were national citizens, while 0.08 per cent came from the SADC region and 0.19 per cent came from countries outside the SADC region. In the 2008 SARUA study, UTM only had part-time students, but there are now 2 274 full-time students (who account for 48.2 per cent of the total number of students enrolled) at UTM. A slightly higher percentage of female students (54 per cent) than male students are enrolled at the public universities in Mauritius.

Enrolment patterns

In the initial SARUA profiling study there were 9 574 students enrolled at both universities. Three years later, the present study has shown that the student numbers have increased to about 14 883 students (a 54.3 per cent student increase rate). The largest proportions of students (40.5 per cent) are enrolled for degrees, diplomas and certificates in business, management and law, followed by science, engineering and technology (with 29 per cent of the student enrolment). There are more female than male students in most faculties, except in the field of science, engineering and technology (where only 33.3 per cent of the students enrolled are women). It was reported that there are 159 students enrolled for doctoral studies, with 58.5 per cent of them studying science, engineering and technology, and only 8.2 per cent studying business, management and law. Enrolment trends by gender are shown in Figure 1 below.

Staff profile

In the academic year 2009/2010, a total of 312 academic and research staff were employed at the two public universities. Of these, 208 were national citizens of Mauritius and 8 were from countries outside the SADC region. None of the staff at either of the two public universities in Mauritius were reported to have come from elsewhere in the SADC region. The University of Mauritius could not provide information on the gender distribution of its staff. The University of Technology reported having more female than male administrative staff members, although male academics continue to outnumber female academics. The ratio of academic and research staff (312) to students (14 883) was about 1:48. According to the data provided, most of the academic and research staff in Mauritius hold a doctoral degree.

---

14 www.uom.ac.mu/aboutus/StrategicPlan/index.htm
Table 2: Number of staff members by nationality and type of post

<table>
<thead>
<tr>
<th>Staffing categories</th>
<th>Nationality</th>
<th>Number of staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic and research staff</td>
<td>National citizens</td>
<td>304</td>
</tr>
<tr>
<td></td>
<td>SADC citizens</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Other international staff</td>
<td>8</td>
</tr>
<tr>
<td>Management and administrative staff</td>
<td>National citizens</td>
<td>813</td>
</tr>
<tr>
<td></td>
<td>SADC citizens</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Other international staff</td>
<td>7</td>
</tr>
</tbody>
</table>

Sources: SARUA university questionnaires (2011)

The questionnaire responses point to a large shortage of academic staff. The University of Mauritius has twice as many part-timers as permanent staff, a practice that is reported to be less costly for the university. This is especially true for the faculty of Law and Management. There is also a need for more staff from the SADC region, as this could enhance the regional position of the country and facilitate collaboration between institutions. The increasing number of students enrolling each year exerts mounting pressure on the already limited resources.

National higher education outputs and alignment with policy imperatives

Graduate patterns

In all faculties and major fields of study, the majority of qualifications are awarded at the undergraduate level. The fields of agriculture and science, engineering and technology were the only fields that had doctoral graduates. 54 per cent of the students who obtained their undergraduate degrees are women and there is no great gender discrepancy. However, at the doctoral level gender disparities were more apparent with male students being awarded 9 of the 11 doctoral degrees (88.8 per cent).

Quality assurance

The Tertiary Education Commission has a Quality Assurance and Accreditation Division (QAAD). Established in 1997, its main objective at the time was to ensure the quality of public universities. In 2005 the TEC Act stated that the QAAD is now responsible for ensuring quality of post-secondary education and determining the recognition and equivalence of post-secondary qualifications. The objective is to bring post-secondary education provision in line with international standards and quality (Tertiary Education Commission 2011).
The University of Mauritius has a quality assurance office which was created in 2002 to align with the university’s 1999–2004 strategic plan (Bailey et al. 2011). This office is committed to continuous improvement and quality management to ensure relevance, quality of teaching and learning, quality of research and good practice at institutional level. UoM regularly conducts internal evaluation of academic programmes. Institutional data collected from the UoM indicates that there are no infrastructure problems. There are enough science laboratories, which are in good condition, and student accommodation is not a problem at UoM. This response from the UoM could indicate significant progress in increasing access when compared to previous research (ADB 2009, Government of Mauritius 2008, Kotecha 2008), which indicated access as a major issue in Mauritius higher education. This was also articulated in policy documents such as the 2008/2009 government budget speech, which allocates resources to scale up infrastructure to increase access and enrolments.

At the University of Technology internal quality assurance is conducted where needed. Where and when a need is identified, an in-depth quality audit is carried out to identify and correct any shortcomings. Quality assurance is conducted across all areas of the university, including teaching activities, research activities and student performance.

Research output

The TEC provided a list of research conducted by tertiary education institutes in 2010. The research output covers many themes, including access to tertiary education, distance education, planning and development of tertiary education, and tertiary education and the labour market (Mohadeb 2010). Most of the research was in the form of peer-reviewed journals. Both the UoM and UTM report being committed to expanding research.

<table>
<thead>
<tr>
<th>Table 3: Research output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of research output</td>
</tr>
<tr>
<td>Peer-reviewed journal articles</td>
</tr>
<tr>
<td>Peer-reviewed books</td>
</tr>
<tr>
<td>Peer-reviewed book chapters</td>
</tr>
<tr>
<td>Patents</td>
</tr>
<tr>
<td>University-funded research projects</td>
</tr>
<tr>
<td>Externally-funded research projects</td>
</tr>
<tr>
<td>Conference papers</td>
</tr>
</tbody>
</table>

Sources: SARUA university questionnaires (2011)

Recent developments and debates in higher education

The government of Mauritius plans to transform the country into a regional knowledge hub and this is an important driver for developments in the higher education sector. It has been reported that Mauritius aims to attract as many as 100 000 foreign students by 2020 and recruitment efforts have already begun in Tanzania and India. Plans include the expansion of the two existing public universities and setting up additional campuses in various parts of the country. A medical university has also been established (Gouges 2011). Mauritius has been actively seeking international partnerships to build the tertiary education sector. The Indian Institute of Technology (IIT) plans to open a branch campus in Mauritius in 2013. The focus of the branch campus will be on high-level engineering courses (Gouges 2011).

Regionalisation

Regional collaboration among universities is increasingly recognised as a vital tool to enhance higher education development, quality assurance and knowledge output. Regionalisation as a concept is manifested in several ways. These include academic mobility of staff and students at regional level, the mutual recognition of academic qualifications in post-secondary education, and establishing a common higher education area in the region.
Mauritius places a great deal of value on regional collaboration as well as the internationalisation of its higher education sector. In its questionnaire response, the Ministry of Education and Human Resources noted that it has taken the SADC Protocol into consideration when drafting its strategic plan for 2008–2012.

As shown in Table 1, just over 33 per cent of students in Mauritius are enrolled for study at universities in other countries. In contrast, only 0.08% of students in Mauritius are from other SADC countries. The two public universities do not currently have any staff from other SADC countries, and only 2.6 per cent of the current staff complement come from countries outside of SADC. Thus, while Mauritius is actively pursuing internationalisation in various forms, there is the potential to attract more staff and students from the region.

Conclusions

Building on the previous SARUA study, this study has provided empirical evidence highlighting the extent of higher education demand in Mauritius, as well as the national focus on building the tertiary education sector as a key strategy for ensuring the competitiveness of Mauritius in the global knowledge economy. Although enrolments at the two public universities have increased substantially in the past three years, the data indicate that although more than half of the students who leave secondary education meet the admission requirements, they fail to gain access to higher education due to the limited number of spaces currently available. For the country to continue to move towards a knowledge economy, there is a need to increase access to education and also to ensure that postgraduates are sustained in the system. It is promising to note that the government of Mauritius has prioritised tertiary education in its development plans and is explicitly seeking to broaden access.

The process of internationalisation of higher education is somewhat unbalanced, with a significant number of Mauritian students studying abroad, and very few students from other countries studying in Mauritius. Less than two per cent of all the students enrolled in the two public universities are from outside the country (including from the SADC region, where the discourse on regional collaboration continues to gain currency). With a relatively high percentage of academic staff holding doctoral degrees, there is a need for incentives to increase and improve the quality of research output and the number of masters and doctoral graduates produced annually. The number of research publications has been increasing, although there is room for improvement. With its plans to build more universities and improve the quality of higher education, Mauritius continues to strive towards the provision of world class education.