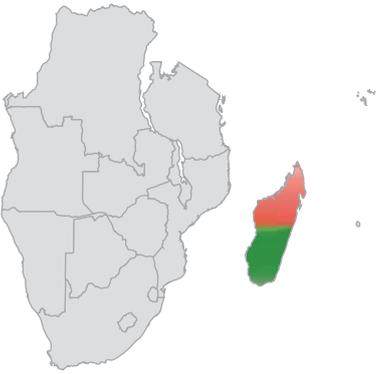


6 Madagascar

Compiled by Beate Gadinger

COUNTRY CONTEXT STATISTICS	
	<p>Population: 21.3 million (2011) GDP per capita: US\$422 (2010) Human development index: 0.480 Unemployment: 50% (2004 est.) Key economic sectors: mining, agriculture, industry, tourism Principal exports: coffee, vanilla, shellfish, sugar, cotton cloth, clothing, chromite, petroleum products HIV and AIDS prevalence: 0.2% (2009 est.) Gross primary enrolment ratio: 149% (2010) Gross secondary enrolment ratio: 31% (2009) Gross tertiary enrolment ratio: 4% (2010)</p>
<small>Country context data were obtained from a variety of sources: CIA (2012), UNAIDS (2011), UNDP (2011), UNESCO (2011).</small>	

Madagascar is a former French colony which, like most other French African colonies, gained independence in 1960. The population of the island is predominantly of mixed Asian and African origin with around 18 ethnic or cultural groups. The major language is Malagasy, while French is widely used as the language of education. English is increasingly being spoken in some pockets of society and has now been introduced in primary schools.

A democratic government was established in 1960, modelled on the French political system. Since 1972, when the first democratically elected president's rule ended, political transitions in Madagascar have tended to be associated with disputes and popular unrest. This included a coup d'état in 2009, which was strongly condemned by the international community and led to isolation of the country. The US and Norway formally imposed sanctions on Madagascar, while the EU and other bilateral donors suspended aid (Maunganidze 2009). Under the auspices of SADC and the African Union a new constitution was approved in December 2010 and an interim prime minister was elected (Ploch and Cook 2012). A formal election date has been set for May 2013 (SAPA 2012).

Political instability, high population growth and mismanagement of resources have impeded economic activity in Madagascar in recent years. Due to imposed austerity measures, GDP growth stood at a meagre 0.6 per cent in 2011 (African Economic Outlook 2012). It has been argued that Madagascar will only be able to meet one of the eight Millennium Development Goals (MDGs) – reducing the HIV prevalence rate of the country. Infant and child mortality rates remain high at 61 and 92.8 per 1 000 respectively.

Higher education landscape

Brief historical overview of higher education

As reported in SARUA's previous profiling study (Kotecha 2008), the Malagasy education system is divided into cycles. The first two cycles refer to primary and secondary education, and the third cycle is tertiary education.

Most aspects of the schooling and higher education system were adopted from the French system. At independence, Madagascar had only one university, the University of Madagascar, which in 1961 was renamed the University of Antananarivo. In the period of socialism (from 1976 to 1990) five university centres were established, one in each of the other provinces, to increase access to higher education. These university centres (Antsiranana, Fianarantsoa, Toamasina, Toliara and Mahajanga) gained full university status in 1988 (US Department of the Army n.d.), making a total of six public universities – one in each of the six provinces¹¹.

In 1995 a policy of accreditation was established by the Ministry of Education. This policy provided for the establishment of private higher education institutions in Madagascar. The policy required that private education institutions comply with certain criteria in the areas of infrastructure and human resources before their curricula could be approved by the Ministry of Education. The accreditation process was suspended in 2003, but private higher education institutions still had to be approved by the ministry. Based on 2009 data from the Ministry of Education, 21 private higher education institutions had been provided with accredited status, while 47 private institutions had permission to operate without accreditation (Rasoanampoizina 2011). Private higher education provides access for most of the students who do not get admission into public higher education institutions. Private higher education also specialises in specific professional courses for those interested in more professional training. There are two types of private institutions operating in Madagascar: approved institutions of higher education and institutions of higher vocational training (Ministère des Affaires Etrangères et Européennes 2009).

In 1992, the Malagasy government established a distance learning centre, the National Centre of Distance Education in Madagascar (CNTEMAD). The centre focused on subjects and training fields in high demand at the University of Antananarivo. Major programmes offered were in the fields of management, business and computer sciences. The expansion of education (including higher education) in Madagascar has had a positive effect on the country. The general literacy level in the country also rose significantly to about 80 per cent in the 1990s according to a UNICEF report available online¹².

Besides the public and private higher education institutions, there are eleven research centres covering different fields of study. These include centres focusing on environmental and rural development, health and medicinal centres and information technology research centres (Ministère des Affaires Etrangères et Européennes 2009). The degree system in Madagascar closely follows that of the French with the *Licence*, *Maitrise*, *Diplome d'Etude Approfondie* (DEA) and *Doctoral*.

National higher education policy context

Since independence a number of policies have shaped access to higher education in Madagascar, and have guided its quality and relevance. One of the key documents has been the Master Plan of 1997. The main aim of this plan was to improve the quality of higher education and to meet international standards of expanding and diversifying the higher education system so as to foster the sustainable development of the nation (Master Plan 1997). The principles upon which the plan was established include:

- diversification of the system;
- improvement of quality in higher education training at all levels;
- advancement of academic output through research;

¹¹ The French system of six provinces has since been superseded by 22 administrative regions.

¹² See also US Department of the Army (n.d.)

- national, regional and local integration of the higher education system; and
- establishment and enhancement of a system of evaluation and control.

Since then a number of other relevant policy documents have informed the growth of higher education in Madagascar:

- Madagascar Naturally 2004
- Madagascar Action Plan 2007
- Strategic Plan for Education 2007–2009.

While these documents focus on the transformation of the economy towards sustainable development, the role of higher education has been clearly established. A key strategy for achieving national development is a focus on the improvement of the higher education system with a view to increasing knowledge production and strengthening its application to development. Further information outlining the higher education sector and its composition can be found in the document provided by the Ministry of Foreign and European Affairs at the French Embassy in Madagascar.

The Malagasy government supports the idea of public higher education institutions gaining financial autonomy by seeking private funding, as well as the creation of more private institutions as the state has reached its capacity with respect to financial assistance for public higher education (World Bank 2010).

Universities that participated in the SARUA study indicated that the national quality assurance initiative is a fairly recent development and that quality assurance guidelines are either not yet in use, or are still in the design and ratification stages.

Size and shape of higher education

In this section an overview of the current state of higher education in Madagascar is presented, drawing on the data collected from the five universities that participated in SARUA's research (2008 and 2011).

Student profile and enrolment patterns

Four of the six public higher education institutions responded to the higher education institutional questionnaire in the current study. Data were also available for one additional university from SARUA's previous work. The document released by the Ministry of Education in 2009 states that Madagascar has 55 private institutions with more or less 14 500 students enrolled (Ministère des Affaires Etrangères et Européennes 2009). This accounts for about 27 per cent of the current total enrolments. The previous SARUA study, which was concluded in 2005/2006, indicated that there were 21 private institutions in Madagascar, indicating that private higher education provision (in terms of number of institutions) has more or less doubled in four years. In the 2008 SARUA study, private institution enrolments accounted for 7 per cent of the total student enrolment compared with the recorded enrolment of 78 per cent in the six public universities' (Kotecha 2008). Over the last four years there has thus also been a significant increase (20 per cent) in the proportion of enrolments in private institutions.

Based on the available data, the public higher education system in Madagascar currently enrolls more than 45 000 students, with the vast majority being Malagasy citizens. Almost all the students are reported to be enrolled for full-time contact-based study. The demand for higher education in Madagascar outstrips supply. For the 2010 academic year approximately 50 819 applications were received for undergraduate study and a total of 31 328 prospective students could not be accommodated at the public universities. The four universities that submitted data for the 2009/2010 academic year reported that a total of 16 474 new first-year undergraduate students were admitted.

With respect to the gender of students in Malagasy public higher education, the data available show that 58.1 per cent of the student body are women. However, there are important gender differences within each major field of study (See Figure 1). The data show that much larger numbers

of male students are enrolled in science, engineering and technology as well as business, management and law, with relatively larger proportions of female students being enrolled in the humanities and social sciences. Across both genders, the largest number of enrolments is found in the business, management and law fields, followed by the humanities and social sciences.

The vast majority of students (69.2 per cent) are enrolled in undergraduate programmes, with 22.5 per cent enrolled at postgraduate level below masters, 7.6 per cent for masters degrees, and only 0.3 per cent for doctoral studies. The largest number of doctoral enrolments (64) is seen in science, engineering and technology.

Staff profile

Available data indicate that there are approximately 2 414 academic and research staff employed at public universities and 2 010 management and administrative staff. For both academic and research staff and management and administrative staff, the proportion of male appointments is much higher than female. A total of 62.9 per cent of academic and research staff members are male and 62.3 per cent of management and administrative staff members are male. These gender disparities are further compounded by the fact that 62.9 per cent of the female academic and research members are employed on temporary contracts compared to 53.1 per cent of male academic and research staff. There are more male staff members employed within each field of study, with the greatest disparity being evident for science, engineering and technology.

On a more positive note, relatively large proportions of academic and research staff are reported to hold doctoral qualifications. This is particularly the case for science, engineering and technology where it was reported that there are a total of 302 academic and research staff members with doctorates. No information was available about research output, so it was not possible to assess whether the staff members with doctoral qualifications are active in research.

Areas for expansion and shortages identified

A key issue in the higher education sector in Madagascar is the age of academics. It has been reported that by 2015 more than 50 per cent of the staff in the higher education sector will be reaching retirement age. With the limited number of students able to access postgraduate study and the low throughput rate at doctoral level, the country faces a huge challenge in replacing the staff who are retiring (Ministère des Affaires Etrangères et Européennes 2009).

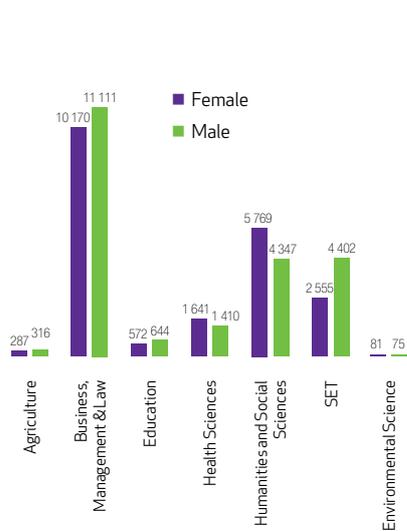
One option may be to increase access to more diversified higher education institutions and to provide students with better learning environments through the expansion of university facilities and improved access to electronic equipment and resources. The Madagascar Action Plan and Poverty Reduction Strategic Paper makes reference to the contribution that higher education could make. However, for higher education to play a meaningful role in development there is a need to expand access substantially, and to ensure that the academic workforce grows.

National higher education outputs

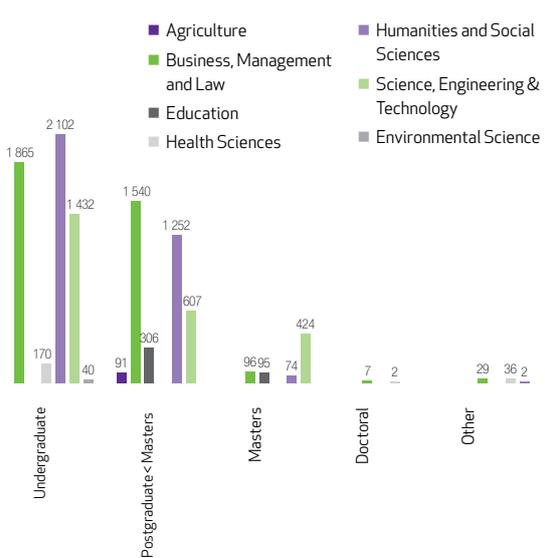
Graduate patterns

Figure 2 presents the number of graduates per field of study. As expected, given the enrolment trends presented above, the majority of qualifications were awarded in the fields of business, management and law, followed by humanities and social sciences, and then science, engineering and technology. Just over half of the qualifications awarded (55.2 per cent) were at undergraduate level, 37.3 per cent at postgraduate level lower than masters, 6.8 per cent at the masters degree level, and only 0.1 per cent – a total of nine qualifications – at doctoral level.

In total, female graduates accounted for 46.4 per cent of the number of graduates at all levels of study. When considered at each level of study, the data show that the proportion of graduates is roughly equal across genders at the undergraduate and postgraduate up to masters degree levels. However, for masters degrees, only 35 per cent of the qualifications were awarded to female students. Interestingly, doctoral qualifications were evenly shared across genders.

Figure 1: Enrolment by gender and major field of study

Sources: SARUA university questionnaires (2008 and 2011)

Figure 2: Graduates by major field of study

Sources: SARUA university questionnaires (2008 and 2011)

Quality assurance, student support and infrastructure

Attention to quality assurance is a relatively new development in the higher education landscape in Madagascar. There is thus no statutory body tasked with the responsibility of ensuring quality and standards in the provision of higher education. While different institutions have expressed differing views in the establishment of a quality assuring body (as reflected in the questionnaires), limited financial support from government and other stakeholders presents the foremost challenge to assuring quality in higher education. A comment by one of the participating universities is that external evaluation by students of the educational system in Madagascar is not yet seen as normal practice amongst the Madagascan universities (Higher Education Institutional Questionnaire 2012).

Some universities have demonstrated significant efforts to improve and modernise their teaching, learning and research practices, as well as putting in place the necessary support structures to promote academic research. However, the available financial resources are reported to be insufficient. Logistics infrastructure such as classrooms, science laboratories, language laboratories, computer rooms, libraries and computers are in short supply.

Government subsidy grants have increased since the previous study was concluded. Public universities in Madagascar are now receiving approximately 88 per cent of their funds from the government. The ministry document indicated that universities mainly rely on the government to provide them with the bulk of their funds (Ministère des Affaires Etrangères et Européennes 2009). Student fees only account for 10 per cent of the available funds.

Research output

In the data provided by participating universities, three indicated that they perceive themselves to be research-intensive universities, with a research strategy in place. All of the participating universities indicated that they have a unit with at least one person responsible for research. Three of the universities also reported that they had a research plan or strategy in place.

It was not possible to verify this further by considering actual research output as no data were provided. Information on the current state of the research output was being compiled by the Malagasy Conference Publication Promotion Service at the time of the survey, and was thus not available for this study.

Regionalisation

The questionnaire received from the ministry was incomplete, making it difficult to report on Madagascar's current commitment to higher education regionalisation. However, this section will draw on the document released by the French Embassy in Madagascar to provide some indication of regional linkages (although these are not specifically focused on the SADC region) (Ministère des Affaires Etrangères et Européennes 2009).

The embassy document on higher education indicates that most of Madagascar's efforts at collaboration take place with France and other francophone countries. Collaborative projects focus most commonly on the needs of Madagascar for financial, research and technical assistance. Approximately 500 students received visas to study in France during the course of 2009. Collaboration between France and Madagascar has three goals:

- to restructure doctoral studies in Madagascar;
- to strengthen research efforts; and
- to provide administrative capacity within the institutions as well as within the ministry (Ministère des Affaires Etrangères et Européennes 2009).

A regional integration project is currently in place, which includes 92 non-European partners from across the world, all with links to the University of Antananarivo. These include three African partners (Comoros, Mozambique and Senegal) and three Indian Ocean partners (including the islands of Reunion and Mauritius) (Ministère des Affaires Etrangères et Européennes 2009).

Collaboration within SADC still faces considerable challenges, including the obvious challenge of communication. The language barrier between Madagascar and the majority English-speaking SADC member countries remains a major challenge, while geographic distance and political differences could account for the limited interaction with other French-speaking countries in SADC (such as the DRC) (Hahn 2004). The 2008 SARUA profiling study also identifies issues around educational frameworks and policies in the higher education sector, which could account for the poor regional collaboration between Madagascar and other countries and higher education systems (Kotecha 2008). The current political situation in Madagascar has also impacted on practices promoting regionalisation, as many collaborative efforts are hanging in the balance pending the outcome of the planned elections in 2013 (Maunganidze 2009).

Conclusions

As is the case across the SADC region, public higher education in Madagascar remains significantly dependent on state funding and there are thus tensions with respect to institutional autonomy from the state. Political instability also significantly impacts on higher education provision and quality due to this dependence on the state.

Infrastructural development remains a major challenge to higher education access, provisioning and quality. Human and physical resources will be required to position higher education more strongly in its role of human capital formation and to support national development through knowledge production. The data revealed an ageing academic staff complement, many of whom will soon retire. Urgent efforts will thus be needed to replace these established academics, but it is unclear where the next generation of academics will come from given the very low throughput at doctoral level. The gender disparities at all levels also give cause for concern.

Despite the internal political and economic challenges facing Madagascar and its higher education system, this island state's geographic isolation and the inherent challenges to regional collaboration (different language and educational structures), higher education in Madagascar has been identified as a major agent in national development. This positions the sector positively, and suggests that potentially the development of higher education in Madagascar will, in one way or the other, impact on regional development. SARUA's work seeks to support this by forging avenues that enhance and sustain regional collaboration between higher education institutions in Madagascar and other parts of the region.