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Executive summary

As Myanmar shifts away from agriculture and towards a more services-based economy, its graduates should be integral to the transition. But instead they find themselves frequently unemployable, products of an ineffective and underfunded system. Three times as many medical graduates who qualify each year are thought to be unemployed¹², and this pattern repeats itself across sectors.

Responsibility for the sector lies with 13 government ministries, each of which is at liberty to follow its own agenda. Teaching is by rote, with little opportunity for students to gain either practical skills or the capacity for critical thinking. Research is considered extremely low priority by the government and, until recently, has been actively discouraged—only around US\$25,000 was spent on research in 2009-10.³⁴ Libraries and laboratories are under-resourced, and employers are unable to shape courses to meet the requirements of industry. Decisions on everything from budgets to course content are made centrally, with the constitution prohibiting greater autonomy for individual institutions.

Just about 10% of the population pursue higher education,⁵ the majority of them women, as Burmese men often take earlier employment rather than continue to study.⁶ However, a preference for men in professional roles still prevails, leaving female graduates at a further disadvantage in finding employment.

Although universities are spread evenly throughout the country, this reflects a desire to prevent high concentrations of students in one place rather than equity of access. Building new institutions, rather than supporting existing ones, has long been government habit.

Since the onset of democracy in Myanmar in 2011, education has been central to the country's political reform process. Speaking to parliament that year, the president, Thein Sein, pledged to improve teaching, nurture talent and increase engagement between educational institutions and the private sector. The largest development initiative currently under way in the country, the Comprehensive Education Sector Review, aims to provide a full assessment of the state of education. However, given that a national election looms in 2015, politics threatens to hinder rather than hasten reform, as political parties compete to position themselves as the saviour of the sector, at the expense of genuine progress.

As Myanmar opens up to international engagement, the opportunity for an overhaul of the system is greater than ever before. Higher education reform is both a government priority and a political football. But, as Myanmar changes direction, its students are a resource it cannot afford to waste.



Higher education environment overview

Social, demographic and economic background

Myanmar's population is comparable to that of its neighbour, Thailand, at around 62m⁷, with a participation rate of 67% in the labour force.⁸

The country is a youthful one, with 26.6% of its population under the age of 15.⁹ Although 50% of the workforce is still employed in agriculture¹⁰, tourism, construction, manufacturing and telecommunications are growing and look set to become Myanmar's principal employers.

Myanmar is both highly ethnically diverse and rigidly discriminatory against ethnic minorities. Although Burmans comprise just 68% of the population, and almost one-third of people in Myanmar do not have Burmese as their mother tongue, all teaching is carried out in Burmese and English. Many people are therefore automatically excluded from participation.

Institutions, policy and governance

Higher education is strikingly centralised, with curricula, syllabi and even textbooks determined by government committees. Budgets and funding are also centrally agreed. However, this lack of autonomy does not equate to consistency, as responsibility for higher education is spread between 13 different ministries, each of which has separate priorities and defines the sector in a different way.

Most institutions fall under the remit of the Ministry of Education (40%), the Ministry of Health (9%) or the Ministry of Science and Technology (37%), while ten further ministries are responsible for between one and five institutions each.¹¹

Three overarching bodies have general oversight of the sector. The National Education Committee (NEC) co-ordinates education for the entire country, including higher education. Beneath the NEC sit the Universities' Central Council, which is responsible for the management of higher education institutions, including in the areas of policy, funding and enrolment quotas; and the Council of Academic Boards (CUAB), which oversees academic matters, university standards, course content, quality control and admissions.

Two further government bodies have recently been established to take the sector forward. The Comprehensive Education Sector Review (CESR) and the Education Promotion Implementation Committee (EPIC) have been created to draft new policy and legislation, and reform higher education in Myanmar.

Under the University Education Law of 1973, there is an enforced separation between arts and science universities and technical institutes. This law also split responsibility for higher education between different ministries. Before it came into force, management and provision of higher education was undertaken by the education ministry.



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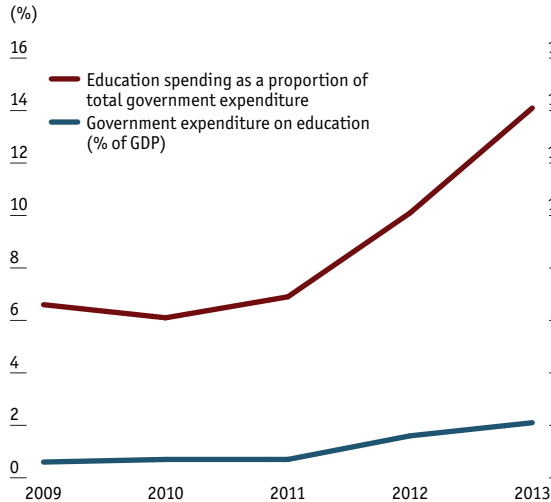
There is currently little scope to escape the educational parameters laid down by the state, as private provision of higher education is outlawed under the Private Tuition Class Law of 1984.¹² However, the law is not strictly enforced and small private institutions circumvent the legislation by registering as service providers.

There is little objective quality assurance of higher education, as responsibility for evaluation lies with the organisations accountable for managing the sector as a whole, and with the individual institutions themselves. Quality-improvement policies, qualification frameworks, university standards and student selection are managed by the NEC and CUAB, while quality within institutions is monitored by internal committees. There are very little reliable data on learning outcomes as well as no regular assessment of students.

Allocation of resources

Government spending on education has tripled in the past two years.¹³ In the budget for fiscal year 2013/14 (April-March), it was equivalent to 14.1% of total government expenditure and 2.1% of GDP.¹⁴ Despite this significant increase, the government's contribution remains low by international standards—Vietnam, for example, spends 20% of its budget on education¹⁵, while the average figure for the Association of South-East Asian Nations (ASEAN) is 3.3% of GDP.

Total expenditure on education



Source: World Bank and DFAT, "Myanmar education sector public expenditure review", 2014.

The funding the government does provide for education is applied ineffectively, with almost a complete lack of strategic planning. The impact of higher education is rarely measured, and budgets are based on neither performance targets nor programme needs. Without the data to measure improvements, ministries compete with each other through the construction of new universities rather than improving existing institutions, despite the fact that there are too few teachers adequately to staff the sector as it is; between 1988 and 2012 the number of institutions leapt from 32 to 163.¹⁶

The education ministry receives 47% of the total budget for higher education, and is responsible for 62% of regular students and

100% of distance learners. In addition, the Ministry of Defence receives 2.7% of the budget, while the science and technology ministry and the health ministry are given 9% and 2.6% respectively.¹⁷

Household expenditure on education is also significant, despite the fact that higher education institutions receive almost their entire budget from the government. In 2009/10 households funded 67.2% of national education expenditure, compared with 32.8% spent by the government. Government expenditure on education has increased over the past five years (by 14-fold in the case of higher



education), ensuring that it now makes up a far larger proportion of total spending. However, the contribution from households (estimated at 31.3% in 2013/14) is still far higher than in comparable economies.¹⁸

Public institutions are allocated budgets by their respective departments, which fund them almost entirely. Although such institutions do charge fees, they are very low and make up a negligible part of the schools' budgets. Private institutions, which do not officially exist, depend solely on student fees and are sufficiently expensive to exclude all but the wealthiest.

Financial support for students is almost non-existent. There are no loan schemes and very few available scholarships.

The higher education landscape

Higher education in Myanmar has been defined by military rule and the priorities and fears of the military regime. The landscape owes much of its current shape to attempts to limit the threat of student uprisings. For example, in 1964 the military broke down the country's two leading institutions, Yangon and Mandalay universities, into their component parts, establishing independent schools of education, engineering, medicine and economics. The residual institutions became liberal arts, science and law universities. This had the effect of reducing the numbers of students concentrated in one place, and of protecting necessary professions from potential insurgency.

Between 1988 and 2000 universities in Myanmar's major cities were closed or relocated to remote areas in order to prevent students from gathering in large groups, while Yangon and Mandalay universities had their undergraduate programmes discontinued. Many new universities were established at this time, more to reduce student numbers at each institution than to broaden access. The current geographical spread of higher education institutions throughout the country is the result of these considerations. Only four universities in Myanmar have more than 10,000 students. In 2011-12 numbers ranged from 20,961 at Mandalay's Yadarnapon University, to just 586 at Pinlon University in Shan state.¹⁹

At the same time, responsibility for higher education stopped being solely the preserve of the education ministry and was splintered among the various government bodies. As a result, institutions today vary significantly according to which ministry they are operated by. There are more than ten different possible ways to attain a degree and the system is extremely disjointed.

Private institutions are technically illegal, and are therefore absent from official statistics. However, they are thought to number as many as 500 around the country, most offering skills-based practical or professional training.

An increasingly significant element in Myanmar's higher education jigsaw is distance learning. Offered by the country's 38 arts and science universities, distance learning, via correspondence course or the Internet, is the only option available to students who fail to score highly enough in the matriculation exams to attend a physical university. Approximately 290,000 students (or 60% of the student population) are currently enrolled in distance education.²⁰ However, because this is known to be the option taken by those who do not score highly enough to attend university, a qualification obtained through distance learning is often poorly regarded by potential employers.



The education function

Education offering

The diverse governmental oversight of the higher education sector means that different ministries can choose to offer courses tailored to their own agendas. As a result, the Ministry of Religion oversees courses in Buddhism, while the Ministry of Livestock, Fisheries and Rural Development provides training in veterinary science as well as fishery management.

However, this fragmented approach means that there is no clarity over which programmes qualify as higher education as opposed to vocational training. Two institutions managed by different ministries might offer courses that are nominally the same, albeit with very different standards and requirements.

The authorities have prioritised science and technology degrees over the past 50 years, and arts subjects have been presented as intellectually inferior. Historically, this bias was intended both to boost productivity in state-owned industries and to downgrade subjects that might cause students to question the military, such as history, philosophy and sociology. Political science and journalism are still almost non-existent as a result of this policy, although the need for more social scientists is increasingly vocalised.

Most higher education institutions in Myanmar are concerned exclusively with teaching, and research of any kind is extremely limited.

Enrolment, access and equity

A government policy stipulating that each state and division should have an arts and science university, a technical university and a university specialising in computer sciences has ensured that provision of higher education is spread throughout Myanmar relatively evenly. More institutions are found in the most populous central divisions, with 42% of the total either in Yangon or Mandalay, which between them are home to over 10% of the population.

Around 500,000 students were enrolled in undergraduate, masters or PhD courses in 2012, 60% of them via distance learning.²¹ Transition rates from high school to higher education have been fairly consistent over the past decade.

To be eligible for higher education students must pass the national matriculation exam, a hurdle cleared by just 30% of those who attempt it each year. However, as most students never complete basic education or sit the matriculation exam in the first place, the majority are precluded from further study. Just 11-12% of Burmese aged between 16 and 21 are enrolled in higher education.²²

Of those enrolled, 77% attend arts and science universities overseen by the education ministry, with English and geography accounting for 40% of degrees undertaken.²³ Of the total, 15% are enrolled in



engineering universities overseen by the science and technology ministry, and a further 4% in health-related studies.²⁴

A student's academic direction is determined by his or her results in the matriculation exam, an obstacle that puts poorer students at a considerable disadvantage. Testing two years' worth of course content in a single exam, it is passed largely by students who have been coached by private tutors. School teachers often tutor their own students, leading to complaints that they pay attention to their fee-paying students in class at the expense of those who cannot afford private tuition.

A low matriculation result denies a student access to higher education altogether, while pass marks (or a repeat attempt after failure) limit them to distance learning. Beyond that, mid-level marks are required for the regular streams of engineering, arts and science, while high marks grant access to medicine or the engineering, arts and science "Centres of Excellence" in Yangon and Mandalay universities.

Students' choices are limited early in their academic careers by the requirement to choose an arts or science pathway before entering high school. This then determines which subjects will be open to them at tertiary level.

Failure to complete basic schooling denies most students in Myanmar the opportunity even to consider the possibility of higher education. The greatest inequity in access is the economic divide, between those who can afford school fees, or indeed private tuition to pass the matriculation exam, and those whose families cannot afford the basics of uniforms and textbooks. This gap is particularly marked as an urban-rural division—just 65.5% of rural children aged 10-15 are in secondary school, compared with 83.3% of their urban peers.²⁵

Rural students are also more likely to cite the need to contribute to household income through paid work as a reason for abandoning formal education—12.2% of young people aged 18-21 failed to attend school because of agricultural work, while another 6.7% listed non-agricultural work as their reason for lack of attendance.²⁶

The World Bank and Australia's Department of Foreign Affairs and Trade are currently working with the Burmese government to expand a programme of providing stipends to Myanmar's poorest students to encourage them to continue in primary and secondary education. The stipend targets those who have attended less than 20% of their classes in the preceding three months.

Students of non-Burman ethnicity, many of whom are not native Burmese speakers, are also at a disadvantage in the education system, which is conducted exclusively in Burmese and English. Burmese is the first language of just 69% of the population.²⁷ Relaxation of the laws forbidding minority languages from being used to teach has been debated, but the most recent education bill upheld the ban. Some ethnic groups, such as the Rohingya, are not recognised as citizens and are explicitly excluded from formal higher education of any kind.

The disabled are also highly unlikely to undertake higher education, as their participation rates in any form of schooling are low, with schools ill equipped to teach students with additional needs.

Unusually, women are overrepresented in higher education in Myanmar, accounting for 60% of students. In arts and science universities the gender balance is even more skewed, with women



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making up between 65% and 70% of the student population,²⁸ while higher studies such as masters and PhD programmes are commonly as high as 80% female. This trend is also reflected in staffing. The imbalance is thought to be primarily attributable to the fact that job opportunities follow the opposite pattern, with boys finding paid employment far earlier than girls, who must continue in education for much longer to make themselves employable.

The role of infrastructure and ICT

Infrastructure and facilities of all kinds are extremely limited. Many institutions, particularly those in rural areas, have no textbooks, journals or computers, and most practical training has to be carried out in shifts as technical equipment is in short supply. The equipment that does exist is usually poorly maintained, with repairs taking place only when funds allow.

Technological initiatives have had little take-up, as only about 1% of the population currently has access to the Internet, and just 13% to electricity. Power cuts are frequent, and use of learning platforms and management systems non-existent.²⁹

However, both Internet and electricity capacity are set to improve dramatically, with 70 power-generation construction projects in the works, and Qatar's Ooredoo and Norway's Telenor building a telecoms tower to support 3G mobile services throughout the country.³⁰

Two new projects are also under way to develop e-libraries in a number of institutions. An international non-governmental organisation (NGO), Electronic Information for Libraries, is working with Yangon and Mandalay universities to enable 130,000 digital texts, including major academic databases, to be accessed on library computers. Funded by the US-based Open Society Foundation (formed by an American philanthropist, George Soros), the two universities have had fibre-optic cables installed so that they have sufficient bandwidth to support the e-libraries, which will support improved teaching, learning and research.

In another initiative funded by the Open Society Foundation, the University of Manchester is working with six higher education institutions to set up eTekkatho, or eUniversity. Developed specifically for Myanmar's poor information and communications technology (ICT) infrastructure, eTekkatho is a free online resource accessible from anywhere, which currently contains 900 titles and is set to expand.³¹



Higher education outputs

Research

Most academic staff in Myanmar have never participated in any kind of research and there is little incentive for them to do so. There is too little research attempted for most PhD candidates to have the opportunity to experience a research environment, and they therefore never have the chance to develop the skills that would allow them to conduct research independently. The rote learning which characterises teaching in almost all institutions does not lend itself to the development of critical thinking.

Those graduates who do have the skills required frequently choose to apply them elsewhere. Owing to low wages and social upheaval at home, many Burmese educated to tertiary level choose to leave Myanmar for nearby countries such as Singapore or Malaysia.

Research has been deliberately discouraged in Myanmar, as the government has viewed it with suspicion and prevented the development of any form of research culture. Just 425 papers from the country were internationally published between 2000 and 2011, compared with 38,500 from Thailand in the same period.³² Academics are not expected to conduct research as part of their role, and government support is minimal.

Currently, students must request permission from the government to conduct research in relation to their degrees, and must find funding themselves if required. There is some independent research, funded by international sources, and international research is likely to increase on the back of growing foreign interest in Myanmar. However, the government is beginning to see research as desirable, and has started to establish so-called centres of research excellence within some universities; these are still in development.

Canada's International Development Research Centre is currently funding a peer-exchange programme between the Mekong Development Research Institute and Thailand's Chiang Mai University in order to build the capacity of researchers in Myanmar to explore development issues. The South Korean government has pledged to build a Myanmar Development Institute, dedicated to economic research, while French and Japanese universities are in the process of establishing collaborative programmes with Burmese institutions.

Lack of financial support and stifling regulation means that, without this kind of international co-operation, few researchers can afford to gain access to the necessary equipment for scientific or technical research. As funding is granted one year at a time, academic staff tend to avoid research topics that would last longer than 12 months, severely curtailing the opportunities for research of genuine interest.

Meanwhile, before embarking on any form of social science research involving surveys, the ward, township and divisional levels of government where the survey will be conducted all need to give



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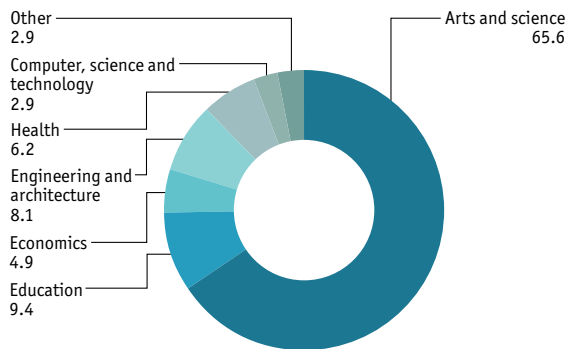
Myanmar

permission, as does the ministry within whose remit the research falls. This degree of bureaucracy dissuades many from attempting research at all, as does a law banning groups greater than five people from assembling outside.

Workforce

Between 120,000 and 180,000 students graduate from some form of higher education each year.³³ However, in a country dominated largely by informal working arrangements and employment of family members and casual labourers, there have until very recently been few professional roles for graduates to fill. The informal sector is still estimated to account for around 73% of the workforce, rising to as high as 79% in rural areas.³⁴

Graduates by field of study in 2008-09
(%)



Source: Thet Lwin, "Higher education in Myanmar", 2013; based on data from the Ministry of Labour.

Although this is changing, the professional vacancies that do exist struggle to find suitable candidates, as graduates are poorly trained and lack suitable skills. Interaction between universities and the private sector is almost non-existent, with no industrial experience on the part of teachers and no opportunity for employers to influence course content.

Higher education is sufficiently poorly regarded that employers frequently prefer not to hire graduates at all, as they usually require retraining and are seen as resistant to less prestigious work and ineffective at applying knowledge. Without the funding for practical equipment, universities focus on theory-laden teaching, resulting in graduates who are unable to apply their knowledge. Personality and work ethic are therefore seen as more significant than qualifications, and education is usually used more as an indication of willingness to learn than proof of applicable knowledge or skills, to the extent that many graduates work in entirely different fields than those they studied. In the case of distance learning, qualifications can actually be a hindrance, as many employers see graduates of distance learning as lacking the work ethic required to pass the matriculation exam at a higher level and attend a physical university.

Graduate unemployment is anecdotally extensive, even in essential fields. There are thought to be 6,000 unemployed medical graduates in Myanmar³⁵—three times the number of medical students graduating each year.³⁶ High numbers of graduates leave the country altogether: around 10% of the population work abroad.³⁷

Many employers prefer to hire graduates with both public and private degrees, demonstrating that they have high enough matriculation marks to gain acceptance to a public institution, but also practical skills acquired privately.



There is little qualitative variance between institutions. Poor facilities, obsolete course content, theory-centric teaching and lack of funding afflict all of them. Yangon University and Mandalay University are widely seen as two of the better institutions in Myanmar, as they have better infrastructure and equipment, better-qualified staff and links to universities overseas. However, not enough data exist to verify whether their learning outcomes are any better than elsewhere.

Higher education in Myanmar compares poorly internationally, as confirmed by the CESR, the largest development initiative in the country. In 2012 the World Bank's Knowledge Economy Index ranked Myanmar 144th out of 145 countries surveyed, higher only than Haiti.³⁸ In a report reviewing the sector, the Asian Development Bank stated:

"While data are incomplete, available measures comparing, for example, investment in education, research output, knowledge economy indices, and enrolment ratios, with ASEAN neighbours, underscore the need for a major re-commitment to higher education."³⁹

Despite the mistrust of tertiary qualifications in general, there is currently a skills shortage in every sector, with an estimated undersupply of 13m skilled and semi-skilled workers.⁴⁰ Qualifications in construction, telecoms, tourism, manufacturing, oil and gas, electrical engineering, information technology (IT) services and English language are particularly in demand.

Labour shortages have seen businesses leaving positions vacant, hiring staff without the required skills and operating below capacity. Competition between businesses for staff has led to sharp wage inflation for fluent English-language speakers and experienced workers. However, this has not yet filtered down to new graduates, for whom the average starting wage is around US\$100 per month.⁴¹ As all graduates have to be retrained regardless of the subject studied, there is little difference in starting salary between different sectors.

In addition to lacking the skills required by employers, large numbers of graduates are locked out of advancement by virtue of their gender. Most businesses prefer to employ men in professional and senior positions, whereas the majority of graduates are women. This bias plays a significant role in preventing the absorption of graduates into the workforce.



Policy levers – interventions

Cases of structural reform or transformation

Thein Sein's speech to parliament in 2011 made education a key priority for Myanmar's political reform. Reflecting this, the country has opened the sector to international scrutiny through the CESR, which sees the government partnering with international agencies, NGOs and governments to review the state of national education. This represents a significant re-engagement with the wider world after decades of secrecy, during which foreign nationals were not even permitted to enter Myanmar's institutions. However, it represents only a first step towards assessing where reform is needed.

Meanwhile, the education ministry has developed the National Education Plan, which aims to streamline management and bureaucracy; adopt quality measurement and assurance mechanisms; and extend technical and vocational training programmes. Institutions managed by the education ministry must also now provide two months' worth of training to all new lecturers.

The Nay Pyi Taw Accord, an agreement to co-ordinate efforts to develop Myanmar, which the government has signed with foreign agencies, has also placed education at its centre.

A new National Education Bill drafted by EPIC is currently being considered but is yet to be implemented. However, reform of the sector is already under way. Much of the way in which higher education is currently managed dates from a more authoritarian time, and several new laws intended to increase the autonomy of institutions are being drafted. The opposition leader, Aung San Suu Kyi, is also chairing a parliamentary committee dedicated to returning Yangon University to the standing it enjoyed before the onset of military rule.

Myanmar is the focus of a current initiative by the Open Society Foundation, through which it is broadening students' experience by supplying guest lecturers, as well as funding the establishment of e-libraries at a network of universities.

Although education is the focus of reform, it is also the victim of political in-fighting. As a national election looms in 2015, the sector is being used to score points, as each political party attempts to position itself as leading the reform process.

Other specific interventions

Myanmar's public education system has little engagement with the private sector, with almost no internships, apprenticeships or work-experience programmes. There is also little opportunity for private-sector involvement in the development of curricula, meaning that programmes are designed by people with no direct knowledge of workforce requirements.

However, two public-private partnerships have recently been established, indicating a growing receptiveness on the part of the government to the advantages of greater co-operation. In the first, US-based Johns Hopkins University is supporting the teaching of law and political science at Yangon



University, providing guest lecturers and advising on curriculum development. There are also reports that Johns Hopkins may intend to establish a major centre within the university. Myanmar's National Management College is also collaborating with a local training provider, Winner Computer, and a Japanese advertising company to offer courses in advertising and media.

In addition to these initiatives, the Singapore-Myanmar Vocational Training Institute is a new project which will aim to meet the growing demand for skilled labour in electronics, hospitality and tourism. Programmes designed by Singapore's Institute of Technical Education will provide training in everything from elevator servicing to front-desk management.⁴²



Conclusion

Myanmar's higher education sector is, by most reckonings, not fit for purpose. It is accessible to a tiny proportion of the population, and those who do manage to access it receive such poor training that they are unable to find work in their fields and have to be retrained by their employers. By failing to fund equipment, resources or research, the government is wasting billions of dollars building and maintaining far more universities than are needed. Employers have a poor opinion of graduates, and higher education appears to play little part in the country's economic growth at present.

Crucially, the disparity between course content and the needs of employers must be addressed by involving the private sector in curriculum development to ensure that graduates' skills match those in demand.

Government funding also needs to be more effectively channelled into infrastructure improvement and teacher training, rather than wasted on showcase projects for political point-scoring. Strategic planning is an essential area for reform, while teaching needs to move away from rote learning to developing transferable skills.

The landscape may be set to change. With Myanmar's technological access about to improve radically, and the country opening itself up to the wider world, the higher education system is under scrutiny from all sides. As the country moves away from agriculture towards a knowledge-based economy, it needs its graduates to be part of the picture.



Endnotes

¹ Shwe Yee Saw Myint. (September 2012), "Young doctors face job shortage", *Myanmar Times*, URL: <http://www.mmtimes.com/index.php/national-news/1481-young-doctors-face-job-shortage.html>

² Myint Oo. (August 2012), "Degrees not worth the paper they're written on", *University World News*, URL: <http://www.universityworldnews.com/article.php?story=201208151533012850>

³ Japanese International Co-operation Agency. (2013), "Data collection survey on education sector in Myanmar", URL: <http://www.cesrmm.org/index.php/en/documents/category/26-other?download=34:cesrphase1surveyoneducationsectorjica-part2>

⁴ Economist Intelligence Unit calculation based on average exchange rate for 2013.

⁵ World Bank and Department of Foreign Affairs and Trade (DFAT). (2014), "Myanmar education sector public expenditure review", mimeo.

⁶ Asian Development Bank. (March 2013), "Technical annex on the higher education subsector", URL: <http://www.cesrmm.org/index.php/en/documents/category/20-higher-education?download=41:cesrphase-one-higher-edu-subsector-technical>

⁷ Economist Intelligence Unit estimate for 2013.

⁸ Asian Development Bank. (January 2013), "Technical annex on labour market analysis: the demand for higher education and TVET graduates", URL: <http://www.cesrmm.org/index.php/en/documents/category/22-technical-and-vocational-educationraining?download=39:cesrphase-one-labor-mkt-analysis>

⁹ Asian Development Bank. (March 2013), "Technical annex on the higher education subsector".

¹⁰ Asian Development Bank. (January 2013), "Technical annex on labour market analysis: the demand for higher education and TVET graduates".

¹¹ Myo Thein Gyi. (May 2013), "Myanmar Higher Education Policy", Department of Higher Education (Lower Myanmar), URL: <http://yangon.sites.unicnetwork.org/files/2013/05/MyanmarHEPolicyConference-Development-PolicyDr-MTG.pdf>

¹² Birch, I. (November 2012), "Comprehensive education sector review: rapid assessment of overarching legislation", Comprehensive Education Sector Review (CESR), URL: <http://www.cesrmm.org/index.php/en/documents/category/25-plmf?download=29:cesrphase-plm4final-birch>

¹³ From 309.8 billion in 2011 to 1.1 trillion Kyats in 2013.

¹⁴ World Bank and Department of Foreign Affairs and Trade (DFAT). (2014), "Myanmar education sector public expenditure review", mimeo.

¹⁵ Ibid.

¹⁶ Japanese International Co-operation Agency. (2013), "Data collection survey on education sector in Myanmar".

¹⁷ World Bank and Department of Foreign Affairs and Trade (DFAT). (2014), "Myanmar education sector public expenditure review", mimeo.

¹⁸ Ibid.

¹⁹ Thet Lwin. (2013), "Higher education in Myanmar", CESR, URL: <http://www.cesrmm.org/index.php/en/documents/category/20-higher-education?download=11:cesrphase1highereducation-backgroundinformationreport>

²⁰ Ibid.

²¹ Ibid.

²² Spohr, C. (November 2012), "Informal note on IHLCS household survey analysis as an input to the CESR", Asian Development Bank, URL: <http://www.cesrmm.org/index.php/en/documents/category/26-other?download=36:cesrphase1informalnoteonihlcsanalysis-cln>

²³ Thet Lwin. (2013), "Higher education in Myanmar", CESR.



Higher education case studies

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²⁴ Japanese International Co-operation Agency. (2013), "Data collection survey on education sector in Myanmar".

²⁵ Spohr, C. (November 2012), "Informal note on IH LCS household survey analysis as an input to the CESR", Asian Development Bank.

²⁶ Ibid.

²⁷ Immigration and Population Department (1995), "Myanmar Population Changes and Fertility Survey 1991," Ministry of Immigration and Population.

²⁸ Asian Development Bank. (March 2013), "Technical annex on the higher education subsector".

²⁹ International Finance Corporation. (n.d.), "IFC in Myanmar", World Bank Group, URL: http://www.ifc.org/wps/wcm/connect/region__ext_content/regions/east+asia+and+the+pacific/countries/ifc+in+myanmar

³⁰ Kyaw Min. (2014), "Ooredoo to Launch Myanmar Services by September". Myanmar Business Today, URL: <http://www.mmbiztoday.com/articles/ooredoo-launch-myanmar-services-september>

³¹ The University of Manchester. (October 2013), "e-Library is new chapter for Myanmar", URL: <http://www.manchester.ac.uk/discover/news/article/?id=10860>

³² Asian Development Bank. (March 2013), "Technical annex on the higher education subsector".

³³ Thet Lwin. (2013), "Higher education in Myanmar", CESR.

³⁴ Asian Development Bank. (January 2013), "Technical annex on labour market analysis: the demand for higher education and TVET graduates".

³⁵ Myint Oo. (August 2012), "Degrees not worth the paper they're written on", University World News.

³⁶ Shwe Yee Saw Myint. (September 2012), "Young doctors face job shortage", Myanmar Times.

³⁷ MM Win and U Naing (2012), "Job creation and skill development by border area development between Myanmar and Thailand 2012". Powerpoint presentation, ILO/JICA workshop, Skills Development in the Thai/Myanmar Border Areas.

³⁸ The index computes measurements of the economic regime, innovation, education and ICT. URL: http://info.worldbank.org/etools/kam2/KAM_page5.asp

³⁹ Asian Development Bank. (March 2013), "Technical annex on the higher education subsector". vi.

⁴⁰ McKinsey & Company. (June 2013), "Myanmar's moment: unique opportunities, major challenges", URL: http://www.mckinsey.com/insights/asia-pacific/myanmars_moment

⁴¹ Estimate based on information from interviews with employers.

⁴² Wong, M. (2014), "S'pore-Myanmar training institute aims to boost youth employability", Channel NewsAsia, URL: <http://www.channelnewsasia.com/news/asiapacific/s-pore-myanmar-training/1068212.html>