The Economist Intelligence Unit

High university enrolment, low graduate employment

Analysing the paradox in Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka

An Economist Intelligence Unit report for the British Council

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Executive summary

Enrolment rates in universities have increased 50% over the past 10 years. Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka represent about one-quarter of the world's population. Beyond just sheer strength in numbers, the region is also encouragingly youthful. Following years of investment in increasing primary and secondary school enrolment, its youth are now seeking higher levels of education. This has resulted in greater public and private investment devoted to expanding capacity of and access to universities.

Private provision has helped with demand, but this has led to issues over quality of education. Much of the increase in demand has been fulfilled by private universities, often providing degree programmes where student demand is found. These for-profit institutions, not obliged to follow public university curriculum, standards and other benchmarks, have produced a great variance in quality of graduates. South Asia's weak regulatory and education accreditation frameworks need to be reviewed to ensure quality of graduates matter, not just quantity.

Despite more university graduates, employers are struggling to find good workers. A disturbing paradox is mounting and there is a need for a tripartite collaboration between policymakers, universities and employers. Education quality is low in universities and employers lament over two types of skills shortages: (a) not enough graduates in specialised skills needed within high growth sectors, and (b) where graduates have these skills, they are still not employable because English language, computer and other softer skills such as communication and problem-solving abilities are missing.

Curriculum is outdated and work skills missing from university education. It is not uncommon for South Asian universities to review curriculum only once every five years. It is also not uncommon for professors and lecturers to have no real work experience when teaching job-oriented degrees. This has led to substandard quality of education found in universities, with skills that have limited real-world application. Course grades are often almost wholly based on the performance in a final exam, instead of encouraging presentations, case studies and other types of analytical assignments. Public universities are especially unaccustomed to change, while private universities have proven to be more enterprising. In both public and private universities, however, internships and other career development services are just starting to take shape and importance.

There is an obvious disconnect between labour market needs and higher education provision. Despite the information, communication and technology (ICT) boom in India and more recently Sri Lanka, there is a shortage of skilled ICT workers in South Asia according to experts. This is an example of the broader trend of the discrepancy between the kind of skills demanded by labour markets and the number of graduates in key disciplines for South Asia. The problem starts with nascent labour market information systems, and is compounded by the lack of coordination at all levels of government.

Greater connectivity and adaptability is the way forward. There is a unanimous consensus that collaboration between industry and academia is critical, but how to achieve this effectively remains unclear. Specific examples where this is done well exist, but replication of successes is a challenge. The global labour market is changing rapidly and ensuring graduates have both technical skills and softer, employable skills will remain a challenge.

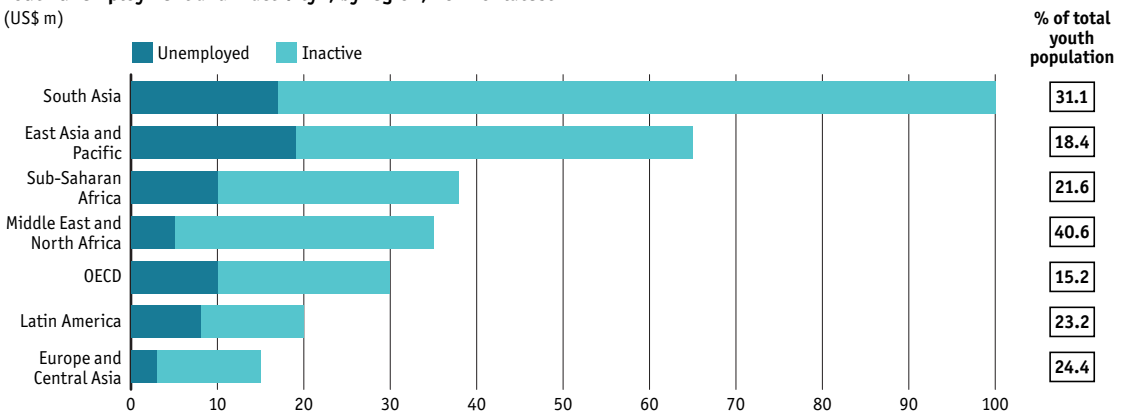
This report explores the higher education and employability challenges facing six South Asian economies—Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka—and considers some of the solutions available to them.

Chapter 1: Higher education enrolment

South Asia's key strength is its favourable demography. The countries of Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka account for approximately 25% of the world's population today. South Asia is also enviably young: in India alone, the average age of its population will be 29 years in 2020; in China, it will be 37 years and Japan 48 years.

The demographic dividend translates to growth in several ways. It holds the promise of an expanding middle class, affordable labour force, productivity growth, and thereby giving rise to greater economic growth. However, the same demographics can prove to be a curse: where youth fail to find jobs, unemployment can lead to social unrest and have a destabilising effect on an economy.

Youth unemployment and inactivity*, by region, 2012 or latest
(US$ m)



*15-24 year olds not in education.
Source: OECD, World Bank, The Economist.

Youth unemployment is a concern almost everywhere in the world, but the sheer scale of a potential missed opportunity is especially stark in South Asia: globally about 25% of all 15-24 year olds are unemployed or not in education; in South Asia, the proportion is 31.1%. A challenge for the region is driving change that will ensure a competitive, skilled workforce well-equipped for the vagaries of a knowledge economy. To achieve this, there is a common agreement that both the quality and quantity of university graduates matter.

Hungry for more education

Steady economic growth coupled with years of investment in primary and secondary education has developed a sizeable middle class in South Asia with a growing appetite for higher levels of education. Post-secondary education comes in a variety of sources ranging from industry and government programmes, vocational schools and non-profit organisations. South Asians, however, place a high premium on entering the labour market with a university diploma. The proportion of secondary school graduates enrolling in higher education institutions have more than doubled in each country between 2004 and 2011.

Public expenditure has also increased to make higher education more accessible. In Nepal, for example, public budget for higher education increased 170% between 2000 and 2011, from Rs1.68bn (US$16.9m) to Rs4.6bn (US$46.4m). In India, the government's 12th Five-Year Plan outlines efforts to increase tertiary enrolment and promises 30 new Central universities and 30 medical and engineering colleges.

As a result of policies of such policies, university participation has more almost doubled in South Asia, from 13.6m enrolled students in 2004 to 25.1m students in 2011.[1] In countries like Pakistan and Afghanistan, the number of students enrolled in higher education increased over 200% in the same time period. The increase in demand has been a result of two broad trends.

Percentage of secondary graduates enrolled in higher education, 2004 and 2011

	2004	2011
Afghanistan	1.3	3.7
Bangladesh	5.7	13.2
India	11.2	23.3
Nepal	6.4	14.5
Pakistan	3.3	8.3
Sri Lanka	NA	14.4

Source: World Bank.

Participation in higher education, 2004 and 2011

	2004	2011
Afghanistan	27,648	97,504
Bangladesh	821,364	2,008,337
India	11,852,936	26,650,953
Nepal	147,123	385,454
Pakistan	520,666	1,572,664
Sri Lanka	NA	232,333

Source: UNESCO.

First, there has been a deliberate effort to increase female participation in universities as a means to increasing female labour force participation. In 1998, Pakistan created the Fatima Jinnah Women's University to encourage women to move from secondary schools to universities. India, Bangladesh and Pakistan created incentives in the way of stipends for female students attending universities. These have increased female tertiary education but demand is expected to only grow: UNESCO reports that there are about 74 females for every 100 males in tertiary education in South Asia, compared to 107 females per 100 males in East Asia.

Second, there is a growing demand from the labour market for higher skilled workers as countries shift from agriculture-based economies towards greater dependence on industry and service sectors. A uniform pattern of a rapidly growing services sector can be seen across South Asia, most notably in India, Nepal, and Sri Lanka, where services share of GDP have risen by about 15% to 35% between 1995 and 2010. However, despite the rapid rise in India's services output share, employment in the services industry remains low, at 27% of total employment. A similar picture is found in Bangladesh, Pakistan, and Sri Lanka. The gains to be made in employment within the service sector will also demand more university graduates with specific skills.

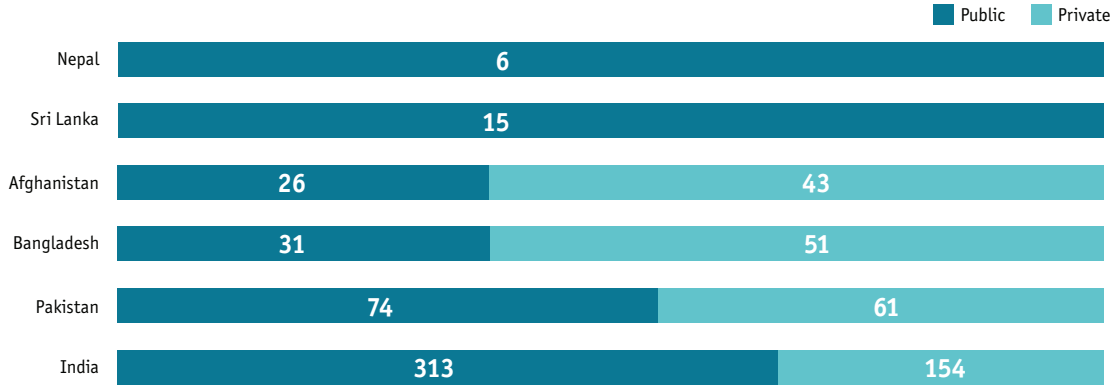
Private education: Boon or bane?

The university system evolved from a wholly public system to one that has become significantly dependant on private provision to meet demand for tertiary education. Since the 1980s, with the exception of Sri Lanka and Nepal, governments have allowed the expansion of private universities. The rate of change has been rapid: in Pakistan, the number of private universities increased eight-fold between 1997 and 2004.[2]

[1] UNESCO statistics.

[2] Higher Education Commission, Pakistan.

Numbers of universities, public and private
(number)



Note. To best effort, universities, rather than colleges or vocational institutions have been accounted for in the data. Inconsistency in definitions across national sources means figures between countries may not be directly comparable.

Source: National higher education agencies.

Typically, private universities can cost as much as three or four times of public university fees, but the rise in costs has sometimes not happened with a proportional increase in quality and graduate outcomes, explains Saad Rizvi, Executive Director of Efficacy at Pearson, an education firm. In 2004, for example, 27 private universities in Bangladesh were found running without a Vice-Chancellor, and eight universities were found with poor academic standards. Between 2004 and 2006, some private universities in Bangladesh introduced new academic courses without the necessary University Grants Commission (UGC) approval, and others were found to deliver instructions in unauthorised courses and have illegal campuses. The expansion of private provision has happened in the absence of appropriate monitoring and regulation frameworks, leading to uneven provision and large variance in quality of education.

Some private universities, however, have done well. They have shown to be enterprising, investing in research and pedagogy and becoming models for adaptability within a rapidly changing labour market, says Amit Garga, partner at The Parthenon Group in India, a consultancy firm. Public universities attract students based on their reputation, he says, but for a private university to compete, it is critical their students find employment easily. As such the types of programmes offered by public and private universities vary greatly: approximately 65% of students enrolled in India's private universities are in job-related degree programmes (for example law, ICT and engineering), but in public universities, 65% of its students are enrolled in basic sciences, commerce and humanities according to Mr Garga.

Demand outstrips supply

Despite the boom in enrolment and proliferation of private providers, it has still proven difficult for supply to keep up with the enormous demand. Dr Aminullah Amin, Associate Professor at Kabul University, cites the example of his university where there are already three shifts of students, effectively tripling the capacity of one campus: one set of students comes in the morning, another set in the afternoon, and a third in the evening. Still, this is not sufficient. In 2013, there will be about

256,000 students graduating from Grade 12 and another 100,000 looking to enter university from the previous year. The university system in Afghanistan, however, can only absorb 60,000 students.

Similar capacity issues lie in Sri Lanka where approximately 220,000 take university exams for 23,000 seats in universities. Here, regulatory hurdles have proven to be a barrier in expanding the university system. Janake Kumarasinghe, HR Director of Kent Ridge Pvt Limited, a HR consultancy, explains that a Private University Bill was drafted but could not get approved due to substantial opposition from students, lecturers and ministers against fee-paying institutions. The bill had to be withdrawn in January 2012 after weeks of escalating opposition.

Course pickings

Demand for university education is not uniform across disciplines. The business and management degree, for example, at both undergraduate and postgraduate level, continues to be most popular, fuelled by students eagerly anticipating jobs in banking and other private firms, or looking to carve it on their own as entrepreneurs. At the same time, there remains a familiar desire of students looking to work in the public service and this drives demand for degrees within the social sciences. Public sector jobs, while not the best paying, offer stability, attractive non-wage benefits and prestige according to various student surveys conducted in Sri Lanka and India. However, the capacity of the civil service to absorb graduates has declined over the years. In India, public sector employment has declined 6% between 2000 and 2010, while private sector employment increased 25.3% in the same period.

University degree programme, enrolment by discipline, selected South Asian countries, 2011

	Education	Humanities and arts	Social sciences, business and law	Science	Agriculture	Health and welfare
Bangladesh	31,733	606,956	968,951	268,650	21,519	45,125
India	43,800	6,132,000	2,628,000*	2,817,800	73,000	35,000
Nepal	150,814	68,413	123,855	14,584	1,466	13,433
Sri Lanka	7,851	122,875	41,691	29,060	4,251	13,844

* Does not include social sciences

Source, UNESCO, University Grants Commission (India).

With high enrolment in business and social science programmes, the largest pool of graduates are generalists with broad socio-economic knowledge, but absent of any specific technical skills. In Pakistan, Dr Allah Malik, Managing Director and CEO, National Education Foundation and Director General, Academy for Educational Planning and Management at the Ministry of Education, Training and Standards in Higher Education, says even though jobs requiring business graduates are full, universities continue to offer and expand the degree offering. This is largely due to student demand and the fact that such programmes are easier to teach and cheaper to offer than other specialist degrees.

This skills shortage – with more generalists and fewer skilled – means that employers will have to spend additional time and effort training graduates for specific roles and tasks. “A lot of times, Bangladeshi employers don’t care about what education the candidate received, and they just say “Come and work for us, we will train you”. But the added costs of training means graduates are not paid

South Asia and demand for general business education

In 2000, there were about 600 colleges in India offering about 70,000 MBA diplomas. By the end of 2009, the number had increased to 1,400 colleges offering about 120,000 such degrees. Demand continues to rise but the trend is not new: business education has a long history and appeal in South Asia.

In 1955, the Institute of Business Administration (IBA) introduced its MBA programme at Karachi in collaboration with the University of Pennsylvania's Wharton School of Business. Two years later, evening classes were offered to cater to working professionals, and by 1982 the Bachelor of Business Administration (BBA) was launched. Similarly, IBA Dhaka was founded in 1966, expanding from just offering Master in Business Administration (MBA) to Master in Philosophy (MPhil) and PhD programs in the 1970s before starting the BBA in 1993. Dr Gazi Mahabubul Alam, Professor in Education Economics, University of Malaya, explains the rise in popularity of the IBAs and similar business degrees is linked to how these schools were started. When they first opened, IBAs targeted professionals in well-paid jobs to join their MBA programmes and further develop key skills. After completing the programme, they returned to their old jobs and received promotions, says Dr Gazi. "It wasn't so much because of the knowledge they gained in the programme, but that they were already good engineers, good bankers and so on. The extra knowledge was in the way of better English language, communication and related skills," he explains. However, seeing the success of these graduates, other young adults demanded similar business education in hopes of rising up the ladder in the corporate world.

Postgraduate degree enrolment, selected South Asian countries

	2009	2011	% increase
India	406,056	597,541	47.16
Nepal	30,861	76,047	146.42
Pakistan	258,753	NA	NA
Sri Lanka	4,771	12,542	162.88

Source: University Grants Commission, Higher Education Commission (Pakistan).

highly, and they are later disappointed," says Dr Gazi Mahabubul Alam, Professor in Education Economics, University of Malaya. He add that is not uncommon for qualified doctors to be in administrative roles because they may not have the right skills for the medical industry, or political science graduates to later enrol in an IT course and work within the IT sector.

Concerns of unemployment and underemployment with just a Bachelor degree is one of the factors leading to the increase in postgraduate degree programme demand. However, this has further distorted the labour market, says Shveta Raina, CEO of Talerang, an organisation dedicated to matching high-potential Indian students with their corporate partners. Students often go from Bachelor to Master degree programmes with no work experience, making them "dirt cheap to hire", she says. The best companies in India are therefore accustomed to hiring postgraduates, which "perpetuates the cycle where undergraduates continue to miss out on internship and work experience, and are underprepared for their first job after college."

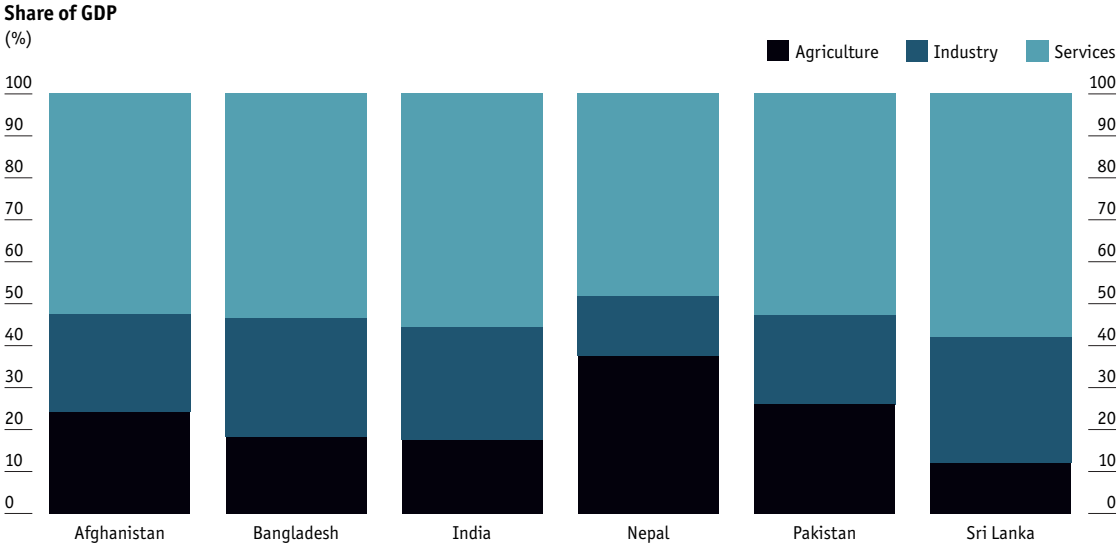
Time to make education relevant

South Asia has been focused on meeting the demand for more universities, but a narrow concentration on producing more universities with little attention to quality or employability of graduates is not a good thing, explains Dr Gazi. "There is a diploma disease in South Asia. Policymakers, students and parents alike see higher education as simply a means of gaining a diploma instead of acquiring necessary skills and knowledge. It is important for higher education to have the right ingredients to get students jobs, not just a capsule of plastic with nothing in it".

Chapter 2: Labour market and graduate employment

Labour market overview

The countries of South Asia – Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka — differ in their socioeconomic composition but share common labour market characteristics. All are primarily agricultural economies, though urbanisation has been changing the landscape as people transition from rural areas to the cities. The current rates of urbanisation (between 15% and 37%) are expected to increase between 1% and 5% per year from 2010-15.[3] Over the past two decades, the region has created close to 800,000 jobs per month, which has increased wages in real terms by approximately 3% a year.



Source: Economist Intelligence Unit.

It is estimated that 40% of growth in the world's working age population (aged 15-64) over the next few decades will come from South Asia. In absolute numbers, there will be about 1m-1.2m new South Asians entering the labour market every month for the next twenty years, a growth rate 20-50% higher than the average between 1990 and 2010[4]. However, at the current rate of job creation, as many as 400,000 South Asians per month may not find suitable employment. It is thus imperative that the right jobs are created to ensure labour force competitiveness and continued economic growth.

Economic growth has largely been driven by activities in low value services, primarily taking place within the unorganised sector. However, both large and small South Asian economies are climbing the value chain and demanding skilled workers to fill industry and service sector jobs. In India, for example, employment growth in service sector jobs has been huge. While total employment only grew by 13.4% between 2000 and 2010, the employment of professionals grew by 125.7%.

[3] CIA World FactBook.

[4] The World Bank, *More and Better Jobs in South Asia*, 2012.

Employment growth (%) by occupation, selected South Asian countries

	Growth in total employment	Growth in Legislators, senior officials and managers	Growth in professionals	Growth in technicians and associate professionals
Bangladesh, 2002-2010	22.1	600	50	41.2
India, 2000-2010	13.4	78.3	125.7	61.7
Nepal, 1999-2008	24.5	491.7	448.6	11.7
Pakistan, 2000-2009	35.7	52.8	6.3	75.4

Source: ILO, national labour force surveys.

Educated, but jobless

Despite positive employment growth and higher university participation, there is a paradox of high graduate unemployment, often significantly higher than total country unemployment. In countries like Bangladesh, Pakistan and India, graduate unemployment is 4-9 times higher than total country unemployment.

Unemployment in South Asia

Country	Estimated graduate unemployment (latest available year)	Total country unemployment (2012)
Afghanistan	65%*	NA
Bangladesh	47%	5.0%
India	33%	8.5%
Nepal	Over 20%*	NA
Pakistan	28%	6.0%
Sri Lanka	7.8%	4.0%

Note: Data may not directly comparable due to different definitions of "unemployment" and data collection methods.

Source: Economist Intelligence Unit, ILO, World Bank, Labour ministry surveys, expert interviews*.

Graduate unemployment is not uniform across disciplines. In Afghanistan, a technical graduate has "no issues getting a job", says Dr Amin of Kabul University, and usually finds employment within three to four months of graduating. Graduates with a social science degree, however, experience more difficulty. Similarly, a study by the Sri Lankan government found engineering graduates most employable, while arts graduates had the most difficulty in finding a job. Highest graduate employment rates also came at specialised universities, like University of Moratuwa (94.3% employment rate of graduates) which offers mostly technical degrees.

Employment rate by discipline, Sri Lanka, 2013

University discipline	Employment rate
Arts	31.5%
Management	65.0%
Science	68.7%
Agriculture	69.5%
Medicine	89.9%
Engineering	95.1%

Source: Ministry of Higher Education, Sri Lanka.

Anushkha Fernando, co-founder and CEO of knowrom.com, a platform to connect university students in Sri Lanka, says it is common for students, particularly arts and humanities graduates, to protest about their extended unemployment. The government usually responds by introducing a scheme that employs a large number of them. In the short term, this raises youth employment but in the long run, mismatches between the supply of skilled graduates and demands of the labour market are not fixed.

Low graduate employment: reasons and solutions

Quality of education is low

There are several reasons for graduate unemployment. First, despite increased public and private investment in universities, qualified lecturers are much needed but hard to find. Universities hire contractual and part-time lecturers as a stopgap measure, but such teaching staff often come with limited qualifications and offer low quality of education. In India, a news report found that as many as 40% of university lecturers are contract staff and get paid between Rs4,000 (US$65) and Rs20,000 (US$325) per month.[5]

The low quality of education shows in the way of top university rankings. South Asian universities are not ranked in the top 100 of the Times Higher Education (THE) and just three of the top 400 of the THE rankings (all Indian Institutes of Technology). The situation is similar across the QS 2012-13 World University Rankings, with South Asia representing just six of the top 500 in the QS rankings (five from India, one from Pakistan).

Globally ranked universities from South Asia, 2012-13

Indian Institute of Technology Kharagpur	• Times Higher Education World University Rankings; 226-250
Indian Institute of Technology Bombay	• Times Higher Education World University Rankings; 251-275 • QS World Univerity Rankings; 227
Indian Institute of Technology Roorkee	• Times Higher Education World University Rankings; 351-400 • QS World Univerity Rankings; 401-450
Indian Institute of Technology Delhi (IITD)	• QS World Univerity Rankings; 212
Indian Institute of Technology Kanpur (IITK)	• QS World Univerity Rankings; 278
University of Delhi	• QS World Univerity Rankings; 401-450
National University of Sciences and Technology (NUST) Islamabad	• QS World Univerity Rankings; 401-450

Source: Times Higher Education World University Rankings, QS World University Rankings.

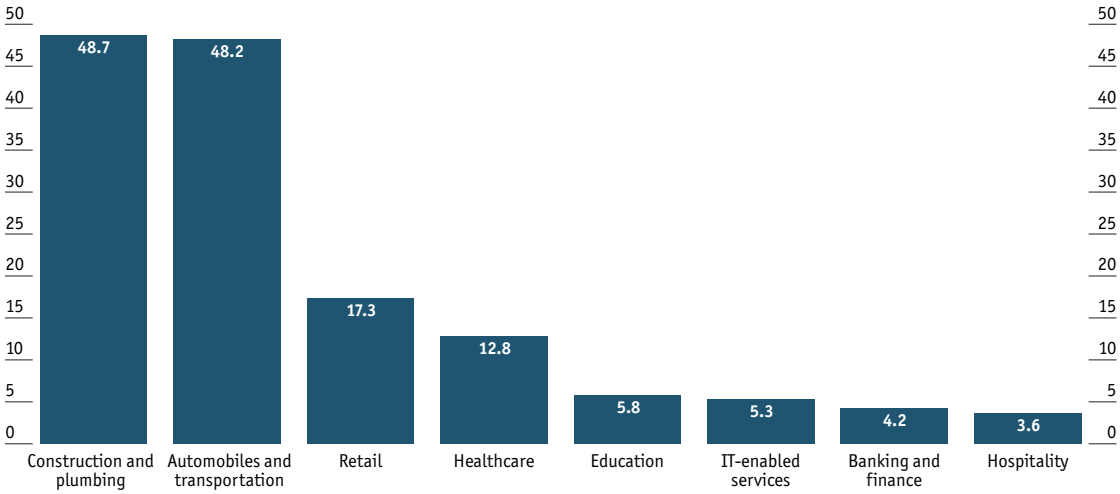
Skills shortage: High growth, low demand

The second reason for high graduate unemployment comes from a shortage of graduates with specialised skills. In India, the largest job growth will come from sectors such as construction, automotive, retail and healthcare, according to the National Skills Development Council (NSDC). By 2022, in the construction and automotive industries alone, there will be close to 100m new jobs created. However, students want jobs in different industries altogether. A survey found that almost 50% of respondents said they would like to work in outside of NSDC's eight high growth sectors[6]. Even amongst those keen to work within NSDC's high growth sectors, students were most interested in jobs in banking, healthcare, retail and hospitality where job growth is not expected to be as rapid.

[5] The Times of India, *Indian higher education: 40% of college teachers temporary, quality of learning badly hit*, 10 November 2013.

[6] Center for the Advanced Study of India (CASI).

Projected new jobs created by 2022, India
(m)



Source: National Skills Development Council.

High growth sectors look similar in other countries: ILO estimates that in Sri Lanka, employment growth in transport will increase by 73.6% between 2010 and 2020, and the financial services sector will need 81.6% more workers with knowledge of finance and various IT and technical skills.

However, the country has too many arts graduates. According to the UGC, the number of arts students as a proportion of total university students increased from 10% in 1992 to 45% in 2010. The Sri Lankan government, however, is "working very hard" to ensure the right skills exist, says Janaka Kumarasinghe, HR Director, Kent Ridge Pvt Ltd. The current strategy seems focused on influencing student demand for university courses by introducing more job-oriented degrees over arts degrees. In June 2013, the government announced that it will open 25 new technical universities and university colleges. At existing state-run universities, it also announced a new Bachelor of Technology degree.

Projected employment demand, Sri Lanka, 2010-2020

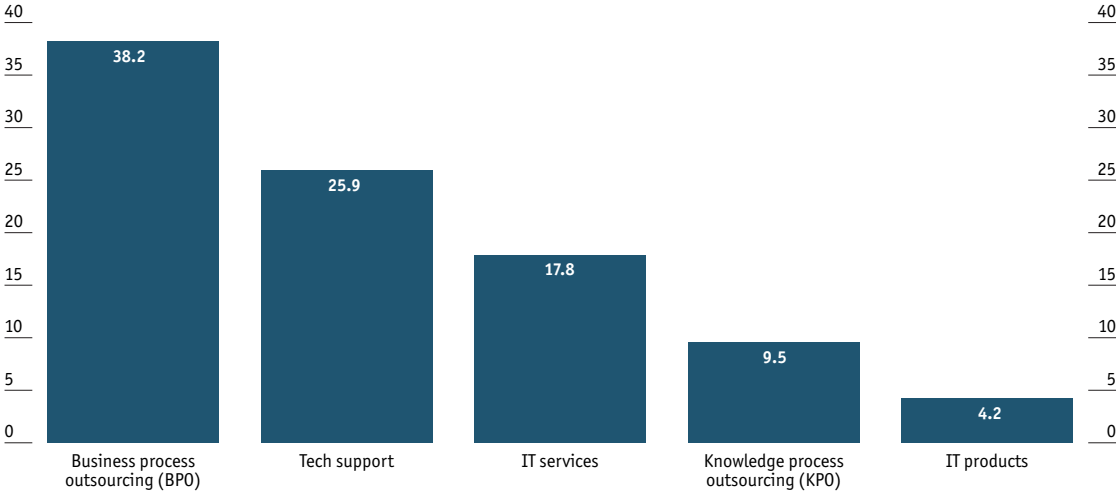
	Employment ('000s)			Change over 2010 (%)	
	2010	2015	2020	2015	2020
Manufacturing	1270	1423	1593	12.0	25.4
Construction, mining and quarrying, electricity, gas and water	507	608	730	20.0	44.0
Wholesale and retail trade	986	1094	1214	11.0	23.1
Hotels and restaurants	139	160	184	15.1	32.4
Transport, storage and communications	463	609	803	31.7	73.6
Financial intermediation and real estate	256	345	465	34.8	81.6
Government services	1178	1222	1269	3.8	7.8
Total	4798	6462	6258	13.8	30.4

Source: ILO.

Skills shortage: New economy, new skills

Thirdly, employers find that graduates are missing key soft skills and English language abilities. Besides skills relevant for specific jobs, a 2012 report[7] published by the Asian Development Bank (ADB) explains dynamic economies require high-level talent that are also innovative, risk taking, adaptable, and responsive to changing environments. Manjula Dissanayake, Founding President, Educate Lanka Foundation, echoes the sentiment. He says there are enough jobs for university graduates in the growing economy, but "the challenge is finding the right workers because graduates lack soft and workforce skills". Employers will expect their employees to be more attuned to an increasingly competitive external environment, which will require creative thinking, problem-solving and good communication skills.

Employability of technical graduates, India
(% of total surveyed)



Source: Aspiring Minds.

Missing soft skills is especially worrying in graduates with technical degrees the labour market needs. Aspiring Minds, a consultancy, recently conducted the first employability study of 40,000 Indian technical graduates based on the results of a standardised computer-based test testing English communication, quantitative skills, problem-solving skills, computer science and programming skills. It was found that in high-growth sectors such as business process outsourcing (BPO), employability of university graduates in the relevant discipline was only 38.2%. There is a significant difference in quality of graduates between top-tier and lower-tier schools, making it two to three times harder (in terms of cost and effort) to identify an employable graduate from a regular campus compared to reputed colleges such as Indian Institute of Technology (IIT).

To make university education more relevant for labour market needs, there is a need to inculcate both the right job skills and train students to become lifelong learners. Some private universities are at the forefront of this, explains Musharrof Hossain, President, Bangladesh Society for Human

[7] Asian Development Bank, *Improving transitions from school to university to workplace*, June 2012.

National development plans, core industries in South Asia

	National development plan	Key growth sectors for skills
Afghanistan	Afghanistan National Development Strategy: 2008-2013	Energy Agriculture and rural development Construction Mining Transport and logistics Telecommunications Tourism and Eco-tourism Healthcare and nutrition
Bangladesh	Perspective Plan of Bangladesh: 2010-2021 Sixth Five Year Plan: 2011-2015	Information technology Agro-food processing Manufacturing (leather and leather goods, ship-building, ready-made garments) Tourism and hospitality Light engineering construction
India	12th Five Year Plan: 2012-2017	Automobile / auto components Electronics hardware Textiles and garments Leather and leather goods Chemicals and pharmaceuticals Gems and jewellery Building and construction Food processing Handlooms and handicrafts Building hardware and home furnishings IT or software Business Process Outsourcing (BPO) and Information Technology Enabled Services (ITES) Tourism, hospitality and travel Transportation/ logistics/ warehousing and packaging Organised retail Real estate Media, entertainment, broadcasting, content creation, animation Healthcare Banking/ insurance and finance
Nepal	13th Three Year Plan: 2014-2016	Tourism Infrastructure Hydro-electricity
Pakistan	Pakistan Development Strategy: 2013-2018	Renewable energy Technology Oil and gas Manufacturing (textiles, surgical instruments, sports goods, leather)
Sri Lanka	Mahinda Chintana: Vision for a New Sri Lanka, A Ten Year Horizon Development Framework 2006-2016 Discussion Paper.	Construction ICT Apparel manufacturing Tourism Education services Construction

Source: Economist Intelligence Unit, ILO, National Skills Development Corporation of India.

Resources Management, where marks are distributed for case studies, presentations and other written assignments, not just final examinations. "Even though the best students go to public universities, their communication skills are not up to mark. In private universities where curriculum is innovative, students graduate with better English and other soft skills," making them more employable.

However, even as change is happening, he adds, there is quite some way to go before the notion of such transferrable skills gain traction. Public universities, for example, are still traditional and less

accepting of change, and universities sit within an education system largely based on rote learning and regurgitating at stressful university entrance exams.

Identify labour force needs

The labour shortfall is thus not a result of too few graduates, but a lack of graduates with good quality education and the right skills, both specialised and general skills. To fix this, a big shift needs to happen, says Pauline Tambling, CEO of the National Skills Assembly in the UK. "We should start from the premise that education and employment can do more for growth for the country together than they can do separately. Matching the courses and curriculum in schools with the jobs available here and now is critical."

In Bangladesh and Nepal, the disconnect is clear. Musharrof Hossain highlights key misalignment between labour market needs and education offered: "Bangladesh is the second largest garment exporting country but we do not have much emphasis on garments in higher education. This is similar in our leather industry, another key sector". Bangladesh University of Textiles (BUTex) is the only public university specialising in textile engineering in Bangladesh, though there are 15 government and private textile engineering colleges under different universities which offer a B.Sc. in Textile Engineering.

In Nepal, Dr Bhawani Shankar Subedi, Executive Director, Training Institute for Technical Instruction, explains that sectors such as tourism, hotel management and banking services have "tremendous scope for expansion and growth, but the economy still relies mainly on agriculture and animal husbandry." As such, there are few degree programmes offered within these sectors with high potential for growth.

Curriculum is often outdated and disconnected with labour market needs, but labour force surveys and graduate employability studies are few and far between, which makes any kind of evidence-based curriculum revamp challenging. Much of employment is also still in the informal sector, contributing to difficulties in collating information and making data driven decisions.

Connect education with employment

Another problem lies in the lack of exposure to work while in school. In mature labour markets, first-hand work experience through internships is common. These involve active collaborations between career offices within universities and public and private sector organisations. Students get to apply classroom knowledge in the real world and gain work experience while in school. The benefits are undoubtedly plenty; the practice in South Asia, however, is unfortunately rare.

Shveta Raina, CEO of Talerang, an organisation that bridges the gap between university education and workforce needs, explains that the problem starts with the structure of such programmes which are favour-driven instead of merit-based. "A student does not learn much because there is no structured internship programme, and the company probably will not hire this person full time, so does not invest time and effort into training the student." She adds that over 50% of top students do not do summer internships in the first two years of university education.

BITS Pilani started collaborations with industry early

Since 1973, the Birla Institute of Technology and Science (BITS Pilani) has made significant inroads into developing institutionalised linkages between universities and industry. One of their early initiatives included a Practice School, which exposed all students to various industries for seven and half months as an integral component of the academic curriculum. It has since introduced other programmes, including a work integrated learning programme which combines real time learning through desktop based video-conferencing with on-demand lectures, and solidified industry partnerships with large companies such as HP, TechMahindra, SAP and Yahoo!. From a small class enrolment of 30 students in 1979, the programme has grown to over 19,000 students in 2008.

Getting the most out of internships requires a mindset change, both from students by way of their expectations, and employers by way of understanding the mentorship role they should play. Such change can take time but there are other ways to create mutually beneficial partnerships that increase graduate employability. Career fairs and industry talks are easy to implement but seldom happen. There is also a need to bring in more real-world teaching in classrooms, says Dr Gazi of University of Malaya. "However, there is hesitation at universities. When they see that industry participants looking to teach in universities have no strong theoretical background, they don't want them."

Other types of collaborations include content development and application of more relevant and practical curriculum. There are several good examples of this happening in private universities. The Hero Group, a motorcycle manufacturer, for example, has made large investments (approximately Rp4bn, or US$65m) to set up a new university in Gurgaon, India, focused on practical-oriented education to increase employability.

Losing skills: Goodbye, valuable worker

To compound the skills shortage and labour mismatch problem, even when workers are highly skilled and employable, they leave for greener pastures abroad. The brain drain cycle is vicious: workforce educational attainment is increasing but there are skills shortages at all levels of employment, hampering further economic growth and forcing some of South Asia's brightest minds to leave.

"How do you encourage your best graduates to stay? They get better pay overseas, the quality of life is better overseas. So even when we train and skill people, we can't fill the right roles here," laments a senior university administrator in Nepal. Healthcare and medical degrees are popular in the country but doctors and nurses often leave. India faces similar issues in the healthcare industry: education institutions in India can produce over 32,000 physicians, 62,000 general nurses and 31,000 pharmacists but the current strength of health professionals in India is about half of the international norm of 2.5 health professionals per 1,000 people. In OECD countries, a 2007 report showed that India is the top country of origin for doctors, but India's own rural areas are short of medical professionals. A big draw overseas is the jump in earning ability: in the 1960s, a professional in India would earn 5-10 times as much in the USA as he or she would in India; today earnings are 15-20 times higher abroad.

Migrant labour, nonetheless, is an important aspect of economic development in South Asia considering the gains derived from remittances. There are national policies targeted at training workers in low and medium skills to work in the construction and healthcare industries outside South

Asia. The migration of higher skilled workers, especially within the health and IT sector, are also now increasingly common. The lure of a better life overseas is one of the driving forces for increased demand for such degree programmes. The challenge for South Asian governments is then to attract workers back to the home country: "brain circulation" has a positive impact for capacity building and diffusion of knowledge.

Chapter 3: Bridging the gap

The paradox is undeniable: South Asia is producing university graduates in steady numbers, but the labour market is finding it difficult to hire graduates with the right skills. Labour market studies conducted by private organisations, chambers of commerce and academics highlight various aspects of the problem but according to experts interviewed for this study, governments of South Asia seem fixated on increasing access to universities. Reversing this "diploma disease" requires structural changes, at both policy and institutional levels: reassess education received before students enter university, change degree offerings and pedagogy at universities and develop policies that support a 360-degree transformation.

Change the input

Professor Rakesh Basant, Chairperson Centre for Innovation, Incubation and Entrepreneurship (CIIE), India explains the first big issue is the type of education students receive: "Are we creating people who can learn quickly enough? The way we do learning here creates individuals who are not proactive enough. They wait for instructions rather than take initiative." Universities operate within a larger education system from primary to secondary education that still emphasise rote-learning as a way to educating. This requires a structural change to pedagogy and introducing more critical and analytical education tools.

There are few examples of this happening. Through a public-private partnership, BRAC (formerly Bangladesh Rural Advancement Committee) developed a programme to train and enhance the knowledge of 350 teachers in rural secondary schools. Teachers were taught innovative teaching methods through the use of multimedia and games, and encouraged to develop new curriculum that encourages teamwork. At the university-level, Bangladesh's Shanto-Mariam University of Creative Technology (SMUCT), South Asia's first design university, has an ethos to deliver both creative and technological education by equipping students with a strong foundation in transformable managerial skills that prepares them for the rigors of professional life. With a Design, Development and Display Centre for creative education, textile lab facilities, a furniture workshop and career counseling services, SMUCT creates a supportive and stimulating environment for its students to experiment with.

Changing the process

Within universities, quality of education is sorely lacking. "There is no change in teacher training, pedagogy, curriculum, infrastructure, content, other input parameters to help in increasing employability," says Ajay Goel, Wadhwani Foundation, Skills Development Network, India.

First, curriculum must be updated more regularly, depending on labour market needs. In Nepal, universities only review or renew their curriculums once every five years, making them unresponsive to labour market changes and graduates unemployable, says a senior personnel at Nepal's University Grants Commission. Similarly in other South Asian countries, experts agree that public universities, in particular, are not adapting to labour needs. This involves a change in both content and pedagogy.

In Afghanistan, the government recognises this urgent need. In 2011, the Ministry of Higher Education appointed a committee of university professors and other stakeholders to review the curriculum and produce a guidebook to change curriculum based on labour market needs. This requires university departments to revise key goals, while considering employment opportunities for graduates. The outcome of these policy changes will take time to show effect, but steps are in the right direction.

Policy statements are plenty, and papers with broad goals may be encouraging but they need to followed through with change. Dr Allah Malik, Managing Director and CEO, National Education Foundation, and Director General, Academy for Educational Planning and Management at the Ministry of Education, Training and Standards in Higher Education, explains that the Pakistan's National Education Policy in 2009 emphasised a demand-driven approach to education, but this has not been put into practice. Policies are often missing implementation metrics and clear strategies.

The private sector is making progress where universities and policymakers fall behind. India's IT industry body National Association of Software and Services Companies (Nasscom) set up the Sector Skills Council NASSCOM and launched the Foundation Skills in Integrated Product Development (FSIPD) programme at 15 Indian colleges. The programme outlines curriculum for courseware and incorporates an internship programme that will help make students more employable.

Second, investment needs to go into training teachers. To make education relevant, professors must not only be qualified, but should also have real-world experience when teaching some courses. Musharrof Hossain from Bangladesh Society for Human Resources Management explains that in some classes, teaching just the theory is of little value. "In a Human Resource course class, for example, when you teach from the book, students only learn the theory. When you bring a professional like Head of HR from the market, he teaches both content and shares what is going on in the market. This way, students gain theoretical knowledge and practical knowledge." However, there is often pushback from professors when non-PhD lecturers, despite having relevant real world experience, step into their theory-laden territory.

Third, when more university education is being delivered by private providers, there needs to be stronger accreditation frameworks, regulation and monitoring. Universities often sit under the responsibility of the country's University Grants Commission or Higher Education Commission. These bodies, in reality, lack the capacity or knowhow of implementing appropriate monitoring standards. In India, for example, only 161 universities and 4,371 colleges had been accredited as of March 2011.

The output: mind the gap

Once the "basics are right", referring to quality of education within universities, Amit Garga, partner at Parthenon Group, says then there is a need for greater connectivity with industry needs. Dr Gazi from University of Malaya echoes a similar sentiment: "You need to make sure the private sector is involved, together with universities and the government, to determine what type of graduates you are producing. Right now, everyone is operating in isolation and they blame each other for the labour market not getting quality graduates."

There is lack of planning in South Asian countries – policymakers are often not actively looking at how many secondary-level graduates, and how many tertiary-level graduates in various degree programmes are needed for the labour market. However, some changes are happening. In Bangladesh, Musharrof Hossain explains that the government is starting to work with various chambers of commerce and the ILO to develop better labour market information. In other countries, there are smaller, disparate policies to increase graduate employment, without fixing other parts of the graduate unemployment equation. In Nepal, for example, where jobs for graduates were scarce, the government introduced a scheme to provide collateral-free loans of up to Rp200,000 (US$2,000) to university graduates in a bid to encourage self-employment and a culture of entrepreneurship.

Besides policy changes, Professor Rakesh Basant says private sector firms need to transform as well: "Companies have to experiment at creating training modules and employees must have basic know-how and be willing to adapt quickly. That makes both sides job-ready and less susceptible to industry cycles."

Strategic transformation: lessons from others

A systemic change is needed, but developing countries have limited resources and a long list of priorities. The onus, however, should not be on the government alone. The experience of other countries show that a diversified range of policy levers exercised within a tripartite collaboration between policymakers, universities and employers can help drive effective change:

1. Improve quality at local universities

- Incentivise quality private universities: In 1990, the South Korean government introduced subsidies such as public subsidy tax and tax exemptions for private universities on a competitive basis. This raised quality standards and by 2010, 15 of 20 top South Korean universities were private universities.
- Allow quality foreign universities to operate: India, Nepal and Sri Lanka have long been debating allowing foreign universities to operate as educational institutions. There are many examples of success stories, including France's INSEAD and Booth School of Business (University of Chicago) in Singapore and University of Nottingham (UK) in China and Malaysia. Foreign universities encourage capacity building, allow for knowledge transfer and encourage competition with local universities.
- Make curriculum relevant: At Suranaree University of Technology in Thailand, co-operative education, where a student works full-time as an employee on a worksite as part of the degree programme, is firmly embedded in the undergraduate curriculum. A student is expected to take two trimesters of co-operative study, resulting in 12 trimester credits. This has made students more job-ready and university curriculum quickly adaptable to global requirements.

2. Transitions between classroom and work

- Encourage industry linkages: In 1991, the Polish government set up the State Committee for Scientific research (KNB) to support programmes that encourage university-industry linkages. Since then, applied research projects are equally funded between the KNB and industry.

- Incentives for employment: The Chinese government released a series of policies to tackle unemployment at a fundamental level, such as reviewing the examination system and improving quality of education in university classrooms. In tandem with this, the State Council pledged RMB 42bn to create job opportunities for graduates such as teaching in remote and disadvantaged areas. It also provided loan incentives to small or private companies to hire graduates. These policies increased graduate employment rate from 70% in 2008 to 87% in 2009.
- Establish networks for cooperation: In Morocco, the Pôles de Compétences Qualité brings together a network of technology and science universities and the country's metallurgic, mechanic and electrical. The objective is not to generate resources, but to train young scientists and technicians in a real work environment.

An education ecosystem with a central focus on employability skills

The UK government, through various agencies, have a number of policies that facilitate graduate employment. The importance of employability skills in higher education was first highlighted in the 1997 Dearing report. The report identified key skills that were relevant throughout life, and not just in employment, which later made these 'employability skills' a central aim within the UK higher education system. This also led to the creation of government departments specifically dedicated to bridging the gap between university and employment, including the Department for Innovation, Universities and Skills (DIUS), which works with the UK Commission for Employment and Skills (UKCES) and Sector Skills Councils (SSCs). The UKCES is a an employer-led advice panel that provides guidance for all educational levels, and the SSC, in particular, aims to build a skills system driven by employer demand. This has led UK universities to introduce mandatory internships, reforming curriculum to create lifelong skills and publishing employability surveys of its students.

Focus on all level of skills

The quality and quantity of university graduates is important to ensure workforce competitiveness. But as much as these countries need professionals, managers and other highly skilled workers, there is also a need for low and medium skilled workers. The concept of vocational and technical education is starting to gain momentum with various skills development policies focused on upskilling workers. In Afghanistan, starting from March 2014, high school students from Grade 10 will be divided into three areas of studies: social sciences, natural sciences, technical vocational sciences.

India has one of the most ambitious plans here. The Ministry for Labour and Employment published a National Skills Development Policy in 2009, with a target of skilling 500m people by 2022. One of the outcomes is a similar push for higher enrolment in the school system from Grades 9-12, adding vocational education as a core part of school curriculum. "By funding about 200 such colleges, the government is taking significant steps to demonstrate its commitment to upskilling graduates. Hopefully in the future, we will also see an offering of shorter 2-year programmes integrated into higher education at the university level as credits to a Bachelor in vocational education," says Ajay Goel, Wadhwani Foundation, Skills Development Network, India

It's a new world

Amidst all the change that needs to happen in the way of policy change and education programme delivery in South Asia, international labour markets are changing. In 2012, according to a UK survey, 10 to 12 jobs student demanded hadn't been invented in 2006. Such changes will continue to happen, says, Saad Rizvi, Executive Director of Efficacy at Pearson, especially as new technologies such as 3D printing and driverless cars change how we do business. "In response to this, we need to create people who have generalised skills that can be applied everywhere. There is a need for skills with both breadth and depth."

It is estimated that by 2020 the world will have a shortage of 47m working people while India alone will have a surplus of 56m people.[8] South Asia's demographic surplus will be key in meeting the labour needs both within the region and beyond, but only if workers have the right education and training.

[8] Boston Consulting Group.

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