SECTOR ASSESSMENT (SUMMARY): EDUCATION

1. This summary is based on the full assessment posted on the Asian Development Bank (ADB) website.\(^1\) The full assessment includes references to sources. Viet Nam’s higher education sector is complex, and there is no regular collection of statistics covering the whole. The latest figures and indicators may be up to 5 years old, and may vary between sources. The problem tree attached is the same as in the project concept paper.

A. Economy and Demography

2. The gross national income per capita in Viet Nam in 2009 was $1,010, ranking it 172\(^{nd}\) in the World Bank ranking of countries. Viet Nam’s rate of gross domestic product growth has been within the 5%–8% range in recent years as a result of economic liberalization and investment, which has attracted labor from agriculture into industry and services. Inflation is high—in the 7%–8% range. The dong has depreciated significantly.

3. So far, foreign investors have focused on labor-intensive industries. Viet Nam recognizes that to sustain its growth it needs to move up the value chain. To do that, it needs to improve the skills of its workforce and develop technology in areas of comparative advantage. In relation to people highly qualified in science and technology, the Government of Viet Nam’s Science and Technology Strategy for 2010\(^2\) recognizes the need to promote competitive capacity, and identifies priority themes for S&T development related to Viet Nam’s socioeconomic needs. Foreign direct investors need to be assured of a local supply of high-level technical and scientific skills if they are to commit to investment in high technology in Viet Nam. Viet Nam is a young country with a quarter of its people aged 14 or under, and birth cohorts approaching 1.5 million. Meeting the educational demands of such large numbers of young people represents a strong challenge for the Vietnamese economy.

B. The Higher Education Sector

4. In 2009, there were 376 higher education and research institutions in Viet Nam. They include research institutes responsible to the Ministry of Science and Technology (MOST); multidisciplinary universities responsible to the Ministry of Education and Training (MOET) or, in the case of provincial universities, the local people’s committee; universities responsible to the corresponding ministry (e.g., university of construction or agriculture); and junior colleges mostly responsible to provinces. Standard college courses are 3 years, while bachelor courses at universities are usually 4 years.

5. The sector has grown significantly since the mid-1980s (Table 1). However, it needs to grow further to meet the demand from young Vietnamese for higher education. In 2005 Viet Nam’s gross enrolment ratio for tertiary education was 16%, compared with 32% for Malaysia and 43% for Thailand. The government plans to increase the number of higher education students from about 200 per 10,000 population in 2010 to 450 by 2020. Half or more of the higher education students in Viet Nam are found in two fields of study: (i) education; and (ii) economics, business, and law. A survey in 2005 found 4% studying natural sciences and 16% studying technology. These low percentages may reflect the higher costs of these subjects, both for providers and students, but appear out of line with Viet Nam’s development needs.

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\(^1\) http://www.adb.org/Documents/Reports/Consultant/VIE/42079/42079-01-vie-tacr-03.pdf
<table>
<thead>
<tr>
<th>Item</th>
<th>1987</th>
<th>1997</th>
<th>2009</th>
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<tr>
<td>No. of universities and colleges</td>
<td>101</td>
<td>126</td>
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<tr>
<td>No. of undergraduate students</td>
<td>133,136</td>
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<td>No. of graduates</td>
<td>19,900</td>
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<td>No. of academic staff</td>
<td>20,172</td>
<td>20,112</td>
<td>61,190</td>
</tr>
</tbody>
</table>

Source: Ministry of Education and Training Data.

6. The curriculum in public universities in Viet Nam has to follow frameworks set by the MOET. These frameworks are slow to change. Combined with meager resourcing, they encourage “chalk and talk” teaching to large groups using subject-based texts, which may have little relevance to emerging labor market needs. Viet Nam is experimenting with foreign curricula and teaching methods through the Advanced Training Programs supported by the World Bank. The number of graduates in Viet Nam is growing rapidly, but skills and creativity often fall short of what employers in growth industries require.

7. Research. Traditionally, Vietnamese universities have focused mainly on teaching; research has been conducted in government institutes, mainly under the aegis of MOST. Since 2005, the Higher Education Reform Agenda (HERA) has set the objective of transforming some universities into major scientific centers. However, the publication output of Viet Nam’s leading universities is just a small fraction of that of their peers in neighboring countries such as Thailand. Vietnamese research appears stronger in fields such as mathematics and theoretical physics, which do not need big investment in laboratories. The proportion of academic staff actively engaged in research is low. Postgraduate students account for just 1.9% of the student body (Table 1). Viet Nam relies substantially on foreign scholarships (funded by both the government and development partners) for research training. The concept of a university that integrates teaching and research is not yet firmly established in Viet Nam.

8. Sector financing. There are no regular statistics for the income and expenditure of higher education institutions (HEIs). Information is gleaned from state planning papers and an ad hoc survey conducted in 2005. In the 2009 state budget, expenditure on education and training was set at D81,709 billion (16.6% of the whole state budget), and on science and technology at D7,867 billion. Expenditure on higher education (funded from the state budget and fees) was set at D10,723 billion. Spread among the 1,389,000 students in public universities, that equals $406 per student. Leading universities may get above-average state subsidy, and boost their income through other sources, including training for employers, “irregular” students, and government research grants. The Hanoi University of Technology, for example, seems to have attained a total income from all sources of about $1,000 per student in recent years. Even allowing for Viet Nam’s low price level, expenditure on higher education remains very low by international standards.

9. Since the late 1980s, the government has moderated the cost of expansion by reducing resources per student; the number of undergraduate students per staff member (student–staff ratio) increased from 6.6 in 1987 to 28.1 in 2009 (Table 2). For the future, the government plans to diversify funding sources. It is encouraging the growth of nonpublic HEIs. In 2009, the government made proposals to increase student fees, which had been frozen for some years at about $10 per month, and to differentiate them by subject; by 2014 the fee for science and technology would have reached $34 per month. These proposals have had to be scaled back but the policy setting still stands. Funding from research contracts was about 5% of university income in 2005. The government’s ambitious objective is to increase it to 25% by 2025.
10. **Sector performance.** Since the “doi moi” reforms began in 1986, Viet Nam has improvised to expand the higher education sector rapidly.\(^3\) The wage premium that university graduates command relative to other workers has widened during this expansion, indicating that employers value their skills. This is a considerable achievement considering Viet Nam’s limited resources. However a 2008 World Bank study concluded that:

Low R&D capacity, increasing evidence of skill bottlenecks and the still inequitable distribution of higher education opportunities, combined with broad institutional and financing constraints, suggest that the higher education system does not yet have the tools it needs to adapt to the growing and changing needs of an increasingly dynamic economy.\(^4\)

11. That assessment is similar to that offered by the government in the preamble to the HERA and again in early 2010 in directive 296, and it still seems valid.

12. There are no good data on completion rates and first destination of university graduates. While the evidence on pay is positive, employers consistently report that graduates lack “soft skills” and creativity.\(^5\) In 2009 and 2010, the National Assembly registered concern that the expansion of higher education has not been accompanied by sufficient measures to safeguard and enhance quality. The Prime Minister underscored that point in directive 296.

C. **Key Issues Constraining Sector Performance**

1. **Quality of Teaching**

13. University lecturers are underqualified. In 2007–2008 about 10% held a doctorate degree, about the same percent as in 1987, though the number of doctors had risen considerably. About 36% had a masters degree. There is an urgent need to increase the number of academics with research training, from both domestic and foreign sources.

14. The increase in the student–staff ratio has increased the burden on lecturers. Basic pay is low, and the incentive to increase it by teaching extra hours is strong. The time for scholarship, teaching preparation, and research is squeezed. The MOET curriculum frameworks constrain the ability to offer fresh and relevant curricula, as do shortages of laboratory facilities and funding for supplies in science and technology. Teaching is also too theoretical.

2. **Constraints on Institutional Management**

15. Central control of the operation of public universities is pervasive. Apart from the curriculum frameworks already mentioned, the government regulates intake numbers for regular students and staff numbers through the budget process. University staff are public servants and are remunerated under public service salary law, though above-scale payments are permitted. The government has some controls over the appointment of rectors, and over staff promotions. The presence of all these controls over a long period of time has reduced the capacity to

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\(^3\) Doi moi is the name given to the economic reforms initiated in Vietnam in 1986 for a “socialist-oriented market economy”


\(^5\) Soft Skills are behavioral competencies that include communication skills, conflict resolution and negotiation, personal effectiveness, creative problem solving, strategic thinking and team building skills.
innovate and to respond to change in many universities. A few universities that no longer rely on regular state subsidies because of their own resources have more freedom.

3. **Separation of Teaching and Research**

16. It is not unusual to have separate ministries for higher education and for science, and for governments to maintain some free-standing research institutes alongside research-oriented universities. In Viet Nam, the MOET and MOST report to the same deputy prime minister. However, some research institutes report directly to the Prime Minister’s department. In practice, coordination between the MOET and MOST is limited. Research institutes and universities lead parallel lives, in which neither is properly resourced for their research role. The national policy and priorities for science and technology impinge on universities through ad hoc initiatives, as recently with nuclear energy. There seems no systematic way of applying priorities across the research institute-university divide. Academics and researchers recognize the problems. The Vietnam Academy of Science and Technology (VAST) originated the proposal for the University of Science and Technology of Hanoi (USTH) as a means of raising standards in research training. For the government, the challenge of interacting with, and funding, integrated teaching and research institutions lies ahead.

4. **Fragmentation of the Sector**

17. Among the 376 universities and colleges, the MOET governs 54, other ministries and sectors govern 116, people’s committees control 125, and 81 are nonpublic institutions. In theory the whole sector works to a common agenda set out in the HERA. Government controls cited below apply whichever ministry is the “owner” of the HEI. But the mechanisms to coordinate higher education and related policies on a whole-of-government basis do not appear to be in place. The HERA commitment to abolish the mechanism of managing ministries and replace it with a common state owner of HEIs is not yet implemented.

18. Within an overarching policy framework, pluralism and local initiative could retain a place, as they do in higher education sector management in other countries. But Viet Nam needs mechanisms to drive forward its challenging higher education sector agenda, and a sectorwide basis of data and indicators to enable policy makers to assess progress and institutions to benchmark their performance. It needs to be able to consider multidisciplinary and monotechnic approaches on their merits, rather than on the basis of historic patterns of ownership. The MOET has not up to now been in a position to do these things. Through directive 296 in February 2010, the prime minister assigned the MOET to review the HERA targets for the development of the higher education sector to 2020, and to coordinate with other ministries to improve the management of the sector.

D. **Impact of the University of Science and Technology of Ha Noi (New Model University) Project on Sector Issues**

19. The World Bank is Viet Nam’s principal development partner in reform of the higher education sector. Through the first and second Higher Education Projects, and now through the Higher Education Development Policy Program, the World Bank has worked with the MOET on many of the issues mentioned. 

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20. One strand of the HERA is to develop a small number of research universities of international standard through concentrated investment and mobilizing foreign resources. The ADB and World Bank jointly agreed with the government in 2008 to prepare proposals for up to four new model universities (NMUs) with an orientation toward science and technology. The World Bank loan for the Vietnamese–German University near Ho Chi Minh City was approved in June 2010. USTH will have a French international partner. The rationale for NMUs needs to be considered both through the value of the institutions in their own right and for their potential contribution to sector reform.

21. The NMUs will have buildings and equipment of international standard. In their early years of operation, international partners will assist them to develop international accredited degree programs, open up research in fields relevant to Viet Nam, and engage with industry partners. The NMUs will offer facilities where Vietnamese academics, many of them currently working abroad, can pursue research effectively. They will provide a domestic source of highly trained scientists and technologists, and a bridgehead for the improvement of research training in Viet Nam.

22. NMUs will operate within a special policy and regulatory framework. The framework will guarantee autonomy and accountability through charters agreed with the international partners. It will include mechanisms for the NMUs to receive a level of operational funding sufficient for them to make good use of the facilities procured through the ADB and World Bank loans, and to achieve international standards.

23. In addition to the cost of repaying the loans, NMUs will have unit running costs at least four times the level currently found in leading Vietnamese universities. Other developing countries have opted to advance a small subset of their universities early to developed country standard, while recognizing the need for the higher education sector as a whole to progress more gradually; an example of this is the 985 Program in the People’s Republic of China. The government acknowledges the same principle of selectivity in calling the NMUs “universities of excellence.”

24. While the resourcing level of the NMUs could not be quickly replicated in other leading Vietnamese universities, there is much in the NMU concept from which they could benefit. They too have been pressing for greater freedom to manage their own affairs, and to innovate in the curriculum and teaching methods. A local model for what can be done would assist them. The NMUs can also be a source of Vietnamese-trained leading academics to refresh science and technology faculties in other universities.

25. The government has given ADB a set of assurances that the policy and regulatory framework will be implemented as intended. These include assurances that the charter now being negotiated with the French international partner will be issued immediately after effectiveness and reviewed by December 2012, and that the special financial mechanism for operational funding will be developed with technical assistance from ADB and also put in place by December 2012.

26. In the longer term, the USTH will need to expand its capacity from 5,000 students to 10,000 or more if it is to attain world class. ADB will consider in the early 2020s whether to support such development.
PROBLEM TREE

Reduced economic growth

Continued skill mismatches

Increased graduate unemployment

Continuing skill mismatches

Reduced productivity

Absence of science and technology focused university delivering high quality and industry-relevant research

Poor quality control in Vietnamese universities

Teacher competencies are poor

Lack of teacher development programs teaching methods

Lack of teaching and learning materials

Poor quality of science and technology teaching in universities

University curricula and programs are outdated

Central control over development and approval of curriculum

Lack of information upon which to base university operation

Absence and poor quality of science and technology research in universities

Weak incentives and capacity to deliver science and technology teaching and research

Absence of performance-based research funding system

Limited funding for research from government and private sector sources

Limited academic infrastructure, including laboratories, computers, and workshops

Lack of tenure track system

Small proportion of academic staff hold PhDs

Cumbersome procedure for promotions

Poor pay and conditions of university academic staff

Central control over development and approval of curriculum

Limited academic infrastructure, including laboratories, computers, and workshops

Lack of tenure track system

Poor quality of science and technology teaching in universities

University curricula and programs are outdated

Central control over development and approval of curriculum

Limited academic infrastructure, including laboratories, computers, and workshops

Lack of tenure track system

Weak university governance

Political interference in university management and governance

Overly centralized management and governance of universities

Lack of information upon which to base university operation

Weak university–industry links

Lack of private sector involvement in curriculum/program design

Lack of information on skill needs of industry

Poor quality of education assurance system

Absence of higher education quality assurance system

Absence of teacher competencies being poor

Lack of teacher development programs teaching methods

Lack of teaching and learning materials

PhD = doctor of philosophy