

# 196 The Research Landscape and the Development of Research Assessment Framework in Vietnam

Alastair Morrison<sup>1</sup>, Raymond Lee<sup>2</sup>, Thuy Thi Ngoc Bui<sup>3</sup>, Milena Bobeva<sup>1</sup>, Nga Nguyen<sup>4</sup>, Dinh Tien Bui<sup>5</sup>

<sup>1</sup>Bournemouth University, Bournemouth, United Kingdom. <sup>2</sup>University of Portsmouth, Portsmouth, United Kingdom.

<sup>3</sup>Hanoi University of Science and Technology, Hanoi, Vietnam. <sup>4</sup>Hanoi University of Mining and Geology, Hanoi, Vietnam. <sup>5</sup>Ho Chi Minh University of Industry, Ho Chi Minh City, Vietnam

## Research Domains

International contexts and perspectives (ICP)

## Abstract

Excellence in research is vital to the socio-economic development in Vietnam. The purpose of this study is to understand the current research environment in Vietnamese universities and to seek the views of academic leaders about an assessment framework which will promote research development. Sixty-six academic leaders responded to a questionnaire designed for this study. It is shown that the financial investment of research is very limited in universities. The research environment may be hampered by the small number of PhD students. There are also often no post-doc appointments who constitute a major engine driving research. Academic leaders believe that outputs, research environment and socioeconomic impacts should be assessed, although the use of impact factors should be discouraged. Moreover, it is suggested that emphasis should be placed on assessing and developing the research environment to support long-term growth.

## Full paper

### Introduction

Excellence in research is vital to the socio-economic development (Meek et al 2009) and the aspiration of Vietnam to become an upper middle-income country by 2035. Vietnam's ISI-indexed (International Scientific Indexing) journal articles have increased more than 10-fold from 1986 to 2015 (Nguyen et al 2011). However, its level of activity is still low compared to other regional peers (World Bank 2020). The total number of Vietnam's ISI-indexed articles was only 28% of the outputs of Singapore and Malaysia. Moreover, Vietnam's public funding allocation to research has increased recently but remains low, representing only 0.53 percent of GDP in 2019 (UNESCO 2022). This refers to funding allocated to all research institutions and not only the universities. The exact level of funding in universities is unclear.

There is currently no national framework for assessing research in Vietnam. Universities tend to carry out their own internal assessment using criteria which are not consistent across the sector. However, many countries have developed national frameworks, e.g. the UK Research Excellence Framework (UKRI 2021). These assessment tools can help develop strategies in building capability, informing funding allocation, monitoring progress, and enhancing the socio-economic impact of research and knowledge transfer (Sivertsen 2017).

An assessment framework will need to be fit-for-purpose for the current state of research development and supported by the academics to be assessed if it was to be developed and implemented effectively in Vietnam. The purpose of this study was therefore to understand the current research environment in Vietnamese universities and to seek the views of academic leaders about research assessment,

### Method

A questionnaire was especially developed for the purpose of this study. Invitations were sent to all universities which are under the management of Ministry of Education and Training (MOET), or accredited by agencies recognised by MOET. Academic leaders (defined as dean/head/director of faculty/school/research institutes) were requested to complete the questionnaire.

The questionnaire had two sections. The first section included questions related to the research environment of the academic units of the respondents. In the second section, the views of the respondents in designing a future assessment system were sought.

## Results

Sixty-six academic leaders responded to the questionnaire (>50% response rate). Forty-one of them were from northern Vietnam and the rest from either central or southern Vietnam. 64% of the respondents were from the science and engineering disciplines, 20% from economic and social sciences, and the remaining from a variety of other disciplines.

It was revealed that the average annual research expenditure of 54% of the academic units surveyed was less than 1 million Vietnamese Dong (approximately £34,000). 49% of the academic units of the respondents had less than 5 PhD students and 78% did not have any post-doc researcher appointments. Most respondents (>80%) would use metrics such as impact factors as well as peer review for assessing the quality of research. They would also assess the research environment and the socioeconomic impacts of research.

## Discussion and Conclusion

This study provides new insights into the current state of research development of Vietnamese universities because previous data were drawn from all research institutions and not focused on universities only. Our findings corroborate with those of previous reports and it is clear that the financial investment of research is very limited in universities. The research environment may be hampered by the small number of PhD students. There are often no post-doc appointments who are highly skilled scientists and a major engine driving research (Powell 2015).

Most respondents indicated that they would assess outputs, research environment and socioeconomic impacts, as in the case of the UK REF. However, the use of impact factors in assessing output should be discouraged as recommended by the San Francisco Declaration on Research Assessment (<http://www.ascb.org/dora>), because it does not reflect the quality of research outputs (Lutz et al 2016). Moreover, as most Vietnamese universities are in their early stage of research development, it may be argued that more emphasis should be placed on assessing the research environment to support long-term growth.

A limitation of the current study is that the data obtained are largely representing the universities in northern Vietnam and the opinions of the academics from the science and engineering disciplines.

It is concluded that there is a strong need to develop a fit-for-purpose research assessment framework in Vietnam. This study has provided useful information to support such development.

## References

Lutz B. and Werner M. (2016) The journal Impact Factor and alternative metrics. *EMBO Reports* 17:1094-1097.

Meek V. L. and Davies D. (2009). Policy Dynamics in Higher Education and Research: Concepts and Observations. In *Higher Education, Research, and Innovation: Changing Dynamics*. Report on the UNESCO Forum on Higher Education, Research and Knowledge 2001–2009. Eds. Meek VL, Teichler U, and Kearney M L, pp 41–82. Kassel: International Centre for Higher Education Research Kassel.

Nguyen T. V. and Pham L.T.(2011). Scientific output and its relationship to knowledge economy: An analysis of ASEAN countries. *Scientometrics*, 89(1), 107–117. <https://doi.org/10.1007/s11192-011-0446-2>.

Powell, K. (2015) 'The future of the postdoc', *Nature*, 520(7546), 144+, available: <https://link.gale.com/apps/doc/A409238397/AONE?u=anon~319fa1fd&sid=googleScholar&xid=57b5ebf4> [accessed 14 Jun 2023].

Sivertsen, G. (2017) Unique, but still best practice? The Research Excellence Framework (REF) from an international perspective. *Palgrave Commun* 3, 17078. <https://doi.org/10.1057/palcomms.2017.78>

UK Research and Innovation (2021) Research Excellence Framework <https://www.ref.ac.uk/> (Accessed: July 2022)

UNESCO Institute for Statistics. (2022). Vietnam: Science, technology, and innovation. Retrieved from [http://data.uis.unesco.org/Index.aspx?DataSetCode=SCN\\_DS&popupcustomise=true](http://data.uis.unesco.org/Index.aspx?DataSetCode=SCN_DS&popupcustomise=true) (Accessed: July 2022)

World Bank (2020). Improving the Performance of Higher Education in Vietnam: Strategic Priorities and Policy Options. <https://elibrary.worldbank.org/doi/abs/10.1596/33681> (Accessed: October 2021)

*This study is supported by the UK-Viet Nam Partnerships for Quality and Internationalisation Grant from the British Council's Going Global Partnerships programme.*