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## THE QUALITY ASSURANCE IN RESEARCH OF HIGHER EDUCATION INSTITUTIONS IN OMAN

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### ABSTRACT

This research analysed the quality assurance in research planning and management of selected HEIs in Oman. It used document analysis of HEIs practices using OAAA Quality Audit reports from 2011 to 2016 through thematic coding and categorising. It aims to identify best practices and gaps in the same areas and report it in a collective and summative manner; and assessed the current situation in the area of research and consultancy based on the inferences and extrapolations. This paper discussed the strategic actions as stated in the quality audit reports and provided recommendations to better plan, implement, and manage research activities.

The study revealed that there is a significantly high number of recommendations in colleges especially in the key area of research planning and management, thus indicates that research in colleges may still be underdeveloped. Conversely, universities in Oman have reached a considerable degree of quality in their research activities especially in research planning and management, research funding schemes, professional development and research-teaching nexus

**Key Words:** quality assurance, research management, HEIs, document analysis

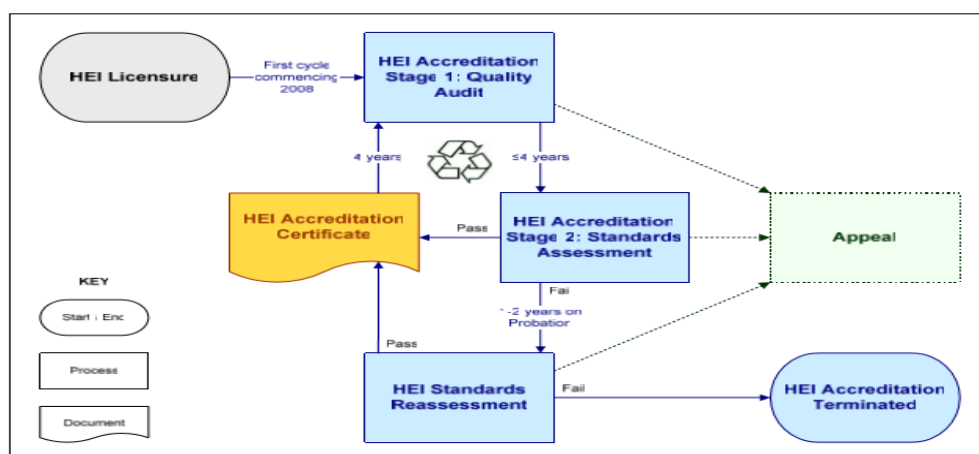
### 1. Introduction

The Sultanate of Oman started its significant transformation in 1970s upon the enthronement of His Majesty Sultan Qaboos bin Said. All sectors of its society including the higher education underwent unprecedented growth, improvements, and reforms over the last decades. The first public university, Sultan Qaboos University, was established in 1986 and eight (8) years thereafter paved the way for the opening of private colleges to accommodate the growing number of students seeking higher education studies locally. These colleges, university colleges and universities are across the region but geographically concentrated within Muscat governorate.

The higher education system in Oman is fairly young as compared with its GCC counterparts. Majority of the HEIs in the Sultanate are affiliated with overseas partner universities that provide various internationally recognized academic and specialized programmes that are made available to Omani students and residents. Regardless of any external partnership, HEIs in Oman are responsible to ensure quality and relevance of its programmes and services. Royal Decree No. 74/2001 was released in 2001 directing an accrediting agency to instil and promote quality culture in Higher Education Institutions (HEIs). Oman Academic Accreditation Authority (OAAA) formerly Oman Accreditation Council (OAC) was established in response to this decree. It is an independent accrediting agency that reports to the Education Council of Oman. Its mandate is to regulate the quality of higher education in order to meet international standards and encourage HEIs to pursue continuous improvement on their internal quality assurance. Its establishment enables the HEIs to install quality assurance systems and undertake internal and external reviews. It is also responsible to do institutional evaluation and accreditation in order to achieve excellent student learning experiences and improve academic outcomes. In effect, HEIs are able to produce graduates who are global players and agents for social and economic development of the country.

Quality assurance is a vital process that can help improve the quality of higher education. Every HEI is responsible for the promotion of quality assurance and continuous quality improvement to enhance the teacher and students' academic experience (AlKhafaji & Sriram, 2012). There are several methods to assure quality education in academic institutions including quality audit, quality assessment and accreditation (Goodlife & Razvi, 2008). Most high-profile HEIs have established quality assurance processes to maintain quality and ensure continuous improvement in their activities. The quality management system for institutional accreditation in Oman uses quality audit to assist HEIs in the formulation of policies and procedures that supports quality higher education. Moreover, it includes standards assessment to evaluate the effectiveness and appropriateness of HEIs' systems in achieving its mission against institutional standards and/or criteria. The institutional quality assurance is a two-stage process as illustrated in Figure 1. The first stage is the Quality Audit. This is when an HEI conducts a self-study of its own quality assurance, enhancement activities, and completes a portfolio. This serves as an opportunity for an HEI to thoroughly examine areas of its operation. A panel of external examiners verifies this portfolio for completeness and accuracy through various means. This panel produces a Quality Audit Report that presents its findings, including commendations, affirmations and recommendations on the effectiveness of the quality assurance and enhancement activities of the institution against its stated goals and objectives. This report is made public so that stakeholders can have an informed view on the performance of an HEI in providing quality higher education. Having a quality audit facilitates a continuing improvement of quality within an HEI (Quality Audit Manual, 2008). If quality audit is formative in nature, then, the next stage, Standards Assessment is summative in nature. An HEI is assessed to meet the institutional quality standards aligned with its mission and context. An HEI self-assesses itself against the standards and addresses the affirmations and recommendations of its quality audit report. This report then is completed and submitted to OAAA within the 4-year period after

the publication of its quality audit report. Accordingly, an external panel validates the report and produces its own report that contains recommendations of standards which are not met by the HEI. Likewise, it will submit a confidential report to the OAAA Board who then decides whether the HEI has satisfactorily addressed the affirmations and recommendations made by the panel. Finally, OAAA awards “Accredited Provider” status to the HEI which met all the requirements. (Institutional Standards Assessment Manual, 2016). In summary, Quality Audit evaluates the effectiveness of the quality assurance of an HEI against its goals and objectives while Standards Assessment appraises an HEI against the OAAA institutional quality standards.



**Figure 1.** Quality Assurance Framework

(Source: Oman Accreditation Council, 2008)

There must be a culture of excellence in any organisation to ensure business success. In the case of higher educational institutions, quality means excellence in the delivery of teaching, research and community engagement. Research contributes to global knowledge and affords environmental, social and economic benefits and drivers to economic progress and development (Bornmann, 2012). The researches produced by educational institutions are drivers to economic progress and development. HEIs are pressured to provide high academic standards which are relevant and responsive to societal needs. Many governments around the world have recognised research intensive universities as national assets. They are considered as storehouses of knowledge that provides a sense of security when the need arise. For instance, academic institutions can be commissioned by businesses to conduct research and the government can tap technical experts and university researchers to be part of advisory and consultative boards (The Group of Eight, 2013). On this regard, HEIs are encouraged to conduct staff and student research to improve the academic experience, teaching and curriculum as well as positively impact society. The HEIs manifest certain levels of research culture and environment that may or may not work well for them.

## **2. Objectives**

To have a robust research quality assurance, an HEI must have a planned approach to research planning and management that is aligned with its vision, mission, goals and objectives with appropriate research targets. Moreover, an HEI must have firm guidelines and policies, infrastructure and resources to carry out its research activities and proper monitoring and review procedures to ensure the achievement of quality research outcomes and performance.

This research study looks at the quality assurance in research planning and management of selected HEIs in Oman and has the following objectives:

1. Identify best practices and gaps in the same areas and report it in a collective and summative manner;
2. Assess the current situation in the area of research and consultancy based on the inferences and extrapolations; and
3. Discuss the strategic actions as stated in the quality audit reports and provide recommendations to better plan, implement, and manage research activities.

This research hopes to share good practices in the quality assurance systems in Oman especially in the area of research and consultancy.

## **3. Methodology**

This paper gathered secondary data contained in the OAAA quality audit reports of several HEIs in Oman which were published in their website from 2011 to 2016, Quality Audit Manual (QAM) that defines the policies and processes in the conduct of quality audits in HEIs, and Requirements for Oman's System of Quality Assurance (ROSQA) that contains the overall quality assurance framework. Important policies and guidelines were lifted from these documents.

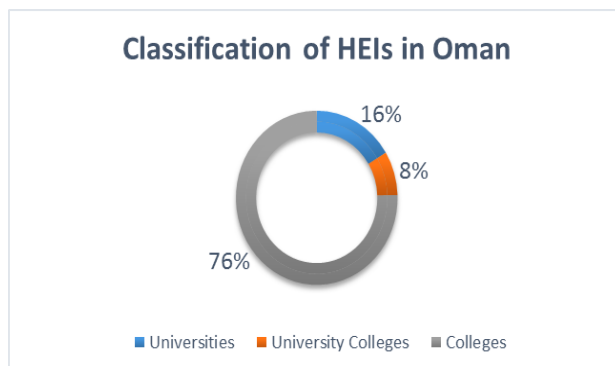
This research used a qualitative analysis process that includes encoding and categorising of the panel of examiners' comments in a spreadsheet using thematic coding and categorising. After which, relevant graphics were generated for further analysis and discussions.

## **4. Findings and Discussion**

HEIs in Oman comprise of a wide range of academic institutions such as universities, university colleges, colleges, community colleges, institutes, academies and the likes. However, the extent of their engagement in research varies depending on their classification and mission. Significantly, the research activities and outputs of an institution determine its classification. An academic institution that is doing more research can be classified higher than those institutions that are low performing in research.

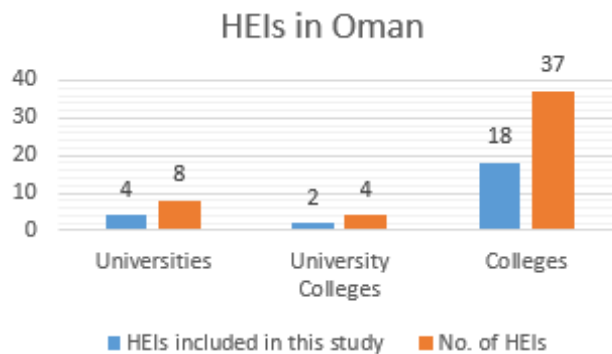
The HEIs in Oman are classified into three (3); namely university, university college and college. First of all, a university is an institution that demonstrates excellence in its core activities: teaching, research and community service. It is expected to have a substantial research component. A university is expected to conduct research in various fields at local, national and international levels as well as organise conferences and collaborates with other HEIs and professional bodies. It must ensure excellent academic and research standards are followed among its faculty and students and must have rigorous mechanisms in place, and substantial research resources and infrastructure. Accordingly, a university college is expected to share similar characteristics of a university in terms of its research and considers research activities in the performance of its core functions. It must have adequate resources and infrastructure to support the research activities and research performance must be of a substantial degree. Lastly, a college is not expected to perform widespread research undertakings but the academic staff members are encouraged to conduct research to update their teaching and keep abreast in their professional field. Teaching and learning is of primary importance for a college and there is less regard for research and publications (ROSQA, 2016).

The HEIs which have undergone institutional reviews with OAAA in the Sultanate comprises 76% of the total HEIs. The composition of HEIs in the Sultanate are mostly colleges and the universities and university colleges comprise of less than a quarter percentage of the total HEIs as shown in Figure 2. It is apparent that the tertiary education system in the country is composed primarily of colleges.



**Figure 2.** Classification of HEIs in Oman (Source: oaaa.gov.om, 2016)

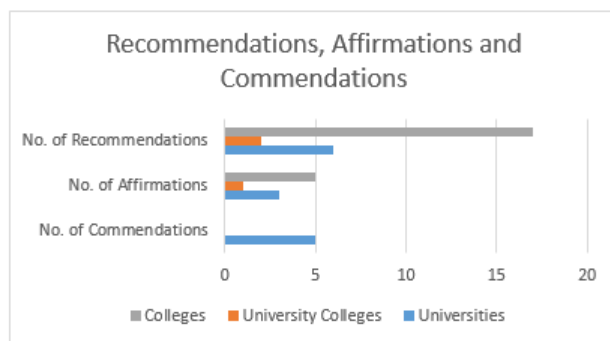
The quality audit accounts for the evaluation on how well an academic institution achieved its educational work in line with its mission. Figure 3 reveals that approximately 50% of the HEIs are included in this study. The quality audit reports are from four (4) universities, two (2) university colleges and 18 colleges totalling 24 HEIs.



**Figure 3.** HEIs in Oman

The scope of OAAA quality audit involves nine (9) areas for which an HEI is responsible to manage and maintain namely: governance and management, student learning by coursework programs, student learning by research programs, staff research and consultancy, industry and community engagement, academic support services, students and student support services, staff and staff support services and general support services and facilities. The identified areas are parts of a general structure for any administration and management of HEIs. An HEI in Oman is expected to carry out a self-study on these areas but some areas may not be applicable for some academic institutions since these areas are not being addressed on its mission statement.

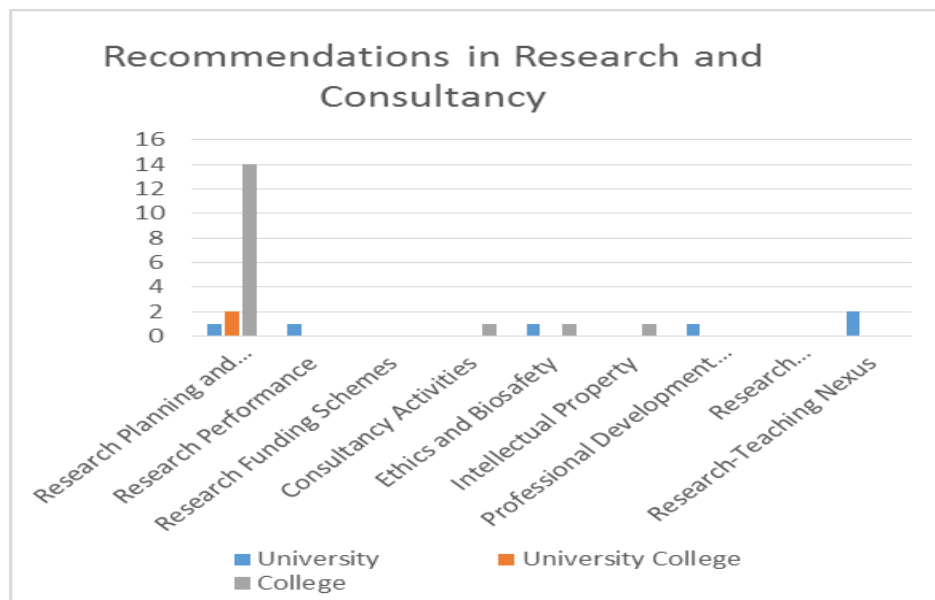
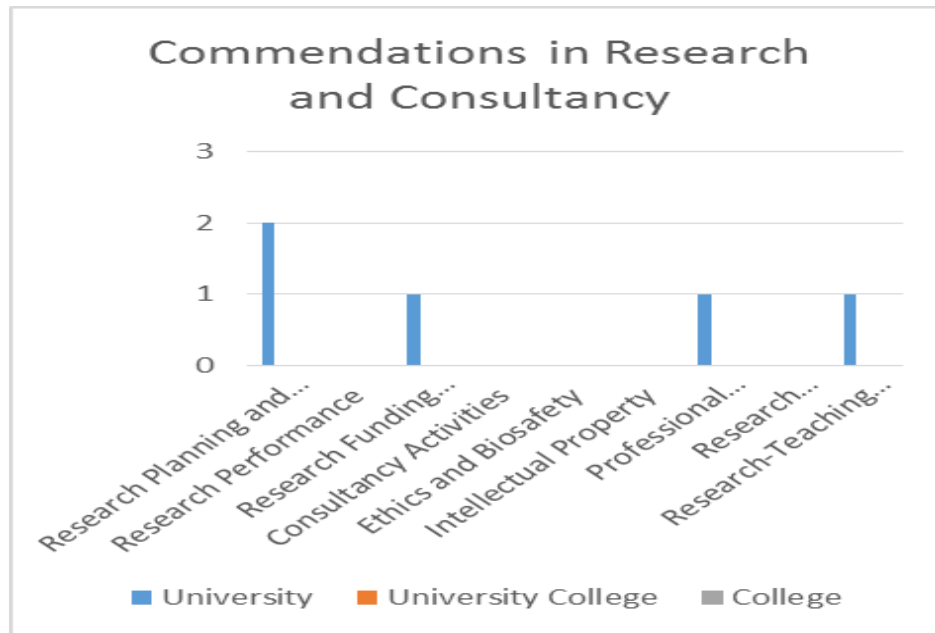
A commendation is a favourable approval and validation of excellent practices and the result meets or exceeds the HEIs goals and objectives and significant improvements are seen. It serves as a benchmark for sharing of best practices to other institutions. However, an affirmation is an assertion of on-going efforts for improvement. On the other hand, a recommendation is a suggestion as to the appropriate course of action for further improvement. Figure 4 identifies the number of commendations, affirmations and recommendations for each HEI classification. It reveals that the number of recommendations is significantly high in colleges as compared to university colleges and universities. This graph discloses that research planning and management in colleges and university colleges may still be underdeveloped. Consequently, the number of affirmations is higher in colleges than the others. This does not however prove anything since affirmations only confirms the continuing efforts of improvement of an HEI. Accordingly, only universities received commendations from the panel of examiners. This may reflect on the effectiveness of research management of universities. This is however expected of universities since research is one of their core functions.



**Figure 4.** Recommendations, Affirmations, and Commendations

An HEI's governance in the area of research comprises of nine (9) criteria namely: the research planning and management criterion that assesses the quality assurance system for planning and managing its research activities whether effective in producing quality research outcomes or not; research performance criterion that assesses quality research outputs over a period of time; research funding schemes criterion that assesses the policies and processes for funding research activities and checks whether an HEI enables quality research outcomes; consultancy activities criterion that assesses the effectiveness of consultancy services provided to external parties; ethics and bio safety criterion that assesses the management of ethical responsibilities and welfare of the research participants; intellectual property that assesses the management of intellectual property right and fair ownership of research work; professional development for research criterion that assesses the effectiveness of the support given by an HEI to its academic staff for them to maximize their research potentials; research commercialisation criterion that assesses the promotion and marketing of HEIs research outputs and consultancy activities; and finally, the research-teaching nexus criterion that assesses the effective incorporation of research into the teaching and learning process. These criteria are used for the effective management of research and consultancy services of an HEI.

Figure 5 identifies the commendations and recommendations that were received by HEIs in the area of research. The graph (on the top) shows that there are four (4) research criteria among two (2) universities that garnered commendations namely research planning and management, research funding schemes, professional development and research-teaching nexus. The graph further discloses that none of the colleges and university colleges received commendations from the panel of examiners. Furthermore, the graph reveals that research planning and management in universities received the highest number of commendation.



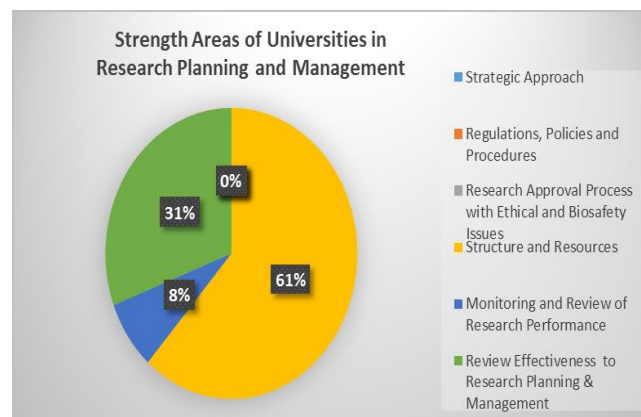
**Figure 5.** Commendations and Recommendations in the area of research and consultancy

On the other hand, the number of recommendations in research planning and management in Colleges is significantly high as evident (in the bottom graph) in Figure 5. The audit reports revealed that most of the colleges assert that their primary focus is teaching not research. This reason was challenged by the panel of examiners who stated that these colleges must see the value and importance of research-teaching nexus. The panel of examiners recommendations on this criterion point to the need to develop a comprehensive research plan to address all relevant aspects of research and consultancy to include:



- identification of Key Performance Indicators (KPIs) and targets;
- development of research strategy and, alignment of the strategic and operational plans in support of the vision and mission; and
- implementation of research activities that are meaningful to the institutional plans.

The colleges must exert a much needed work in this regard if they are committed to improve their research function. The recommendations will pave the way for future planning of its research and consultancy function and provide the direction in achieving their institutional goals.

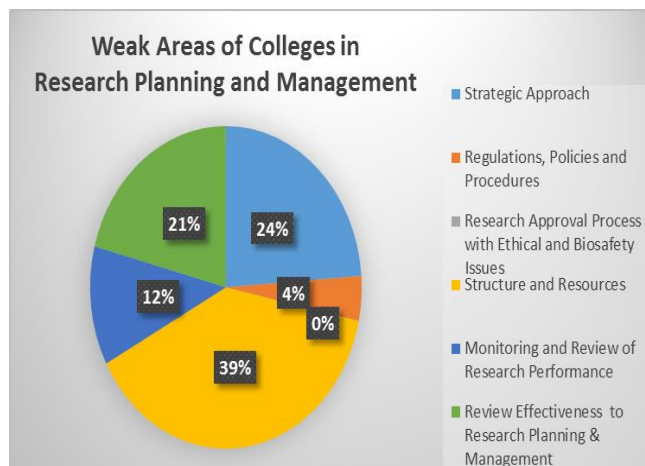


**Figure 6.** Strength areas of Universities in Research Planning and Management

The significant areas and corresponding percentages that are considered strengths of universities in Oman in relation to research planning and management are illustrated in Figure 6. Positive comments were garnered in three (3) criteria namely: Structures and resources (61%), Review effectiveness to research planning and management (31%), and monitoring and review of research performance (8%).

As indicated in the audit reports, these universities promote a research culture that includes recruitment and retention of staff with excellent track record in research and strong professional staff development. They also foster research collaborations and partnerships among institutions, funding agencies, and private enterprises. Furthermore, these universities established research committees that overlook research activities and research centres that facilitate research collaborations. Their academic staff are encouraged to engage in research activities and provided with support through research funding, participation in research conferences, research publications, and access to library and other research resources. In line with their effectiveness, these universities have developed sound research plans and strategic objectives which are aligned to its institutional mission, and formulated policies that led to successful outcomes. Thus,

monitoring and reviewing show a continuous growth in staff research performance. These universities were commended for establishing strong foundation for research and development and implementing research initiatives, infrastructure and support systems in the achievement of its strategic objectives and institutional aims.



**Figure 7.** Weak Areas of Colleges in Research Planning and Management

Figure 7 illustrates the weak areas and corresponding percentage of colleges in Oman in terms of research planning and management. Negative comments were garnered in five (5) criteria namely: Structures and resources (39%), Strategic Approach (24%), Review effectiveness to research planning and management (21%), and monitoring and review of research performance (12%) and Regulations, Policies and Procedures (4%). Interestingly, three (3) criteria identified as weak areas of colleges are acknowledged as strengths by universities.

The quality audit reports specified structure and resources as the major weak area of colleges. This includes heavy staff workload that limits them to engage actively in research and other scholarly activities. The HEI has less collaboration with externals, insufficient funding, limited library and other research resources, less support in staff professional development and research incentives. Furthermore, the research culture in colleges is primarily dependent on staff members' initiative and interest because research is not their key function. As regards to strategic approach, colleges need to develop research plan that includes KPIs and strategies that are aligned with their institutional vision and mission. Key performance indicators must be developed and managed to address quality issues (Cullen, Joyce, Hassall, & Broadbent, 2003). For most colleges, research planning and management is still at an early stage and a comprehensive plan at both strategic and operational levels need to be formulated, implemented and reviewed for effectiveness and sustainability. The research performance of these colleges showed minimal instances of staff engagement in research activities. Teaching function was still the primary focus of every staff member's work. As for research policies, there were no formal research policies and guidelines to promote research activities. Therefore, these colleges were recommended to review their strategic approaches, plans, policies, leadership roles, structures,

and resources in line with their vision and mission in order to develop their staff profile to promote a good culture of research. Lastly, there were eight (8) out of 18 colleges that did not provide an institutional research and consultancy profile. These HEIs share the same weaknesses with the colleges.

## **5. Conclusion and Recommendation**

The continuous demand for quality in education requires HEIs to have quality systems in place. HEIs are expected to check their internal processes and measure their effectiveness and efficiency in delivering quality education because research and scholarly activities affect teaching and learning. The impact of quality evaluation to HEIs will bring more rigid procedures, increased stakeholders' awareness and strengthened research and teaching and learning practices (Baldwin, 1997). Fostering excellence on research is essential for any HEI and must be given due importance because research activities not only positively contribute to academic outcomes and improvement of the curriculum but also addresses economic, social and environmental issues. According to Dr. Mahrooqi, HEIs are also judged by their research performance including ranking and international reputation (Kothaneth, 2016). This research hopes to influence HEIs to pursue higher ranking and increase their reputation as well as positively change their institutional culture in research and consultancy.

The development of a research culture doesn't happen overnight; there must be careful planning and development (Salazar-Clemeña and Almonte-Acosta, 2016). HEIs are expected to develop a rich research culture and implement a comprehensive and effective research plan coupled with strategies and policies to support quality research outcomes in order to advance higher education and socio-economic development. HEIs must develop and/or evaluate the effectiveness of their research strategy that is aligned with their mission, vision and values. They must do so through consultation of various stakeholders and must be able to create a research strategy that has societal relevance. HEIs can expand their research network to allow the participation of more players including the government, industries, civil society, and social entrepreneurs thus enabling more research funding, incentives, and impact. Likewise, HEIs must be able to support research training and professional development of their academic staff and students. The academic community must be able to conduct researches that link to teaching and learning to achieve better learning outcomes. Moreover, HEIs must provide the necessary research infrastructures, services, facilities, and resources to support their research goals. The researches that are produced by HEIs must also be utilised and have commercial value. HEIs must also consider the right governance, monitoring and review to achieve its research targets. In conclusion, research should be carefully planned, implemented, managed, reviewed and improved by HEIs.

## References

- AlKhafaji, S., & Sriram, B. (2012). Higher education institution quality assurance management system-“modelling and design”. *EXCEL International Journal of Multidisciplinary Management Studies*, 2(7), 18-31. Baldwin, G. (1997). Quality Assurance in Australian Higher Education: the case of Monash University. *Quality in Higher Education*, 3(1), 51-61. <http://dx.doi.org/10.1080/1353832960030106>
- Baldwin, G. (1997). Quality Assurance in Australian Higher Education: the case of Monash University. *Quality in Higher Education*, 3(1), 51-61. <http://dx.doi.org/10.1080/1353832960030106>
- Bornmann, L. (2012). What is societal impact of research and how can it be assessed? A literature survey. *Journal of the American Society for Information Science and Technology*, 64(2), 217-233. <http://dx.doi.org/10.1002/asi.22803>
- Cullen, J., Joyce, J., Hassall, T., & Broadbent, M. (2003). Quality in higher education: from monitoring to management. *Quality Assurance in Education*, 11(1). <http://dx.doi.org/10.1108/09684880310462038>
- Goodliffe, T., & Razvi, S. (2008). Quality Audits in Oman: potential drivers of change?. *Oman Quality Network*, 131. Institutional Standards Assessment Manual (ISAM). (2016). 1st ed. [e-book] Muscat: OAAA, p.15. Available at: <http://www.oaaa.gov.om/InstitutePdf/ISAM%20Book%20Final.pdf> [Accessed 12 Sep. 2016].
- Kothaneth, L. (2015). Concern over research funding in the Sultanate. *Oman Daily Observer*. Retrieved from <http://www.pressreader.com/oman/oman-daily-observer/20160424/281479275598720>
- OAAA - Oman Academic Accreditation Authority. (2017). *Oaaa.gov.om*. Retrieved 18 March 2017, from [http://www.oaaa.gov.om/Institution.aspx#Inst\\_Review](http://www.oaaa.gov.om/Institution.aspx#Inst_Review)
- OAAA,. (2008). *Quality Audit Manual* (pp. 10-45). Muscat: OAAA.
- OAAA,. (2016). *Requirements for Oman’s System of Quality Assurance in Higher Education* (pp. 10-19). Muscat: OAAA.
- OAAA,. (2016). *Quality Audit Reports 2011-2016*. Muscat: OAAA.
- Requirements for Oman’s System of Quality Assurance in Higher Education (ROSQA). (2016). 1st ed. [e-book] Muscat: OAAA, p.10-19. Available at: [http://www.oaaa.gov.om/Oman\\_ROSQA%20%28all%20part%20one%29.pdf](http://www.oaaa.gov.om/Oman_ROSQA%20%28all%20part%20one%29.pdf) [Accessed 12 Sep. 2016].

Salazar-Clemeña, R. and Almonte-Acosta, S. (2016). *Developing Research Culture in Philippine Higher Education Institutions: Perspectives of University Faculty*. unesco.org.

The Group of Eight,. (2013). *The role and importance of research intensive universities in the contemporary world* (p. 3-9). Turner: Group of Eight House. Retrieved from <https://go8.edu.au/sites/default/files/docs/role-importanceofresearchunis.pdf>