Major Challenges Facing Higher Education in the Arab World: Research and Development from the Perspective of Oman and Sohar University

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Abstract: Arab states face challenges in many fields and sectors as they seek to move up the value chain and develop a knowledge-based economy. Increased investment in Research & Development (R&D) across all sectors is essential to provide solutions to these challenges and move beyond an oil-based economy. R&D in the Higher Education (HE) sector has an important role to play in solving the challenges facing Arab countries. The Ministry of Higher Education, Research, and Innovation has responsibility in Oman for driving research and innovation through development of national strategies along with funding key aspects of work linked to the Oman Vision 2040. Accordingly, HEIs in Oman, and Sohar University in particular, have established research platforms and centers focused on strategically important fields. In Oman, The Research Council (TRC) works to build research capacity, create a supportive environment for research and provide funding to researchers. The aim is to enhance the quality of HE and build confidence with stakeholders to support innovation across all sectors.

Sohar University allocates about 5% of its annual revenue to support research and development. This approach is intended to build research capacity by supporting University staff to undertake research and knowledge transfer. In addition, through a number of partnerships, Sohar University has contributed to attracting local and Direct Foreign Investment (DFI) as part of its research and development. Examples include: (A) work with WR GRACE (USA) to establish one of the three qualitative testing laboratories of catalysts in the world used in the oil industry; a project that involved an investment value of US $3.5 Million; (B) establishment of a US $13 Million Advanced Manufacturing Research Center in partnership with the Ministry of Commerce, Industry and Investment Promotion (MoCIIP) as part of the Sultanate’s program to implement the diversification of the economy; (C) funding from the British government as part of the UK-GCC research grants for the establishment of a food growing plant to localize advanced food technologies and support food security in Oman. These projects have contributed to the growth of the quality of research and development in Oman and demonstrate the importance of working in partnership across sectors. These projects have increased local value-added; have attracted local and foreign investment, supported innovation and creativity, created jobs for Omanis, and enhanced research and development capabilities.

The investment in these projects has been impactful with the results demonstrating the validity of this partnership approach focused on strategically important challenges. They have also supported Sohar University in obtaining professional accreditation from organizations such as the Oman Academic Accreditation Authority and Engineers Australia. It is anticipated that the impact of this approach will contribute to R&D in the wider Omani context and establish Sohar University as one of the Sultanate’s leading R&D institutions.

Keywords: Research and Development, Innovation and Creativity, Research Platforms, Investment, Efficiency and Productivity, Building Research Capacity.