

# PRESIDENT'S NEWS DIGEST

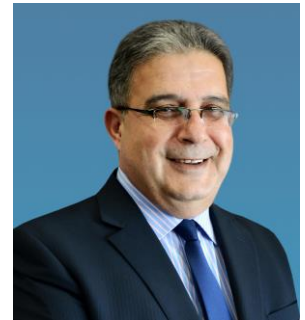
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## MESSAGE FROM THE PRESIDENT

Welcome to the 43rd issue of the 4th volume of the President's News Digest. In this issue of the News Digest, I will address the subject of **“Status of Research in the Arab World”**.



Research in the Arab World is still considered embryonic and facing many common issues and challenges, some of these are identified as: lack of research funding through national funding bodies, lack of doctoral programmes, lack of interest by the private sector, research culture is lacking, infrastructure for research is not advanced enough, lack of national strategies for research and publications, and lack of incentives.

When comparing the expenditure on research as percentage of GDP by the top performing nations in relative terms (R&D expenditure as a proportion of GDP) which includes the Republic of Korea (4.2%) Switzerland (3.4%), Sweden (3.3%) and Japan (3.1%) amongst many other nations, R&D investment in most of the Arab States remains lower than 0.5%, though there are a few exceptions like Tunisia, Egypt, Morocco, Saudi Arabia and the United Arab Emirates where research spending is ranging from 0.6% to 1.0%.

Arab's expenditure on scientific research is about 0.2-0.6% of the GDP, while it is around 2-4% in industrialised developed countries. A large proportion of R&D expenditure in the industrialised nations goes towards the wages and salaries of the R&D personnel including researchers, technicians and support staff engaged in R&D.

The number of researchers per million inhabitants is less than 500 in the Arab countries, whereas in the developed and industrialized countries the number is more than 5000 per



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million inhabitants and in some nations it exceeds 7000. This low number is not appropriate for creating a research culture in most universities in the Arab World.

The investment of the private sector in R&D in the Arab World does not exceed 3% of the research budget allocated to universities whereas in the industrial world especially Japan the number is over 70%. In addition, the output of scientific research publications and patents is low in the Arab World in comparison with advanced nations.

The biggest challenge facing universities in the Arab World is the lack of cooperation which prevents them from sharing resources like labs, libraries, and experiences and exchanging researchers. Cooperation amongst universities and researchers in the Western World have led to many inventions, patents, and in many instances joint winning of Nobel Prizes.

Another big challenge facing research in the Arab World is the “brain drain” where many top and capable researchers decide to stay in the Western World after finishing their doctoral studies in order to pursue their research careers.

The *Arab Strategy for Science, Technology and Innovation* adopted by the Council of Ministers of Higher Education and Scientific Research in the Arab World in 2014 proposes an ambitious agenda. However, fruitful results are yet to be fully realised. Countries were urged to engage in greater international cooperation in 14 scientific disciplines and strategic economic sectors, including nuclear energy, space sciences and convergent technologies such as bio-informatics and nanobiotechnology.

The embryonic state of Arab research and innovation systems can be attributed to many factors including the region’s low spending levels on R&D, and the relatively small pool of qualified experts and researchers. However, research and innovation in the Arab World can be improved through genuine collaboration, sharing of resources and the launching of more doctoral programmes in Arab Universities.

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#### **QUOTE OF THE WEEK**

*“The most powerful force ever known on this planet is human cooperation - a force for construction and destruction.”*

**Jonathan David Haidt**

*Happy Reading!*