



R&D Program – Monthly Newsletter

Ministry of Education held a press conference to announce the launch of its 'Program For Supporting Scientific Research And Development In Saudi Universities' on 24th of August, 2017. The conference included:

Opening Remarks from His Excellency the Minister of Education Dr. Ahmed Bin Mohammed Al-Issa

His Excellency the Minister of Education Dr. Ahmed Bin Mohammed Al-Issa announced that the Ministry has launched a series of bold and transformative R&D initiatives to meet the objectives set by the Kingdom's Vision 2030 and National Transformation Program. His excellency also announced that a budget of 6 billion SAR has been allocated for the initiative.



Presentation: The Program For Supporting Scientific Research And Development in Saudi Universities

The presentation included a brief overview of the current R&D ecosystem in the Kingdom and how it compares to the R&D ecosystem in leading countries around the world. The presentation also introduced the Research and Development Program initiatives that will be launched in the short, medium and long term.



Question and Answer Session

Many representatives from the wider ecosystem participated in the question and answer session and lauded the efforts of the Ministry in launching the initiative. There were great comments on the importance of collaboration and development: "I am glad (development) is included, instead of the focus only on research; which has been going on for a long time," said one guest.



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A brief description of the objective of each initiative program can be found below:



1. Research Capital Program

Establish a rolling fund to support specific additional capital investment and more effective maintenance of existing facilities such as: lab construction, up to date equipment and specialized machinery essential to all phases of R&D activities at universities and other research institutions. Preference will be given to those proposals containing a careful plan for sharing access to new assets with other appropriate institutional users.



3. University/ Industry Partnership Program

- Establish a framework/platform to enable R&D partnerships, and encourage universities to develop a 'unique selling point' to attract private sector companies
- Partnerships could focus on priority industries and technologies, key future challenges and application of research outputs
- Pilot training modules for private sector managers on management of technology to improve the technology aspects of their products



5. PhD Scholarship Facilitation

Facilitate more students to enter PhD programs in local KSA universities by incentivizing local & international students, and thus improve the PhD pipeline to better match the needs and priorities of KSA.



7. Technology Transfer Offices (TTOs)

- Provide incentives and matched funding for leading research universities to develop and strengthen existing TTOs. These offices are expected to manage the interaction between faculty, students and companies in order exploit commercialization opportunities
- Promote best practice to new universities developing TTOs



9. Knowledge Transfer Partnership Fund

Fund allocated to Universities which provide monetary vouchers to SMEs as incentives to use Saudi-based R&D, faculty and students to enhance SMEs' business opportunities and innovations. The vouchers will be given with the condition that they are used for local R&D collaborations only. The purpose is to grow knowledge transfer between universities and SMEs.



11. International Exchange Program

Providing leading university faculty and top STEM graduate students with opportunities to partner & conduct short-term research and training exchange programs at leading overseas universities and research institutes. In exchange, host researchers from abroad to conduct their research in Saudi universities, particularly in key priority areas.



2. International Collaboration

Developing a legal and standardized national framework to facilitate effective international collaborations (removing barriers); equipping local universities with a mechanism to establish international collaborations, and provide funding for universities to facilitate effective and attractive partnership proposals. (There are many elements of collaboration which include faculty exchange, joint curriculum development, joint degrees and data sharing).



4. Post-doc Training & Support Program

Provide universities with additional funds to specifically increase post-doc positions in KSA universities, and support post-doc training. This will emphasize the need to develop Post-Doc programs (including establishing a career path for post-doc candidates) to improve the attractiveness and appeal for local, returning and foreign PhD students.



6. Technology and Innovation Centers

- Develop a fund aimed at technology and innovation centers (TICs) focusing on translational research aimed at increasing the commercialization of research activities and technology transfer
- The centers will bring together stakeholders from academia and private sector to exploit innovation opportunities, and realize commercial products and services



8. Knowledge Sharing Platforms

Develop a platform that encourages the sharing of active R&D activities between research institutions and the private sector with the objective of eventually establishing a comprehensive repository of research activity and outcomes on which industry can draw.



10. National R&D Awards

Develop national awards for Saudi and foreign researchers within Saudi Arabia. Awards will be given in a range of categories including most effective applied research, start-up/entrepreneurship exemplars, and university/ industry partnership etc. Awards can be presented with cash prizes towards continued R&D activities. An annual awards ceremony celebrating excellence can offer high profile to this scheme.



12. Incubator Development

Motivate universities to provide facilities, support, infrastructure, know-how and encouragement for start-up activities. The long term goal is developing graduates with start-up capabilities as well as knowledge for new growth industries.

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13. National Innovation Fund

Building a long term “third stream” of funding to universities (in addition to core teaching and research funding) to support universities in developing capacity and capability for downstream phases of R&D (i.e. knowledge transfer, commercialization). Initially the objective would be to build capacity through core funding to all universities. Later, funding could be based on related performance and outcomes. Support for universities can also extend to providing consultancy and training.



14. Research Pooling Program

Requires cooperation among groups of universities to share research goals. Each university consortium will be requested to pool their funds and share resources in order to receive additional support. Avoids duplication and encourages more effective use of resources, particularly in areas of ‘big science’ and medical research.



15. Master Teachers

Identify top-flight secondary-level teachers in STEM fields who are funded to go to leading schools around the world to co-teach with great local teachers. This will help close the gap between the capabilities of high-school STEM graduates and universities’ expectations of such students. Closing such gap can greatly reduce the burden on universities to develop the basic science skills of accepted students.



16. Integrated Human Asset Pyramid

Effective support of technology-driven economic growth requires more than just top-flight PhD scientists. It requires trained science and technology professionals at all different levels—lab technicians, for example as well as research scientists. Saudi Arabia needs a strategy for developing and tracking human assets at all levels of this pyramid.



17. Industry Placements

Funds provided to University programs which support university doctoral students and faculty to spend a placement period within key industries, or SMEs. Lessons learned from these support programs can be used to improve university curricula, R&D programs and industry partnerships.



18. Human Asset Database for STEM Professionals

- Developing an integrated repository of information on the knowledge and skills of Saudi human resources in STEM, in order to form a central database of available skills and capabilities required by private or public sector
- Enables KSA to attract foreign investors by providing accurate information on availability of skilled and capable professionals



19. Next Generation Science and Tech Policy

- Using technology to form policies: forming policies aimed at driving R&D towards next generation technologies through making use of advances in technology to drive entirely new ways of pushing back the frontiers of knowledge
- Could be done through crowdsourcing, expertise, challenges and competitions, big and open data



20. Research and Development Leadership & Management Programs

Launching leadership programs in order to improve the leadership and technology management skills and capabilities of researchers and private sector professionals to perform high quality research and to enable better commercialization of research.



21. IP Laws and Regulations

- Developing IP laws and regulations, in line with international best practice, to promote collaboration and knowledge sharing
- Designing a clear enforcement mechanism in order to ensure full compliance of new laws and regulations within the ecosystem



22. Science & Technology (S&T) Parks

Building physically clustered research and commercialization centers of universities, private sectors and other institutions to share, utilize and co-create with faculty, students, graduates and research facilities.



23. Supporting Research in Social Sciences

- Establishing a center (e.g. Kingdom of Saudi Arabia’s Center for Social Sciences Research) in social sciences either on or off-campus, to identify key research themes and fund such research, and to develop social science research capacity in the Kingdom
- The center will identify the current and future challenges of the society aligned with Vision 2030 to produce value-adding applied research dealing with social issues



24. Start-up Support Program

- Establishing a center with a mission of reducing the time and cost associated with starting and registering a new business as well as supporting its growth
- The center will identify the current and future challenges that face entrepreneurs in KSA. Then the center will work with public and private stakeholders to overcome those obstacles (whether the obstacles are logistics, bureaucracy, IT, infrastructure, etc.)