

**ISLAMIC-WORLD ACADEMY OF SCIENCES (IAS)**  
**2015 TEHRAN DECLARATION**

ON

**SCIENCE, TECHNOLOGY AND INNOVATION: BUILDING HUMANITY'S COMMON FUTURE**

adopted at Tehran, Iran

on

27 December 2015

1. Science, Technology and Innovation (STI) represent primary forces behind the advancement of human civilisation. Productivity gains and achievements of humankind have been derived chiefly from innovation based on scientific discovery and invention, technological and engineering development as well as the utilisation of S&T in all walks of life;
2. A new economic paradigm has emerged worldwide in which the most important factor is the intensive application of knowledge. Comparative advantage is increasingly determined by knowledge and innovation. This centrality makes knowledge a pillar of the wealth and influence of nations in the 21<sup>st</sup> century;
3. The creation and transfer of scientific knowledge are critical to building and sustaining socio-economic welfare and integration into the global economy. No region or nation can remain a 'user' of new knowledge but is expected to become a 'generator' of new knowledge. Closing the innovation gap is an indispensable role of universities in OIC and developing countries; promoting innovation must become as important as teaching and research;
4. Despite noticeable advances in some emerging economies, the knowledge and economic divides between OIC countries in general and the developed world have widened and are restricting the potential of science and technology to contribute to global development;
5. Against such a backdrop, countries of the Organisation of Islamic Co-operation (OIC) and other developing countries have to create the paradigm shift to again become a community that values knowledge and proficient in utilizing and advancing S&T to enhance their socioeconomic well-being as well as humanity's;
6. Despite political diversity, regional economic and scientific co-operation at the level of the OIC is essential to build capacities to harness modern science particularly through leveraging well established OIC S&T agencies including COMSTECH, the IDB, the ISESCO, the IAS as well as universities, national research centres and national academies of sciences. Such collaboration should not be at the expense of North-South collaboration in STI. Newly launched initiatives such as the Technology Bank for LDCs and the IPR Bank must also be leveraged as part of this effort;
7. The international development agenda manifested by the recently adopted Sustainable Development Goals (SDGs) with the cross-cutting STI component thereof, the international research agenda on climate science emanating from COP21 as well as other development targets such as water, food, energy and health security remain priority areas for OIC and developing countries and elsewhere;

8. For science, technology and innovation to become effective and transformational, a culture of science appreciation has to be engendered; people's talent and skills need to be enhanced essentially through promoting science, technology, engineering, mathematics and medicine (STEMM) education at all levels;
9. OIC and developing countries' governments have to act to establish long-term sustainable and balanced mechanisms for the funding of scientific research especially in the context of budgetary constraints;
10. Archetypal as it may sound, governments must improve the governance of science at the national level by building up their STI systems, engaging the science community, adopting and adapting promptly their national STI policies, developing innovative ways to raise Gross Expenditure on R&D to that elusive 1% by involving stakeholders from the private sectors, strengthening networks of centres of excellence, empowering women and young scientists, stimulating policy debates, exchanging knowledge of best practices and lessons learned and by strengthening local institutions;
11. Implementing the above national STI agenda requires the collaboration of all stakeholders. To ensure a greater chance of success, the 'Smart Partnership' principles and practices are proposed to be adopted by interested OIC and developing countries. 'Smart Partnership' can be an appropriate framework to enhance national and international endeavours to promote STI governance;
12. Many developing countries have been striving to achieve a balanced investment in science while respecting the need for both curiosity-driven and demand-driven research. To stimulate transformative science – which is unpredictable and requires openness to new and unforeseen pathways – and aim to promote a paradigm change in technological and social development, funding mechanisms that allow for innovative research should be part of funding schemes;
13. The IAS calls upon OIC and developing countries to smartly distribute national research expenditure to finance curiosity-driven research as well as demand-driven research with its two components; problem-solving at the national level and the development of products and services. Needless to say that the equitable participation of women, young scientists in the practice and application of science is an essential panacea in the success of this process. The 2015 UNESCO Science Report provides updated information on the participation of women in science;
14. The IAS recognises the crucial role of champions of STI; and the presence of a sound, independent scientific advisory system that can improve the quality of science-based decisions on policy-making. The IAS welcomes recent global trends for the more pronounced use of science in policy-making and the efforts to bridge the divides in the roles of scientists and policy makers. Needless to say the launch of national science academies in OIC countries where such entities do not exist is an imperative in this regard;
15. Notwithstanding the magnanimous efforts made by refugee-hosting countries in terms of the provision of shelter, food, water; to ensure the adherence to the universal right to education such governments are urged to provide education for all displaced people residing in their countries with the full support of the UN, the other relevant agencies and the international community.