

**19TH ISLAMIC WORLD ACADEMY OF SCIENCES
CONFERENCE**

on

*Achieving Socioeconomic Development in the Islamic World through
Science, Technology and Innovation (STI)*

CONFERENCE DECLARATION

adopted at Dhaka, Bangladesh

on

28 Jumada II 1434

08 May 2013

PREAMBLE

1. The quest for knowledge is one of the seminal elements in the Islamic code of belief. For over a millennium, i.e., up to the turn of the seventeenth century, the Islamic civilization was a milieu *par excellence* for groundbreaking science; science which laid the foundation for the European renaissance and the Industrial Revolution;
2. The world economic uncertainty of the previous five years has been the source of serious difficulty for the Science, Technology and Innovation (STI) sector. The sharp declines in trade, foreign investment and access to financing have also had negative impacts affecting global value chains;
3. STI is still a tool of might and affluence and a tool at the disposal of governments. Leveraging STI at the national level is essential for the socioeconomic development of countries including OIC-Member States; achieving prosperity, food, water, energy security and national self-fulfilment; as well as addressing the challenges of human health and climate change;
4. In the wake of the financial crisis, STI will make a vital contribution to sustainable and lasting recovery and to long term growth prospects of most countries' economies;
5. Investment in science and technology and education has been a critical source of economic transformation. Such investment should be part of a larger framework to build capacities in STI. Improvements in higher education need to be accompanied by growth in economic opportunities so that graduates can apply their acquired capabilities in the fields of their preference;

6. The decision-makers and the science community in OIC-Member States have to appreciate the common view that science transcends political borders, enhancing cooperation and acting as a catalyst for consolidating stability in the Islamic world. Knowledge production and diffusion play a key role in the enhancement of innovation, sustainable economic development, and social well-being. To this aim, it is vital to strengthen regional cooperation in STI,

THE ISLAMIC WORLD ACADEMY OF SCIENCES (IAS), AT THE CONCLUSION OF ITS 19TH CONFERENCE HELD IN DHAKA (BANGLADESH), 6-8 MAY 2013, NOTES WITH SATISFACTION THAT AT THE LEVEL OF BANGLADESH AND THE OIC, RESPECTIVELY:

1. Bangladesh has achieved over 90% enrolment in primary education and drop out has been reduced considerably. Higher education has been gaining momentum in Bangladesh as the country has witnessed growth in tertiary level enrolment from 1.16 million students in 2008 to 2.65 million in 2012. The number of public and private universities has also gone up from 78 to 104 in the last four years and seven more public universities are in the pipeline;
2. Bangladesh has managed to take a number of actions to mitigate the negative effects of natural phenomena, attain a reasonable level of food security for its population and locally produce 97% of the medicinal drugs it requires;
3. Gross Expenditure on R&D (GERD) for OIC-Member States has quadrupled to an average of 0.8% for OIC-Member States from the 2005 average of 0.2%, and many OIC-Member States are investing heavily in the sectors of higher education and priority-focussed R&D;
4. Twenty-five OIC universities are ranked amongst the world's top 500 universities according to the QS World University Rankings 2012/2013, and OIC-Member States are making encouraging progress in terms of research publications with the number of research publications in international journals exceeding 90,000 in 2011 compared to around 20,000 in 2000; however,

TO RAPIDLY ACHIEVE SOCIOECONOMIC DEVELOPMENT THROUGH STI, THE IAS APPEALS TO THE DECISION-MAKERS IN OIC COUNTRIES TO:

1. Recognize the crucial role of STI and higher education in their respective country policies and strategies for socio-economic development and endeavour to heed the call towards increasing budgets for STI;
2. Encourage public understanding and awareness of science highlighting, in the process, gender equality, social inclusion and participation;
3. Organise programmes on leadership training for both domestic and regional research and innovation policy makers;

4. Evaluate the quality of statistical data on STI and the statistical system on research and development, as a prerequisite to developing sound and effective strategy in STI;
5. Further develop existing evaluation mechanisms for STI enterprises in order to assess progress on different levels; open national and transnational evaluation mechanisms to a diverse group of research and innovation stakeholders including civil society organizations, companies and investors;
6. Facilitate partnerships between public and private sectors in the field of STI and encourage both public and private R&D organizations and universities to use public research infrastructures;
7. Promote the central role of the university as an originator of scientific knowledge. To contextualize this role, universities should streamline their efforts not only to produce graduates in the various disciplines but knowledge workers. Knowledge production can be enhanced if universities segregate their research budgets from their administration budgets;
8. Increase utilization and enhance synergies and coordination between different instruments, initiatives and programmes for facilitating capacity-building and sharing of research infrastructures. Moreover, university-based R&D has to be directed not only at increasing humanity's pool of knowledge but also for developing products and services that can contribute to creating national wealth;
9. Create links between knowledge generation and enterprise development as this is one of the greatest challenges facing OIC and developing countries. Develop active partnerships with local and regional industries and come up with innovative ways to fund academic and industrial research and for commercialization of research outcomes;
10. Promote bilateral and regional cooperative agreements, within the OIC and at the South-South level; provide easy access to research facilities, infrastructures and science publications;
11. Intensify cooperation among developing countries, especially involving countries that have developed significant expertise in S&T policy development, S&T infrastructure, and the ever transformational areas of biotechnology, nanotechnology and information technology;
12. Focus on a limited number of priorities and regional smart specialization activities where some networks already successfully operate or some new ones may be developed; strengthen such networks with the view of making them attractive partners for neighbouring regions and states; support the best national research centres to enable them to participate in pan-Islamic/regional networks;

13. Further promote the development of local technology, partly by improving national incentive regimes including taxation, promoting the culture of technological innovation and generating markets for new products and services within their societies and internationally;
14. Increase investments in international STI projects; and take advantage of existing OIC organizations that are active in STI for research and innovation projects and for research infrastructure funding, and introduce measures that foresee the strategic inclusion of diaspora scientists;#
15. Create a Brain Bank by tapping into the enormous expertise possessed by expatriate scientists and technologists originally from the OIC-region and develop conducive conditions to transform Brain Drain into Brain Gain and Brain circulation within the OIC-region;
16. Strengthen advisory structures across countries noting that in many countries science academies provide political leaders with advice. The advisory processes should be able to gauge public opinion about STI. At the level of the OIC, appropriate mechanisms should be worked out by the IAS to provide advice to OIC heads of state, parliamentarians and other decision-makers;
17. Recognize that it is important that OIC-Member States speak in one voice at the world level on specific commonly agreed issues, such as climate change. To this aim, they must commit themselves to increasingly coordinate common positions prior to international meetings and to use such meetings as platforms to further macro-regional agendas;
18. Develop partnerships with –for example- local pharmaceutical companies and utilize developed intellectual property to help develop a research-led pharmaceutical industry in the Islamic World,

FURTHERMORE, THE ISLAMIC WORLD ACADEMY OF SCIENCES (IAS):

In order to achieve the goal of ‘Achieving Socioeconomic Development in the Islamic World through Science Technology and Innovation,’ the IAS proposes the establishment of a consortium of existing and emerging centres of excellence in OIC-Member States. Such a consortium could focus on areas such as Drug Discovery and Development or Energy or Information Systems; and can serve as a model for international research and information sharing among academics, professionals and policy makers. Potential partners in this endeavour could be the International Centre for Energy and Information Systems (www.iceis.net) being developed at Virginia Tech, USA.

LASTLY, THE ISLAMIC WORLD ACADEMY OF SCIENCES (IAS):

Extends its appreciation to Her Excellency Sheikh Hasina, the Honourable Prime Minister of Bangladesh; Her Excellency the Foreign Minister of Bangladesh Dr Dipu Moni; His Excellency Yeafesh Osman, State Minister of Science and Technology; to the Bangladesh Universities Grants Commission (UGC) headed by Prof. A K Azad Chowdhury; to the Bangladesh Academy of Sciences (BAS) and the eminent Fellows of the BAS; to the Bangladesh University of Health Sciences (BUHS); Incepta Pharmaceuticals; for organising and sponsoring the conference; and to the Islamic Development Bank, COMSTECH, OPEC Fund for International Development (OFID), and the Arab Potash Company for generously co-sponsoring this international scientific congregation.