

## IAS-SELANGOR SHAH ALAM DECLARATION

on

*Towards the Knowledge Society*

*in the Islamic World:*

*Knowledge Production, Application and Dissemination*

Adopted at Shah Alam/Selangor, Malaysia

on

30 Dhul-Hijja 1430

17 December 2009

### **PREAMBLE**

1. Worldwide, a new economic paradigm is emerging in which the most important asset is not capital, labour, raw materials or energy, but also the intensive use of knowledge. Comparative advantage is increasingly determined by the competitive use of knowledge and technological innovation. This centrality makes knowledge a pillar of the wealth and influence of nations;
2. Science, Technology and Innovation (STI) represent still the primary force behind the advancement of human civilisation. Productivity gains and achievements of humankind have been derived chiefly from innovation based on scientific exploration, technological and engineering innovations as well as extensive application of S&T in the social life of humankind; and
3. Organisation of Islamic Conference (OIC) countries have been striving to achieve steady socioeconomic development. With the diffusion of ICTs as a prerequisite, actions are needed to invigorate; (a) knowledge production, (b) knowledge application and (c) knowledge dissemination, to help OIC countries build knowledge societies and achieve rapid socioeconomic development. Because the quest for knowledge is a pillar of the Islamic Code of Belief (قل هل يستوي الذين يعلمون و الذين لا يعلمون), and knowledge and its pursuit have assumed augmented importance in an increasingly knowledge driven world economy, countries of the Organisation of the Islamic Conference (OIC) must commit themselves to becoming a community that values knowledge, one that is competent in utilizing Science, Technology and innovation (STI) to enhance its socioeconomic well-being

### **THE PARTICIPANTS IN THE 17<sup>TH</sup> IAS CONFERENCE NOTE THAT:**

- a) In responding to the growing demands of the Knowledge-based or K-economy, a fresh-look is needed to re-examine the infrastructure and delivery of higher education in OIC and developing countries in terms of quality and relevance. Also an attempt should be made to evaluate the scientific development and acquisition capacity as well as technology application in the productive sectors of the economy; and
- b) There exist significant obstacles to science and technology in OIC-Countries, including, *inter alia*, lack of comprehensive Science, Technology and Innovation (STI) policies, and strategies emanating therefrom. The objective of such policies should to realise some level of national prosperity, food, water and energy security and national self-fulfilment. The dearth or inadequacy of resources, infrastructure and institutions, gender imbalance in Science and Technology, shortage of trained personnel, prohibitive costs of acquiring knowledge and technology, and barriers to the transfer of knowledge, personnel and technologies from developed to developing countries are also obstacles of significant impact,

## AND APPEAL TO THE DECISION-MAKERS IN OIC COUNTRIES TO:

1. Implement specific actions at the national and international levels including *inter alia*, engender commitment at the highest level to STI; sizeably increase R&D expenditure, and promote the central role of the university as originator of scientific output. Investment in science and technology education has been a critical source of economic transformation. Such investment should be part of a larger framework to build capacities in STI worldwide. Improvements in higher education needs to be accompanied by growth in economic opportunities so that graduates can apply their acquired capabilities;
2. Promote and enhance scientific and technological cooperation among developing and OIC countries. The IAS also calls for the exchange of scientific experiences and of technologies with a view to intensifying cooperation and delivering real benefits among developing countries, especially involving countries that have developed significant expertise in S&T policy development, S&T infrastructure, biotechnology, nanotechnology and information technology;
3. Create links between knowledge generation and enterprise development as this is one of the greatest challenges facing OIC and developing countries. To further promote the development of local technology, OIC countries need to improve their incentive regimes including taxation and must try to promote technological innovation and generate markets for new products and services within their societies;
4. Recognize that future generations of scientists are today's IT and knowledge savvy students, and that prompt action is required to ensure that these young scientists cultivate a sense of hope and purpose so that they may contribute to shaping a sustainable future. Future generations in OIC countries must be **educated and not indoctrinated, they must learn – and not be taught** – to work hard, to identify role models in science and life that they can emulate, and learn to work together as teams rather than as individuals. A thorough review of our higher education system in the OIC is required to ensure that the generations of tomorrow are equipped with the tools that enable them to face the challenges of tomorrow. Moreover, our community leaders are invited to support and mentor the youth and early career scientists;
5. Engage more female scientists in raising the right questions and searching for sound answers if the sizeable women science community of the OIC is to contribute to the development of the *Ummah*. Even in developed countries today, the upper levels of the occupational ladder in science and technology women are under-represented. Women graduates in science and technology count for only one fifth of full professors in research institutions. This phenomenon has been aptly called the leaky pipeline or the glass ceiling. What is needed is an integrated approach that includes mentoring, science education, recognition and the promulgation of best practices;
6. Recognise that a salient feature of modern science is its greater autonomy from the public. This has resulted in the codification and institutionalization of the scientists' professional role and the emergence of a divide between scientists on the one hand, the polity and the media on the other. The media has a considerable role in promoting science and technology and scientists need to communicate with the general public, policy-makers, and the media. Scientific institutes need to open lines of communication with, and engage more with the outside world; and
7. Appreciate that advice on science, technology, and innovation needs to reach policymakers. For this to happen, an institutional framework needs to be created and commitment needs to be garnered to support it. At the university level, we must **integrate rather than segregate** students especially from the science and literary streams so that all future leaders appreciate the value of science as a means of socioeconomic advancement. Advisory structures differ across countries. In many countries science advisors report to the president or prime minister

and national science academies provide political leaders with advice. The advisory processes should be able to gauge public opinion about science, technology, and innovation. 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.

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

- a) Expresses its deep concern for the safety and well-being of all Iraqi scientists, academics and educationalists both inside and outside Iraq; and
- b) Extends its appreciation to the His Royal Highness the Sultan of Selangor and the State of Selangor for hosting the conference; to the University of Industry of Selangor (UNISEL) and the International Islamic Academy of Life Sciences and Biotechnology (IIALSB) for coordinating local arrangements; the Islamic Development Bank; COMSTECH; OPEC Fund for International Development (OFID); Perdana Leadership Foundation; United Nations Educational, Scientific and Cultural Organisation (UNESCO); Arab Potash Company; and the Jordan Phosphate Mines Company for generously sponsoring this international scientific congregation.