









International Conference on Women in Science and Technology in the Arab Countries

Venue: Kuwait Institute for Scientific Research (KISR) April 231-2, 2013

Closing Statement and Recommendations

It is an important moment for women in science across much of the world, and especially in the Arab countries. The opportunities for education, work, and international engagement are unprecedented across much of the region. But political instability in some nations have raised questions over whether the gains of recent years could be reversed; environmental stress and health issues arising from a more Western lifestyle both pose risks for women.

These circumstances made the International Conference on Women in Science and Technology in the Arab Countries timely and valuable. Following three days of constructive presentations and discussions involving **some 150 women** from **15** nations in or adjoining the Arab region, we, the participants in the present Conference held at the Kuwait Institute for Scientific Research (KISR), adopt the following statement:

We express our humble gratitude to His Highness the Amir of Kuwait Al-Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah for his patronage of the present conference and for his continued support for policy and initiatives recognizing the role that science, engineering, technology and innovation can play in women's development. We are also grateful to Dr. Nayef Al-Hajraf, Kuwait's minister of education and higher education, for his support and encouragement of the full participation of women and girls in education and careers in science, engineering, technology and innovation.

We also extend sincere thanks to Dr. Naji Al Mutairi, director general of Kuwait Institute for Scientific Research (KISR), for his steadfast support and aid in organizing the conference. And we are grateful as well to the sponsoring organizations: the Kuwait Foundation for the

Advancement of Sciences (KFAS); the Organization for Women in Science for Developing World (OWSD); the Organization of the Islamic Conference; and TWAS, the academy of sciences for the developing world.

Our presentations and discussion over these three days have underscored a fact that is broadly accepted in our time: A society's strong commitment to science and technology is directly correlated to economic development and human progress. We all share the conviction that the full participation of women in the fields of science, technology, health, environment, as well as social sciences is essential for the fulfillment of a nation's potential for innovation and sustainable economic growth.

Without doubt, women have made significant advances in science and technology professions during the past decades. However, they often lag behind men in pay, access to resources, and opportunities for promotion and advancement into leadership positions. While their numbers in university science programs are at historic highs, a growing body of research shows that a host of cultural pressures, family responsibilities, and professional frustrations drive too many young women out of scientific careers. This has high costs for the women, but also for national institutions, economies and societies.

For the benefit of women scientists, we offer these recommendations for consideration by governments and policymakers, universities, private industry, and national and international science organizations and development agencies:

Education and Professional Development

Education is the foundation of a nation's research capacity and strength. Without strong science education and opportunities for professionals to continually improve their knowledge, a nation's science enterprise is bound to falter. Therefore, we recommend:

- Programs undertaken by governments to encourage all children to understand the joy of discovery and benefits of research.
- Strong mentoring programs that would be available, as early as high school, to girls and young women who are pursuing careers in science.
- Women scientists should be encouraged to pursue post-graduate studies to obtain Masters degrees and PhDs and to join post-doctorate professional development programs.
- Leadership training programs should be made available to early- and mid-career women scientists.

Networking

Nurturing talent, identifying opportunities and addressing challenges all require systematic networking within a profession or a nation. However, women often lack long-standing professional networks. Therefore, the participants recommend:

- Encourage the formation of national chapters of the Organization for Women in Science for the Developing World (OWSD)
- Develop electronic networks to link women scientists within a nation and across national borders.
- Develop specific networks focused on specific areas of national or regional priority, including such areas as energy; bioethics; health; environmental issues; and research integrity.
- Encourage establishment "Community of Practice" comprising of a core of professionals and young women scientists in specialized area of Scientific Research.

Policy

Recognizing that translation of science into evidence based policies and programs by governments for development, we recommend:

- Policies should be crafted to support the progress of women including funding in fields
 of scientific research. These policies should be continually reviewed and revised in
 recognition of changing conditions and needs.
- Gender mainstreaming policies and mechanisms in research institutions in the Arab Region should be established in line with he international conventions (e.g., Convention on the Elimination of all Discrimination Against Women-CEDAW- 1979).
- The legal and policy framework governing women's workplace rights should be strengthened to promote the participation of women scientists in the workforce.

Regional and International cooperation

To pursue opportunities or to address challenges, scientific is increasingly being done by international teams working across borders. That presents great opportunity—and certain practical challenges, we recommend:

 Governments, universities, private industry and science sectors should collaborate to identify areas of priority for regional science cooperation. An emphasis should be placed on collaborative ventures and partnerships within the framework of existing institutions

- such as GCC (the Gulf Cooperation Council), UNESCO, the World Health Organization, , TWAS (the academy of sciences for the developing world), OWSD, and UN-Women.
- Women should be encouraged to participate in international conferences, seminars, and meetings to increase their interaction with other international experts to foster collaboration and innovation.
- All means of communication, from the conventional mass media to contemporary social media, must be utilized to support network-building for women scientists and the scientific professions in general.

Pursuing these ambitious goals requires collaboration and cooperation among many sectors of any nation, and often across borders. From our governments, universities, science organizations, and our conference participants, we request:

- * The State of Kuwait and the Kuwait Institute for Scientific Research should continue and expand efforts to serve as a focal point for interactions among women scientists from the Arab nations and adjoining regions.
- * OWSD should encourage and support the establishment of national chapters in the Arab region and other areas. These decentralized chapters could effectively build regional networks and draw from members' energy and skill to promote regional cooperation through professional development activities, scientific and educational exchanges, and joint research projects.
- * TWAS/OWSD should present the above-listed recommendations to the World Science Forum this fall in Rio de Janeiro.

The participants in the International Conference on Women in Science and Technology in the Arab Countries share national and regional interests in advancing science for sustainable development, economic growth, and human well-being. We are committed to working closely together and in a spirit of cooperation toward these goals with potential partners in all sectors, and all nations of our region.