Scientific and Cultural Achievements of the Islamic Republic of Iran

न्यस्यात्वद्यात्वद्यात्वद्यात्वद्यात्वद्यात

By: Hafez Najafi, Faculty Member of the Department of Ethics of the Academy of Hajj and Pilgrimage

44 No. 283 | Jun 2023

ECHO



1- Scientific Achievements

A- Educational Achievements

i- Increase in the number of educated people from 25 percent in 1979 to over 88 percent in the year 2016.

ii- Growth of schools from 47 thousand to 220 and institutions of higher education from 15 to more than 2600 in 2014. iii- 25-fold increase in the number of students in higher education from 76 thousand in 1979 to 4.3 million in 2015 education year, i.e., from 248 per every 100 thousand people to 5486.

iv- A major transformation in the area of women's education and higher education:

a. Increase in the number of educated women from 35 percent in 1979 to about 90 percent.

b. Increase in the number of girl students from 2 million in 1976 to over 6 million in 2016. c. Increase in the number of

women with higher education from 6 percent in 1976 to 45 percent.

d. Increase in the number of women university teachers from 1.2 percent to over 20 percent.

e. Establishment of dozens of universities, colleges, and research institutes for women.

f. Before the Islamic Revolution, only 125,000 women worked in the field of education, but recent statistics show that this number has gone up to 532,000.

g. Female general practitioners have grown 16 times from 3,500 in 1355 to 60,000 in 2016. And the number of women MDs has shown a 50-fold increase from 597 to 30000.

h. The number of female writers has increased from less than 50 people in 1979 to 8 thousand in the post-Revolution era and the number of female story writers has increased from less than a handful to 4 thousand people.

i. Eighty percent of the participants of 11,000 Qur'anic institutions are women, which counts for more than 6 million people

B- Science and Technology

1- As reported by Scimago Journal, Iran's ranks in the field of scientific activities and production has increased from 53rd in 1996 to 16th in 2015. In terms of research, Iranian researchers have registered 8,513 scientific articles, and rank 16th among the scientists and researchers of the world. Currently, Iran's rank in science production is 13.

2- In the field of biotechnology Iran's rank has gone up from 56th to 14th in the world (increase in the number of articles from 11 to 618).

3- In medicine Iran, presently, ranks 19th in the world. (increase in the number of articles from 64 to 3 thousand)

4- In the field of chemistry Iran's rank has gone up from 48th to 19th in the world. (increase in the number of articles from 79 to over 3 thousand)

5- Iran's world ranking in physics has gone up from 64th to 19th in the world. (increase

есно



in the number of articles from 21 to over one thousand)

6- According to a report by ICESCO the Islamic Republic of Iran ranks first among the 57 Islamic countries in terms of science, research, and patents (more than 26196 patents in 2012).

7- Successful entry in the field of nanotechnology, which was the monopoly of a few advanced countries, and ranked seventh in the world.

8- Success in other new sciences including laser, microelectronics, the science of making robots and achieving global success in robotics competitions, hardware development and supercomputer construction, and software development, winning 362 medals in various science Olympiads. Changing and turning the country into a regional hub of health tourism and accepting and treating foreign patients for all kinds of diseases, progress in the field of stem cells, and ranking among the top countries for kidney transplants and treating eye diseases.

9- Iran's rank in the field of atomic energy has gone up from 83rd to 11th (an increase in the number of articles from 1 to 418). Progress in the field of nuclear fuel cycle and being among the top five countries in the world. Iran was able to build a 20% enriched nuclear control rod in 2011 and elevate it to 60% enrichment in 2023. Iran being among the 13 countries that have a nuclear fuel cycle uses this energy and has many advantages in such fields as agriculture, medicine, engineering, etc.

10- Space technology; Iran's world ranking in the field of aerospace engineering has gone up from 43rd to 11th in the world (an increase in the number of articles from 4 to 341). The Islamic Republic of Iran succeeded in launching the "Sina 1" satellite in 2004, and launch the "Research" probe (sending a living being into space) in 2012.

C- Medical Sciences and Healthcare Services

1- Due to the expansion of health centers and homes, presently more than 85% of the population of deprived

As reported by Scimago Journal, Iran's ranks in the field of scientific activities and production has increased from 53rd in 1996 to 16th in 2015. In terms of research, Iranian researchers have registered 8,513 scientific articles, and rank 16th among the scientists and researchers of the world. Currently, Iran's rank in science production is 13. areas of Iran have access to primary medical care.

2- According to the statistics provided Iran Medical Council (IRIMC), there are 78,000 general practitioners, 36,000 specialists, 25,000 general dentists, 2,000 specialist dentists, 19,000 doctors in pharmacy, and 200 PhDs in laboratory sciences.

3- Pharmacology: Although the country's pharmaceutical industry has a history of 80 years, this industry developed extensively after the Islamic Revolution to the point where 34 all-Iranian biotechnology drugs are now produced in the country. Since 26 years ago, Iran has achieved many advances in the field of using stem cells in the treatment of diseases and vaccine and serum production.

4- Treatment of foreign patients: Even though Iran is facing sanctions in the field of medicine, with the advances in medical science, many foreign patients come to Iran for the treatment of complex diseases.

5- Decrease in mortality and increase in life expectancy: Unlike the pre-Revolution era when due to poor health and medical services the rate of mortality was quite high, with Iran's progress in various health and medical fields, not only these statistics have decreased, but life expectancy has also decreased. Presently,

есно



Iran ranks 11th in terms of reduced child mortality.

2- Cultural Achievements

Being founded and established by a Shiite mujtahid, a mystic and scholar on the basis of the enlightening teachings of Islam, the Islamic Republic of Iran has had great cultural achievements some of which are enumerated hereunder.

1- Changing the country's political system, from an autocratic monarchy dependent on foreigners to a republic system that has two distinct characteristics: 1) being ex-

tensively popular, i.e., giving importance to people's votes; and 2) being Islamic, i.e., being based on the culture and teachings of Islam. V

2- Expansion of Qur'anic culture: With the victory of the Islamic Revolution, the Quran came out of isolation and people started learning, memorizing, reciting

EGHO

the Qur'an, and applying its teaching in their lives. Establishing radio and TV Qur'anic channels and creating at least 400 Quranic websites, founding hundreds of Qur'anic institutes and Dar al-Qur'an in provincial centers, and creating the most popular TV series based on Qur'anic stories. International Qur'an competitions, translation of the Qur'an into 130 living languages of the world, the annual international exhibition on the Holy Qur'an, printing and publishing of more than 37,000 books about Qur'an and its teachings, the establishment of the Qur'an University and Qur'anic faculties, research centers and institutions, and publishing Qur'anic magazines, books, encyclopedias, etc. are some of the achievements in this area.

3- In addition to the cultural centers of the Islamic Republic of Iran in different countries, Al-Mustafa International University has more than 170 educational units inside the country. and in more than 60 countries. By 2014, this university had more than 50,000 male and female students from 122 nationalities 25,000 of whom have graduated. Al-Mustafa community is a member of these organizations and unions: 1- International Union of University Presidents, 2- International Union of Universities, 3- Union of Islamic World Universities, and 4- Islamic World Students' Union.

4- Changes in the content of books and textbooks: Unlike during the Pahlavi era in which the contents of the books were mainly anti-religion and propagated the capitalist system, and false schools of thought, in the Islamic Republic the contents of the books are based on teachings appropriate Iranian-Islamic culture. Statistically, the average number of books written annually stood at two thousand, and thus number has increased to about 53,000 books published annually in Islamic Iran. In this context, mention should also be made about the Tehran International Book Fair, which was founded after the Islamic Revolution.

5- Print Media; The number of print media which stood at 86 during the Pahlavi era has increased to more than 400 in the Islamic Republic.

In addition to the cultural centers of the Islamic Republic of Iran in different countries, Al-Mustafa International University has more than 170 educational units inside the country. and in more than 60 countries. By 2014, this university had more than 50,000 male and female students from 122 nationalities 25,000 of whom have graduated

6- Art and artistic activities: during Pahlavi's time, art was used as a tool to spread immorality and unethical values through broadcasting obscene programs and films. But a religious model has been drawn for art in the Islamic Republic the purpose of which is to cultivate and educate people, to develop moral virtues. In fact, in the area of culture and art, vulgarity has been replaced by real art and revolutionary and Islamic themes. In this regard, the Fajr International Film Festival, Film Festival of the Ministry of Culture and Islamic Guidance, Rushd Educational Film Festival, Fajr National Theater Festival, Provincial Theater Festival, Fair National Hymn Festival, International Qur'an Recitation, and Memorization Competitions, Book Reading Competitions, Essay Writing Competitions and traditional arts exhibition, Quran exhibition, cultural heritage exhibition, international exhibition are held every year.

8- Radio and Television: Before the Revolution, there were only two TV channels and very few radio channels, each of which had only a few hours of programs per day. Presently, there are more than 130 provincial, national, regional, and global radio and television channels, which include more than 35 radio and television channels that broadcast their programs internationally.