

# The Scientific Publications: A Glance at World and OIC Countries 2000-2015



#### Introduction



Since one of the important purposes of Islamic World Science Citation Center (ISC) is mapping fields of science and technology and qualitative and quantitative assessment of scientific publications' in Islamic countries, cooperation of OIC with ISC is definitely necessary. The present report, depicts the 15-year (2000-2015) growth of scientific outputs of the world according to the data retrieved from Thomson Reuters Web of Science (ISI). This report reveals that over the last 15 years, Islamic countries' share of world's total number of scientific publications

(quantitative indicator of research) has increased remarkably. The data are also presented subjectwise in agricultural sciences, engineering and technology, humanities, medical and health sciences, natural sciences, social sciences.

Since 2000, world's growth in agricultural sciences was 81%, while OIC's growth rate was 433%. In engineering and technology, world's progress was 238%, while OIC's growth in this field was 1053%. With regard to humanities, world's publications progress rate was -1% but OIC improvement was 1053%. Similarly, world's growth in medical and health sciences was 79%, while OIC's development was 523%. In natural sciences, world's growth was 73%, while OIC's progress in this field was 580%. Finally, in social sciences, world's growth was 83% and in OIC's, this growth was 953%.

While, world's growth in scientific publication over the last 15 years was 87%, OIC's progress was 638%, which is 7 times more than the world's average. It is noteworthy that in 2000 OIC's share of world's total number of scientific publications was 1.8%, while in 2015 it has reached 7.2%, which is a remarkable growth.

	The growth rate of the number of publications from 2000 to 2015						
Topic	Agricultural sciences	Engineering and technology	Humanities	Medical and health sciences	Natural sciences	Social sciences	All Fields
world	81%	238%	-1%	79%	73%	83%	87%
OIC Countries	433%	1053%	1053%	523%	580%	953%	638%

The number of scientific publications is the quantitative indicator of research, which is not enough to guarantee scientific development of a country. Factors such as scientific impact, citations, scientific diplomacy, economic impact, innovation and technological impacts must also be taken into account.

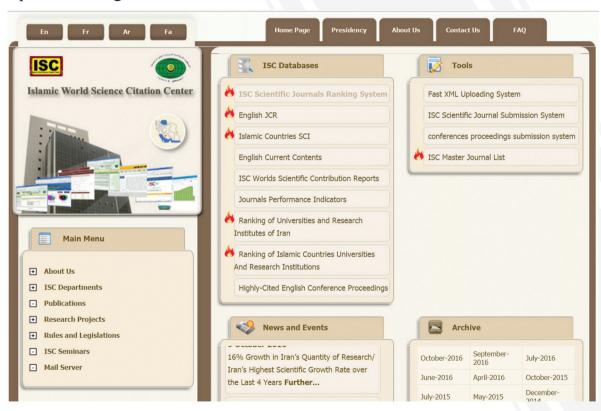
ISC by adopting advanced scientometric strategies to improve OIC's scientific impact, citations, scientific diplomacy, economic impact, innovation and technological impacts, is proceeding towards preparing the necessary grounds for enhancing the quality of research and establishing an efficient scientific network within OIC countries.

Dr. Mohammad Javad Dehghani, ISC President

### Islamic World Science Citation Center (ISC): An Overview

- ISC was approved by Islamic Conference of Ministries of Higher Education & Scientific research (ISMHESR) in a meeting that held by ISESCO in 2008 in Azerbaijan.
- ISC evaluates and rank the researchers, universities, countries, journals, research domains etc. in OIC countries based on their scientific impact.
- ISC provides various service for scientific promotion in OIC countries including training workshops in Scientometrics.
- ISC helps OIC countries to know about the state of the art of the science in his country through mapping the scientific plus points and weakness.
- ISC maps the science in the OIC countries to help them for making scientific improvement plans.

#### http://www.isc.gov.ir



## The Scientific Publications in the World and OIC Countries

The statistics in this report are extracted from Thomson Reuters Web of Science (ISI) during 2000-2015

#### The world's number of publications



About 87% increase from 2000 to 2015

#### OIC countries' number of publications



About 638% increase from 2000 to 2015

## The proportion of publications of OIC countries as fraction of the publication of the world



A comparison of the world's and OIC countries' scientific publications in different subject-fields

#### The world's number of publications in Agricultural Sciences



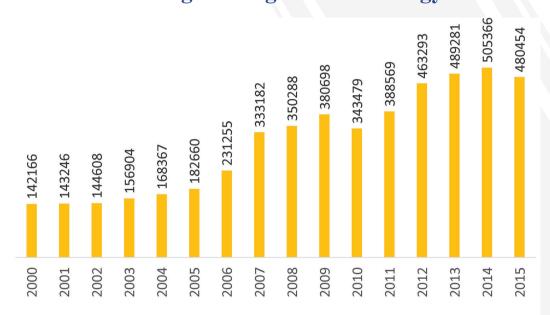
About 81% increase from 2000 to 2015

#### OIC countries' number of publications in Agricultural Sciences

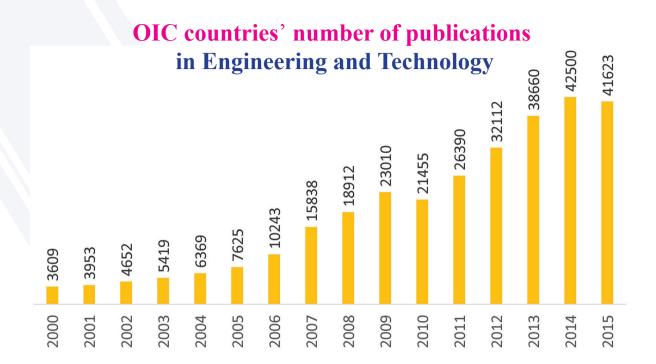


About 433% increase from 2000 to 2015

## The world's number of publications in Engineering and Technology



About 238% increase from 2000 to 2015



About 1053% increase from 2000 to 2015

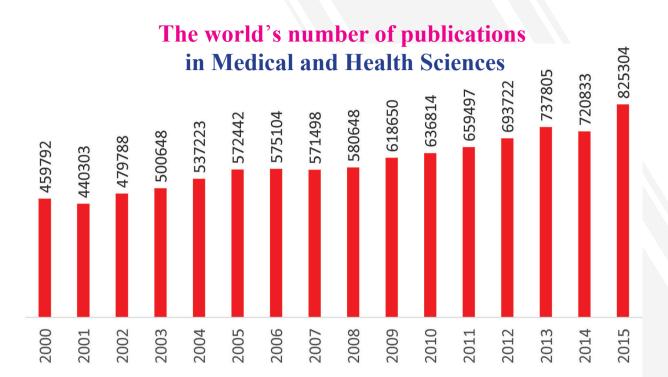


About -1% decrease from 2000 to 2015

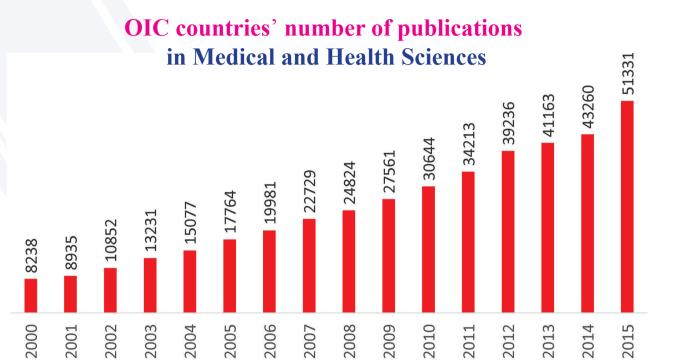
#### **OIC** countries' number of publications in Humanities



About 1053% increase from 2000 to 2015

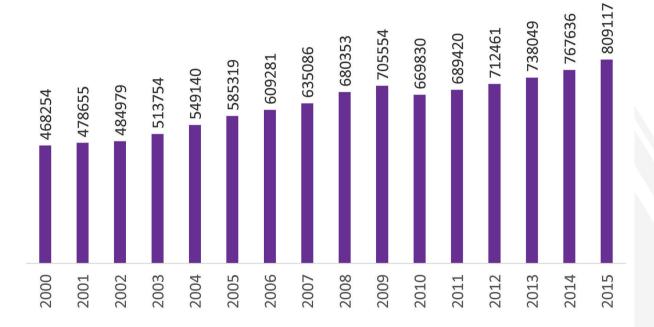


About 79% increase from 2000 to 2015



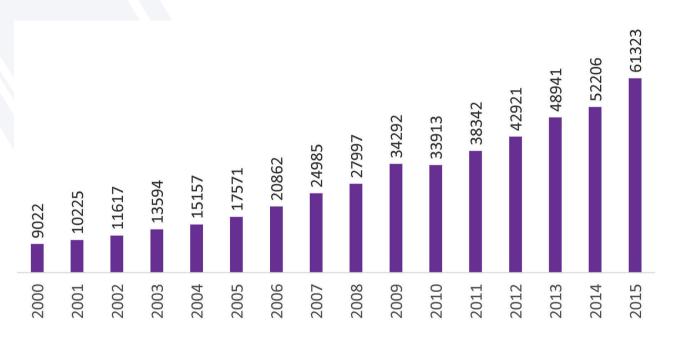
About 523% increase from 2000 to 2015

#### The world's number of publications in Natural Sciences



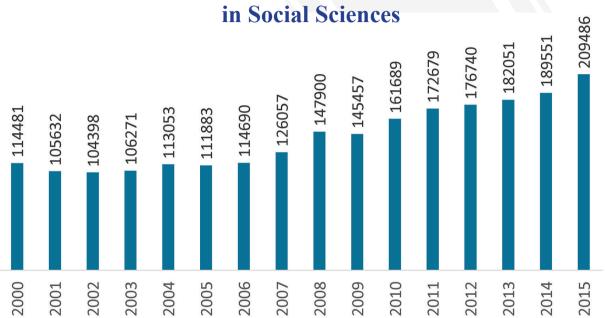
About 73% increase from 2000 to 2015

#### OIC countries' number of publications in Natural Sciences

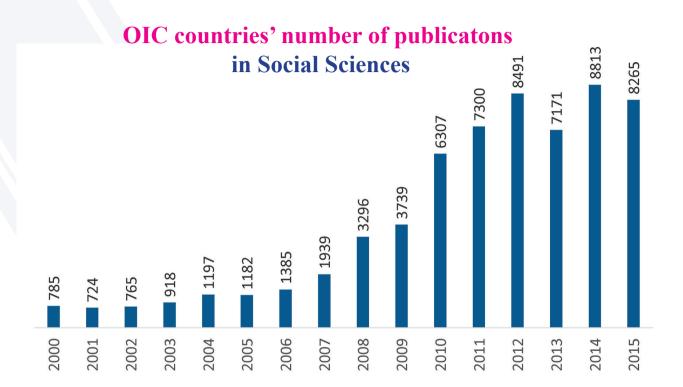


About 580% increase from 2000 to 2015

#### The world's number of publications

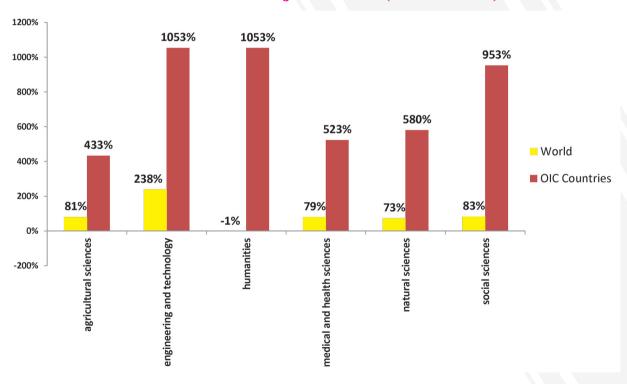


About 83% increase from 2000 to 2015



About 953% increase from 2000 to 2015

## A comparison of the growth rate of the number of publications in different subject-fileds (2000-2015)



## Mapping the science beyond focusing only on the number of publications

- The scientific activities of scholars, universities and countries could be mapped by using different indicators which will be mentioned briefly in the follow:
- Scientific impact or quality of the publications which mainly measured using the number of received citations
- Industrial impact which mainly measured by counting the number of citations received from those publications published by R&D section in the industries in the international journals
- Innovational impact which refers to the number of received citations from the patents
- Scientific collaboration which mainly count the number of coauthored work done by a group of authors, research institutions, universities and countries.

- ISC determine the plus points and weakness of researchers, universities
   and countries based on the above mentioned criteria and other indictors for scientific improvement
- ISC databases will also help OIC countries to know and to manipulate
- those parts of their science which are invisible and could not be traced using international databases such as Scopus and Web of Science

ISC is ready to help, cooperate and collaborate with you all.

Log onto our website www.isc.gov.ac.ir for more information.

THANK YOU



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