

## Arab Knowledge & Strategy: The Future Is Made, Not Simply Awaited

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**Abstract.** A society that longs for a better future, for a prosperous economy, for sustainable development, needs to examine its situation, learn its strengths and weakness, explore its options and opportunities. An action plan to promote scientific knowledge and the development of research based on modern technologies is proposed for the Arabic speaking countries. The role of the Syrian Arab Republic in this action plan is defined.

**Keywords:** emerging technologies, knowledge based economy, the Arabic speaking countries, the Syrian Arab Republic (SAR).

## Арабские знания и стратегия: будущее делается, а не ожидается

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**Аннотация.** Общество, которое стремится к лучшему будущему, процветающей экономике, устойчивому развитию, должно изучить ситуацию, определить ее сильные и слабые стороны, выявить свои потенциал и возможности. Для арабоязычных стран предлагается план действий по продвижению научных знаний и развитию исследований на основе современных технологий. Определяется роль Сирийской Арабской Республики в этом плане действий.

**Ключевые слова:** новейшие технологии; экономика, основанная на знаниях; арабоязычные страны; Сирийская Арабская Республика (САР).

DOI: 10.31432/1994-2443-2020-15-2-27-32

**Цитирование публикации:** Аммар У., Тайфур И. Арабские знания и стратегия: будущее делается, а не ожидается // Информация и инновации. 2020.Т.15, № 2. с. 27-32. DOI: 10.31432/1994-2443-2020-15-2-27-32.

**Citation:** Ammar Osama, Tayfour Ibrahim. Arab knowledge & strategy: the future is made, not simply awaited // Information and Innovations 2020.Т.15, № 2. p. 27-32. DOI: 10.31432/1994-2443-2020-15-2-27-32.

The challenges and turbulence experienced during recent years in the world, the Arabic speaking countries and the Syrian Arab Republic (S.A.R.) in particular, require an initiative to facilitate research enabling the policymakers' access to, and use of, new and generated knowledge, by publishing insightful quantitative and qualitative data and analyses to enrich the region's socio-economic knowledge development in the years to come.

Four emerging technologies are considered today as key focus areas for creating a knowledge based economy (KBE), given their potential to offer comprehensive and effective solutions to the world's most pressing environmental, economic and social challenges, namely:

a) Artificial intelligence: Applying data science algorithms and methods on large quantities of data allows extensive analysis of past events, as well as using predictive trends allows research into potential future scenarios and simulations of potential outcomes.

b) Cybersecurity: Using a combination of application software tools, microcode at telecom devices as well as operating systems at server and workstation levels in order to protect data and performance or to attack other entities on a local or international network. By extension, the use of cybersecurity tools and methods provides assistance to law enforcement agencies as well as intelligence agencies in extending their services and activities to the digital realm.

c) Blockchain: A synchronous ledger shared between multiple servers over a secure network provides participating agents a seamless interface to speed up the processing and automation of transactions allowing users to benefit instantly from services

d) Biotechnology: This emerging domain combines advances in sciences and biology with digital data processing tremendous potential that accelerates science advances to provides rapid solutions to challenges being

faced due to new discoveries in space and materials science

Tracking development and evolution in deployment of these technologies to document best practices and lessons learnt will be an effective factor in sustainable development for societies these days. SAR leadership have always prioritized knowledge as a prerequisite for their efforts, promoting KBE among their people, and even establish it as a core national value and way of life.

Nowadays, to say '*Knowledge Is Power*' is an understatement. Knowledge is essential — and even imperative — for communities to grow and move confidently into the future of KBE.

### 1. Global situation

As a very recent example of a global challenge, we can pinpoint the differences of national level responses to the emerging pandemic COVID-19. South Korea, China and Germany have maximized their use of emerging technologies to generate knowledge that assisted in managing the situation in tracking and tracing infections, treatments and research into potential cure treatment and vaccines to reduce the number of casualties and fatalities, thus these countries achieved the lowest rates of deaths per capita. *Figure 1.*

### 2. Arabic speaking countries situation

Whether rich in natural resources and cash or not, Arabic speaking countries have limited research and development (R&D) budgets. As such, these countries are knowledge consumers in English language of other countries' academic and economic evolution rather than knowledge generators in Arabic language of the specific features of their national experiences.

The absence of a repository and compendium of such knowledge in Arabic is notably an urgent need for these countries to share experiences and accelerate the paced catch up with emerging markets and developed economies. *Figure 2.*

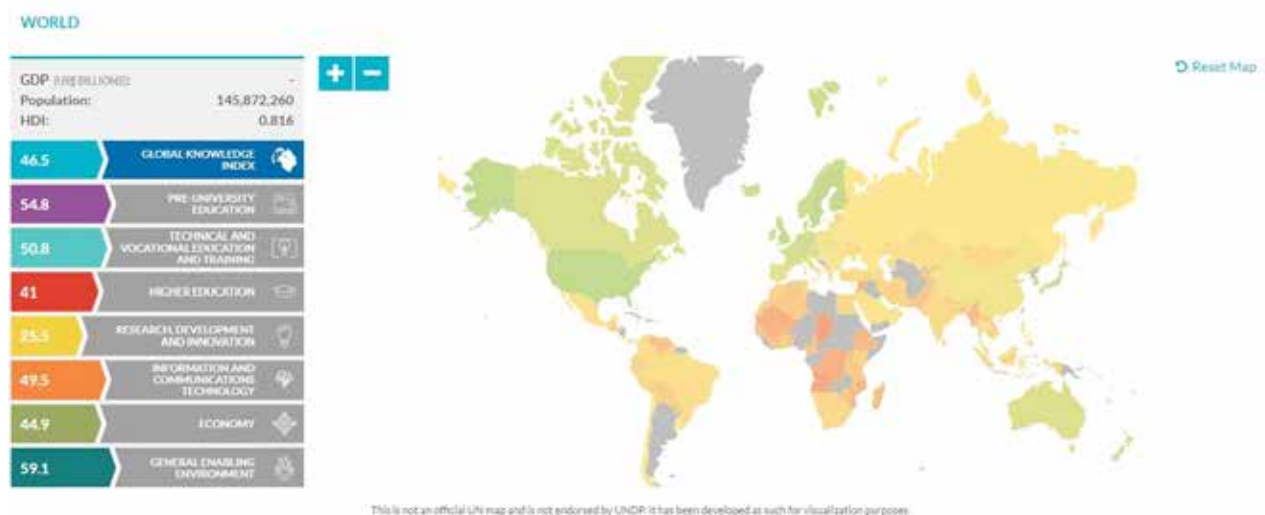


Figure 1. World Summary. The Knowledge index and its 7 Key Indicators [1]



Figure 2. Arab States Summary Data [2]

### 3. S.A.R. situation

In addition to being under one form or another of economic and technology sanctions since the 1980's as well as a national armed conflict crisis for the past 10 years, the S. A. R. journey towards a sustained knowledge based economic development is at a clear disadvantage in comparison with other countries [3].

It would therefore be prudent for the S. A. R. to capitalize on other countries experiences so as to avoid re-inventing the wheel. Figure 3.

The challenges and turbulence experienced in the world during recent years, the Arabic speaking countries and the Syrian Arab Republic (S.A.R.) in particular, require an initiative to:

1. facilitate research by publishing insightful quantitative and qualitative data and analyses based on local and international research and publications;
  2. support Arabic language if possible for the above mentioned publications;
  3. enable the policymakers' access to, and use of, new and generated knowledge;
  4. enrich the socio-economic knowledge development in line with international trends.
- Figure 4.

The above enables us to envision an Arab Knowledge Centre (AKC) in the Syrian Arab Republic. AKC is to embrace the pursuit of knowledge as a primary objective and action plan dedicated to the production,



Figure 3. Syrian Arab Republic Summary: The Knowledge index and its 7 Key Indicators [1].



Figure 4. Syria KPI's as per World Bank [4].

dissemination, and localization of knowledge in the Syrian Arab Republic.

Considering the close relationship between the language used and the knowledge based economy, the Arab Knowledge Centre mission, vision, strategy and objectives ought

to address the region of Arabic speaking countries as well. Thus the case for cooperation with international agencies to shape a new and innovative approach for realizing the United Nations 2030 Agenda and its 17 Sustainable Development Goals (SDGs) within the Arab Speaking countries. *Figure 5.*

## PREPARING SDG-BASED DEVELOPMENT PLANS



Figure 5. UN SDG Agenda 2030 page 30 [5]

As to the methodology and strategic deliverables, the plan is to act as follows:

1. The annual AKC report that surveys the Arab speaking countries, analyzing data from digital sources using various languages to establish a connection between knowledge and future technologies to measure the status of knowledge on the level of the countries in the Arab speaking region. The report is expected to position the AKC as a leading institution spreading knowledge and science.

2. Teams of highly qualified experts and academics from around the Arab speaking region are to be enlisted to work the two Components of the Publication:

- the first component seeks to present a qualitative diagnosis of the state of knowledge around the region,
- the second component offers an analysis of the future of Knowledge evolution, as well as recommendations for building knowledge economies and sustaining their growth to continue harnessing knowledge for sustainable development for a further decade to come:

3. The AKC report is expected to benefit from big data by employing a new model to measure the Arabic speaking countries' readiness for further knowledge based socio-economic development in view of rapid technological evolution and their impacts on key knowledge sectors.

4. The focus of the AKC spans from theoretical studies of:

- 4.1. the nature and status of knowledge;
- 4.2. quantitative monitoring and analysis of countries' knowledge profiles;
- 4.3. forecasting the future trajectory of knowledge acquisition, retention and application around the Arab speaking region.

5. AKC is to support stakeholders in political, academic, research, industrial and economic circles to develop informed policies based on data and scientific evidence.

6. Initiatives and programmes are to be developed in collaboration with many governmental and private-sector partners, to promote knowledge, and lay the AKC focal role for empowered knowledge-centered societies

in the Syrian Arab Republic, the Arab speaking region, and the world.

7. The objective of the AKC is to provide opportunities to monitor socio-economic progress via the following five sectoral domains:

- Tertiary education and University higher education (EDUC);
- Technical and Vocational Education and Training (TVET);
- Research, Development and Innovation (RDI);
- Information and Communications Technology (ICT);
- Socio — Economic Digital Development (SEDD).

Thus, AKC target would be to play a part in promoting the Syrian Arab Republic as a global Centre for cultural dialogue, and a

source of knowledge and ambitious strategies for building the advanced, knowledge-based societies of the future.

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