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OUTLOOK OF THE INFORMATION SOCIETY IN THE ARAB REGION - 2013

1. Background

The information society, in which information is processed efficiently, including the production, exchange, adaptation and use of information, is the appropriate environment for achieving sustainable development and enhancing the quality of life for all citizens. However, the move towards the information society constitutes a real challenge to developing countries, particularly in view of the expanding digital divide with developed countries, thus rendering them increasingly vulnerable to reduction in their productive and economic capacities.

Given the importance of information societies as a path for achieving sustainable development and achieving Internationally Agreed Development Goals, and in the process of following up to the World Summit on the Information Society, the ICT Division at ESCWA prepared a regional profile report, which is the sixth in a series on the information society in the Arab region. The 2013 report provides essential information on the status of the information society in the Arab region. It aims at assisting decision makers and researchers by providing them with reference information for analysis and planning. It also allows national authorities to compare the current status of their information society with that of other countries in the region and the world, thereby promoting opportunities for cooperation and regional integration in an increasingly knowledge-based global economy.

2. General outlook of the Information Society in the Arab region

The development of the information society in the Arab region encompasses many different facets and variables. Broad trends seen are very hopeful; most countries are performing better today than following the conclusion of the second phase of WSIS was held in Tunis 2005.

The Arab region has taken significant steps towards bridging the digital divide and building the information society. The prominence of ICTs has grown across the region, with dramatic increases in ICT adoption and use rates, and mounting adoption of fixed and wireless broadband technologies. Access costs are lower and more attention is being focused on building confidence and security in the use of ICTs, and building the ICT sector. Consequently, the region has witnessed an increasing adoption and use of ICT applications and e-services, and a greater participation of the Governments and all stakeholders in building the information society. These efforts will make it easier for member countries to address such issues as access to information and knowledge, building capacity for regional integration and the availability of digital Arabic content.

Despite the commonality of countries in the region, there are divergent economic and social differences which distinguish the GCC sub-region from the rest. Non-GCC countries suffer from poverty and high unemployment rates, especially among women and youth. However, most countries in the region face a number of other serious issues of detrimental to development including economic and political uncertainty, civil wars, occupation, civil unrest and terrorism.

Challenges facing the realization of the information society and the transition to a knowledge based economy in the Arab region persist. Such challenges should be addressed in the coming years through a joint collaboration by all stakeholders (Governments, the private sector, and NGOs) while facilitation the important role the youth and digital natives could play as the main actors of an ICT-driven transformation. These challenges differ from one country to another; however, they all have to be addressed with almost equal priorities. The list of challenges includes, but not limited to:

- Low ICT readiness and utilization in some member countries;
- Poor broadband penetration levels and affordability issues;
- Lack of confidence and security in the use of ICTs;
- Weak, and sometimes incomplete, legal and regulatory ICT framework;
- Restricted access to information and privacy issues;
- Fragmentation of ICT applications and services for socio-economic development;
- Limited production of substantive digital Arabic content;
- Inadequate production of accurate and timely statistics for ICT measurement and analysis for policy-making and decision support purposes;
- Human skills gap, in ICT related fields.

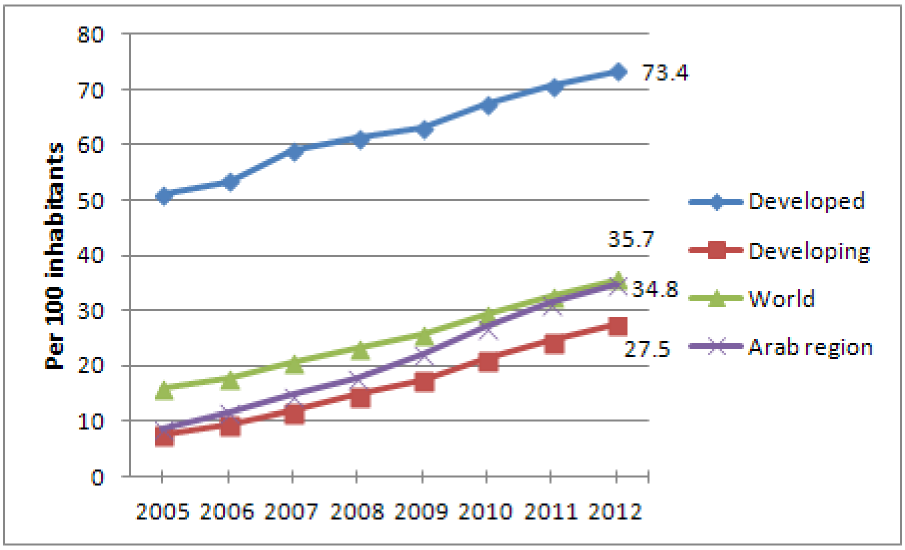
3. Outlook of the Arab region in ICT infrastructure

Most countries in the Arab region have sought to focus on improving their ICT infrastructures and taking measures to promote competition in their telecom sectors. Across the region, a significant positive correlation has been perceived between the liberalization of telecommunication services, and higher uptake of ICTs. Mobile and Internet penetration rates, in particular, have witnessed considerable increase in the region; as competition enters the market, the quality of service increases and costs are reduced. These conditions have been shown to promote the development of the information society.

(a) *Internet penetration*

While Internet users penetration rate in the Arab region registered a compound annual growth rate (CAGR) of 21.9 per cent during the period 2005 - 2012 (the world rate registered 12.4 per cent during the same period), the current penetration rate at 34.8 per cent remains slightly lower than the world average at 35.7 per cent. The Arab region lags behind developed countries in Internet penetration, but comfortably overtook the average of developing countries at 27.5 per cent (see figure 1).

Figure 1. Internet user penetration rates in selected regions, 2005-2012

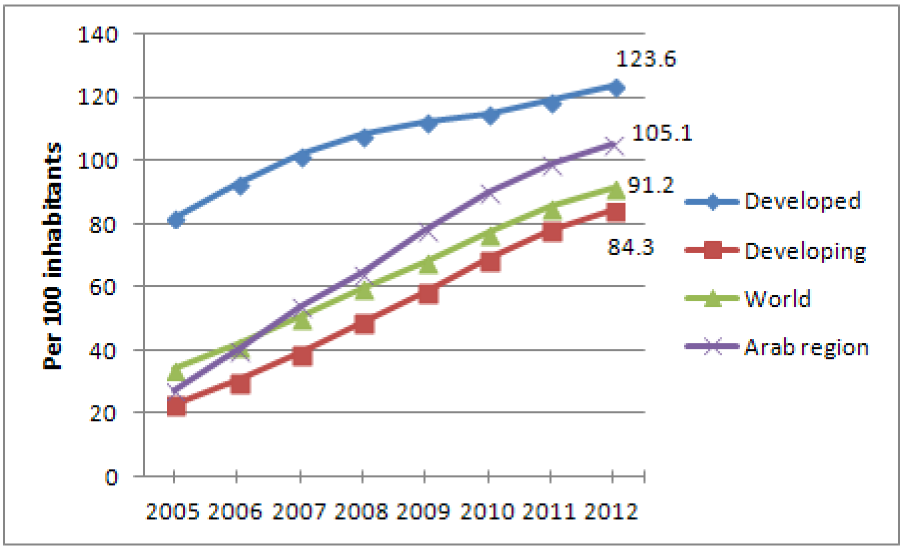


Source: Compiled by ESCWA based on data from ITU

(b) *Mobile phone penetration*

Mobile service markets are the forte of ICT infrastructure in the region; they have gone a long way in terms of competition and sophistication. A notable CAGR of 21.4 per cent has been observed between 2005 and 2012, overtaking the global CAGR of 15.2 per cent during the same period. When comparing regional mobile phone penetration rates, it is evident that the Arab region surpasses the mobile penetration rate of developing countries by a good margin (at 84.3 per cent), while still trailing behind developed countries (at 123.6 per cent). While the average in the Arab region is higher than the world average, the sector is expected to grow further as such countries as more Arab countries shun duopoly and opt out for competitiveness (see figure 2).

Figure 2. Mobile phone penetration rates in selected regions, 2005-2012



Source: Compiled by ESCWA based on data from ITU

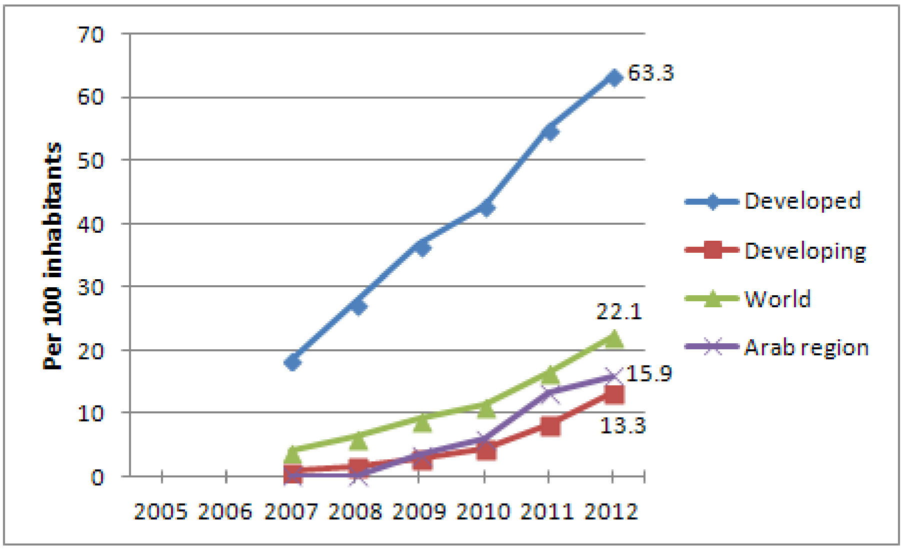
(c) *Mobile broadband penetration*

Wireless broadband is the most dynamic ICT service in the Arab region, in alignment with a similar global trend. Most of the growth seen in terms of wireless broadband penetration rates owes to the high penetration rate of mobile telephony and a surge in the uptake and use of smartphones.

The penetration rate of wireless broadband in the Arab region reached a value of 15.9 per cent in 2012– nearly six times higher than the region's fixed broadband penetration rate – still shy of the world average at 22.1 per cent but ahead of the average of developing countries at 13.3 per cent (see figure 3).

As of mid 2013, all countries of the Arab region but three (namely Iraq, Algeria and Palestine) had rolled out 3G services, and the shift to 4G networks, which has already started, is expected to fuel further growth in the near future.

Figure 3. Wireless broadband Internet penetration rates in selected regions, 2007-2012



Source: Compiled by ESCWA based on data from ITU

4. Outlook of the Arab region in ICT capacity-building

Measuring the performance of the Arab region in ICT capacity-building mainly reflects the use of ICT in education, training and literacy programmes, the status of research and development and the development of an enabling environment for innovation. To illustrate the situation in the Arab region, a number of criteria have been selected for comparison with other regions and countries of the world.

Illiteracy is still widespread in the region, especially among youth and women in the less-developed Arab countries. Despite great strides in fighting illiteracy, the region has one of the highest rates in the world, demonstrating that these countries have yet to benefit from the use of ICT to reduce prevailing high illiteracy rates.

Furthermore, spending on research and development and innovation region remain very limited and far below the world average. Assessing innovation through the number of PCT international filings reveals that the Arab region comes ahead of Africa but lags behind Asia and Europe (see table below). While, the number of PCT filings in the Gulf sub-region constitutes 81 per cent of the PCT filings of the whole Arab region, the latter comes ahead of Malaysia and Turkey, but lags dramatically behind Israel.

Number of PCT international filings in selected regions and countries, 2012

Country or region	Number of PCT international filings
Arab region	495
GCC sub-region	401
World	194,400
Africa	433
Asia	78,800
Europe	57,904
Israel	1,377
Malaysia	292
Turkey	451

Source: Compiled by ESCWA based on data obtained from WIPO Statistics Database available at: http://ipstatsdb.wipo.org

5. Outlook of the Arab region in e-Government

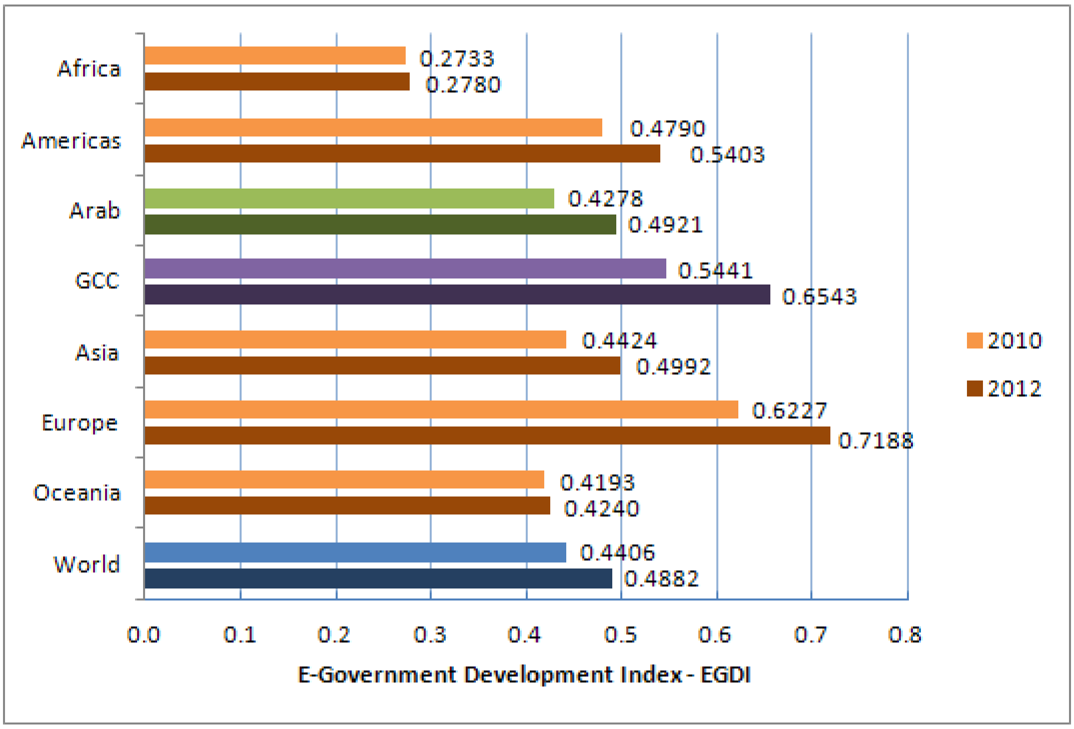
The development, adoption and use of e-services in the Arab region has been steadily evolving in the past couple of years driven by the growing number of Internet users, improved access to broadband networks, the rapid uptake of smartphones and mobile device, and the spread of social media providing more ubiquitous channels for interaction. Governments have started to provide e-services allowing for online transactions and cloud computing.

All countries in the region have now dedicated and interactive Government web portals, though at different levels of development and sophistication, supported by a growing use of such advanced online participation tools as blogs, forums and social media applications. According to the 2012 UN E-Government Development Index (EGDI), the index score of the Arab region at 0.49 surpassed the world average at 0.48, albeit far lower than that of the Americas at 0.54. However, the GCC sub-region scored the second-highest average in the world, at 0.64, only behind Europe, at 0.71 (see figure 4).

6. Outlook of the Arab region in linguistic diversity and local content

As more people in the region access the Internet, a key issue is the availability and accessibility of content, information and knowledge. Per capita, there are proportionally fewer sources of information available to Arab speakers than to other language groups in comparable regions. Arabic content on the internet has improved since 2008, when it accounted for only 0.3 per cent of total online content to around 2 to 3 per cent in 2012, thereby signalling a significant growth in online content in the region.

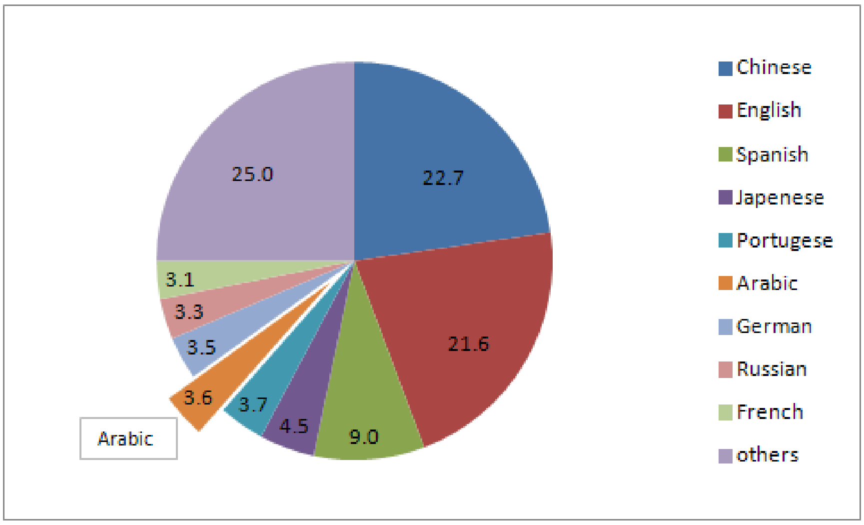
Figure 4. E-Government Development Index scores in selected regions, 2010-2012



Source: UN E-Government Survey, 2010 and 2012

The Arabic language made it to the top-ten list of languages used on the Internet in 2012, driven by a growing number of Arab internet users. While only 3.6 per cent of the world online users utilize the Arabic language on the Internet, Arabic became the 6th leading language online overtaking German for the first time, which fell down to 7th place (see figure 5). Despite the improvement, these numbers indicate that relative to the growing size of online content, not much Arabic content has been created; particularly content that is of quality.

Figure 5. Percentage of online users by world language, 2012



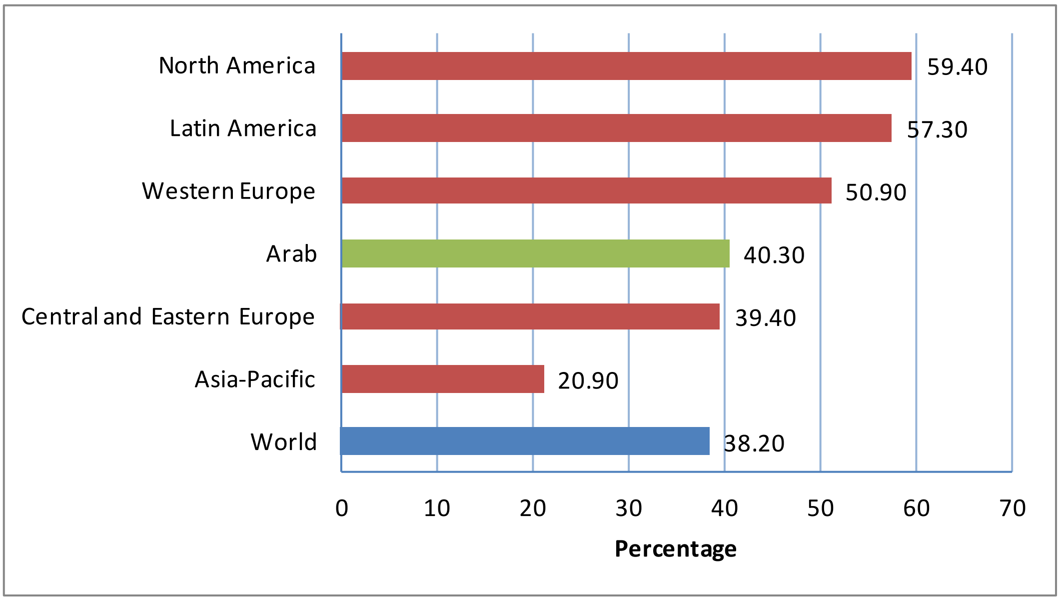
Source: ROI Lifts the Long Tail of Languages in 2012, available at: http://www.commonsenseadvisory.com

7. Outlook of the Arab region in the media

Despite the diversity of the media in the Arab region, its role remains limited in developing information societies. One of the findings of the 2013 regional profile of the Information Society in the Arab Region is that media freedom in all member countries is at its lowest level compared with developed countries. Social issues continue to be portrayed in a stereotypical way by most media outlets in the Arab region, unlike their coverage in developed countries of the world. However, the rise of social media applications and its potential impact on governance and the civil movement in the region is to be seen. The quick adoption of such applications as Facebook and Twitter is expected to have a positive impact on the freedom of expression, the participation of citizens, and democracy. Facebook user penetration in the Arab region (as a percentage of internet users) surpassed the world average at 38 per cent, and the averages of Asia-Pacific and Central and Eastern Europe; however, the Arab region trails behind the Americas and Western Europe by a big margin (see figure 6).

Figure 6. Facebook user penetration by region, 2012

(Percentage of internet users in each group)



Source: Compiled by ESCWA based of data obtained from Wikipedia and eMarketer at: http://www.emarketer.com/Article/Emerging-Markets-Drive-Facebook-User-Growth/1009875

8. The way forward

While bright spots have been observed in realizing the information society in the region, the analysis presented in the regional profile report clearly indicates that GCC countries have made greater strides than the rest of ESCWA member countries in building information societies. Nevertheless, all ESCWA member countries, including the most advanced ones, still need to exert considerable efforts before reaching the levels attained by developed countries in this regard.

While ICT has a key role to play in creating job opportunities and alleviating poverty, the difficulties of development in conflict-prone areas preclude any role for ICT for development, and require different priorities and focus. While much remains to be done, realistic options exist for making concrete improvements throughout the Arab region.

Based on the analysis, findings, and recommendations provided in the Regional Profile report of 2013, Arab countries are urged to adopt a framework for formulating policies and strategies beyond 2015. Furthermore, several initiatives and projects may be launched to reduce the existing digital divide both among member countries and between the Arab region and the more developed regions of the world. Within that context, ESCWA will continue to provide countries in the region with the support and advisory services required to ensure synergy with the global trends of ICT, and the development of the information society in line with the WSIS processes and post-2015 development agenda.