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# Measuring the Information Society in Western Asia

**Rami Zaatari**  
Team Leader, IS Measurements  
ICT Division, UN-ESCWA  
[www.escwa.un.org](http://www.escwa.un.org)



## Outline

- Current Status
- Capacity-Building on IS Measurements
- Adapting and Developing New Indicators
  - Arab Women in S&T Project
- Advisory Services to Member Countries
- Publications/Studies
- Portal and Database



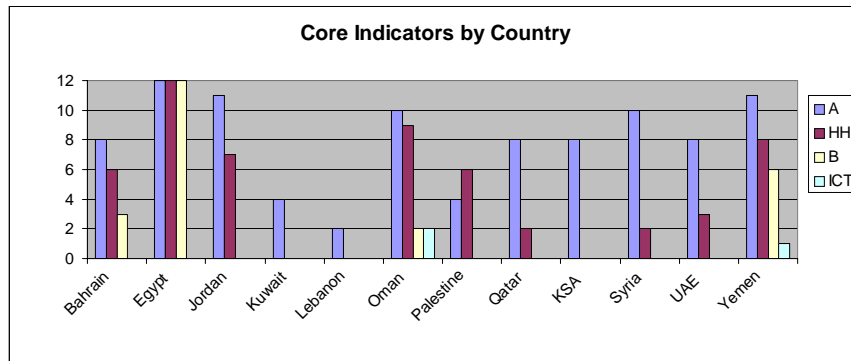
## Current Status

- In most ESCWA member countries, core ICT indicators adoption and data collection are not institutionalized and often partial;
- ICT sector/ICT goods statistics are practically inexistent;
- Egypt and Jordan are more advanced than the others;
- Recognition of the importance of ICT indicators at decision making level is still weak;
- Good collaboration at the regional level, particularly with AITRS and ITU regional office, and at the international level with ITU, OECD, UIS and UNCTAD.



## Current Status

- In 2006-2007 ESCWA tried to collect core indicators through national focal points:





## Capacity-Building on Information Society Measurements (1/2)

- Training workshops carried out at the regional, sub-regional or national level;
- Collaboration with regional and international organizations (ITU, UNCTAD, UIS, OECD, AITRS\*) and national statistics offices;
- From awareness on core ICT indicators to hands-on training on data collection and analysis;
- Household/business surveys constitute major components.

(\*) Arab Institute for Training and Research in Statistics



## Capacity-Building on Information Society Measurements (2/2)

- Capacity-Building Workshop on ICT Core Statistics, April 2008, Amman, **Jordan**;
- Training Workshop on ICT data, statistics and indicators for **Iraq's** Central Organization for Statistics and Information Technology (COSIT), Beirut, 17-21 June 2008;
- Additional training workshops on ICT indicators and statistics are planned for Iraqi COSIT, **Syrian ICT Statistics** Unit and **GCC statistics offices** in March-June 2009.



## Adapting and Developing New Indicators

### Measuring the status of Arab women in S&T

#### Background

- The participation of Arab women is still weak in the field of S&T, particularly at decision-making level, whether in the public or private sector;
- Her contribution to the advancement of S&T is still also very modest;
- There are no statistics, no databases in the Arab world on the role of women in S&T.



### Measuring the status of Arab women in S&T

#### Project Objectives

- Collect data to measure the role of Arab women in S&T;
- Expand on the GIS built by the Arab Women Organization;
- Launching of the Arab women in S&T database.

#### Main Project Components:

- Identify and develop a set of indicators for monitoring the status of Arab women in the field of S&T;
- Identify mechanism for data collection and developing the related questionnaire;
- Identify focal points in the countries participating in the project.



## Measuring the status of Arab women in S&T

### Methodology for the development of indicators:

- Previous work done by OECD, UNESCO EU, regional and international organizations were used as references;
- Identified and defined specific areas of interest in S&T;
- Adopted classifications for educational levels, specialization, work sector and job level.

### Project Partners:

- Arab Women Organization (AWO) and ESCWA;
- 15 Arab countries, where a focal point is designated for data collection.



## Measuring the status of Arab women in S&T

### Arab Women in S&T Indicators:

- A set of 55 indicators in line with those universally adopted and compatible with the context of the Arab world.
- The set of indicators will monitor the status of Arab women
  - in all educational levels (elementary, intermediate, secondary, vocational, tertiary and higher education);
  - at the Workplace in various economic sectors;
  - in R&D fields related to S&T.



## Measuring the status of Arab women in S&T

### Work Progress:

- Arab Women in S&T set of indicators and related questionnaire are developed;
- Questionnaires were sent to focal points in 14 Arab cnty;
- Data collection was accomplished and received from 7 countries: Algeria, Bahrain, Egypt, Jordan, Lebanon, Palestine and Mauritania;

### Four sets of indicator on Arab Women in S&T:

- 1- General Indicators (17);
- 2- Indicators on Arab Women in Education (20);
- 3- Indicators on Arab Women in S&T at the workplace (12);
- 4- Indicators on Impact of Arab women working in S&T (6).



## Measuring the status of Arab women in S&T

### 1-General Indicators

1. Total population
2. Proportion of females to total population
3. Illiteracy rate of individuals aged 10 years and above
4. Illiteracy rate of females 10 years and above
5. Total number of students (school level)
6. Ratio of females to the total number of students (school level)
7. Total number of teachers in schools (basic, secondary and vocational levels)
8. Proportion of female teachers to the total number of teachers in schools of (basic, secondary and vocational levels)
9. Total number of university students
10. Ratio of females to the total number of university students
11. Total number of faculty members at universities
12. Proportion of female faculty members to the total number of faculty members at universities
13. Total number of universities
14. Total number of workers in various sectors in the country
15. Proportion of female workers to total number of workers in the country
16. Total number of workers in science and technology (holding a university degree or technical university) in the country
17. Proportion of female workers in science and technology to the total number of workers in science and technology in the country





## Measuring the status of Arab women in S&T

### 2- Indicators on Arab Women in Education

<b>2.A - Women in basic, secondary and vocational education (students)</b>
1. Percentage of female students in basic and secondary education 2. Percentage of female students in vocational education
<b>2.B - Women in basic, secondary and vocational education (teaching staff)</b>
1. Percentage of female teachers 2. Percentage of female schoolmasters
<b>2.C - Women in tertiary education (students)</b>
1. Percentage of female students in tertiary education 2. Percentage of female graduates in tertiary education 3. Percentage of female students in vocational education 4. Percentage of female graduates in vocational education 5. Percentage of females receiving scholarships to prepare for graduate studies 6. Percentage of female graduates at the Masters level 7. Percentage of female graduates at the PhD level
<b>2.D - Women in tertiary education (teaching staff)</b>
1. Percentage of female teachers in vocational education 2. Number of females heads of vocational institutes 3. Percentage of females as trainers 4. Percentage of female faculty members as teaching assistants 5. Percentage of female faculty members as assistant professors 6. Percentage of female faculty members as professors 7. Number of females heads of universities 8. Number of females as deans of colleges 9. Percentage of female faculty members with a research grants



## Measuring the status of Arab women in S&T

### 3-Indicators on Arab Women in S&T at the workplace

<b>3.A - Women in science and technology, according to the job level</b>
1. Percentage of female workers according to the job level
<b>3.B - Women in science and technology, according to specialization</b>
1. Percentage of female workers according to specialization
<b>3.C - Women in science and technology, according to the work sector</b>
1. Percentage of female workers according to the work sector
<b>3.D - Women in science and technology, according to the degree level</b>
1. Percentage of female workers with a degree
<b>3.E - Women in science and technology, according to the work sector and job level</b>
1. Percentage of females working in the business sector 2. Percentage of females working in the government sector 3. Percentage of females working in the higher education 4. Percentage of females working in international and regional organizations
<b>3.F - Women in science and technology, according to the work sector and specialization</b>
1. Percentage of females working in the business sector 2. Percentage of females working in the government sector 3. Percentage of females working in the higher education 4. Percentage of females working in international and regional organizations



## Measuring the status of Arab women in S&T

### 4-Indicators on Impact of Arab women working in S&T

#### 4.A- Women in science and technology, according to specialization

1. Percentage of patents registered to females
2. Percentage of inventions held by females
3. Percentage of published papers written by females
4. Percentage of books published by females
5. Percentage of translated work provided by females
6. Percentage of females with honorary awards



## Advisory Services (1/3)

Advisory service to the Ministry of National Economy and Information Technology Authority, March 2008, Oman, to:

- Provide technical assistance for defining relevant indicators to reflect use of ICT in education and government;
- Provide technical assistance for identifying the data required for building the relevant indicators.
- Explore for existing data and assist in devising data collection strategies for additional data required for the purpose;
- Provide technical assistance for framing questionnaire modules, instructions for data collection, and output table formats;
- Assist in preparing a plan for capacity building for developing ICT indicators for Oman.



## Advisory Services (2/3)

Advisory service to Qatar Statistics Authority, March/April 2008, Qatar, to:

- Present an overview of the coverage of ICT indicators for the measurements of the Information Society;
- Discuss with QSA their priorities in the selection of groups of ICT indicators that could be produced during 2008-2009;
- Carry out visits of possible partners and sources of data for the measurement process;
- Provide sample questionnaires and definitions of data to be collected for the selected groups of indicators;
- Outline possible steps to be taken in the preparations for the surveys required for data collection.



## Advisory Services (3/3)

Advisory service to Yemen, April 2008, to:

- Present an overview of the coverage of ICT indicators for the measurements of the Information Society to the National Information Centre (NIC);
- Discuss with NIC their priorities in the selection of groups of ICT indicators that could be produced during 2008-2009;
- Carry out visits of possible partners and sources of data for the measurement process;
- Provide sample questionnaires and definitions of data to be collected for the selected groups of indicators;
- Outline possible steps to be taken in the preparations for the surveys required for data collection.



## Publications/Studies

- Regional Profile of the Information Society in Western Asia, 2009 (Q4 -2009).
- Impact of ICT on Community Development in the ESCWA member countries.(Q2 -2009)
- Working manual for data collection and compilation of statistical tables for ICT related indicators, planned for end of 2009.



## Portal/Databases

### IS Portal:

- IS Indicators Database
- IS Profiles (03, 05, 07, 09)
- Regional Action Plans
- Information Library
- Modern Online Tools for Collaboration



### ESIS:

Functions as a dedicated software package on the desktop and facilitates the distribution of indicators to policy makers and decision makers in the region through its Web component.



# Thank you!

*zaatari@un.org*