# The 13<sup>th</sup> Islamic Countries Conference on Statistical Sciences (ICCS-13): "Statistics for Better Life"

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Statistical Capacity Development of the OIC Member Countries between 2009-2013 and Emerging Concepts in Official Statistics by Prof. Savas Alpay, Director General Statistical Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

#### Bismillahi Ar-Rahmanir-Raheem,

Your Excellency, M. Nasir, Minister of Research and Technology, Republic of Indonesia

Your Excellency, Prof. Haryono Suyono, Former Minister of Population Republic of Indonesia

Prof. Shahjahan Khan, Acting President of the ISOSS

Dr. Munir Ahmad, Founding President of ISOSS

Prof. Dr. Ir. Herry Suhardiyanto, Rector of the Bogor Agricultural University

Distinguished Participants,

Ladies and Gentlemen,

#### Assalamu Alaikum wa Rahmatullahi wa Barakatuhu,

It is a great pleasure for me to address you on the occasion of the 13th Islamic Countries Conference on Statistical Sciences (ICCS-13) with the theme "Statistics for Better Life" in this beautiful city of Bogor. I would like to extend my best wishes to Dr. Ali S. Hadi and the local organisation committee for the excellent arrangements and their kind hospitality.

#### Distinguished Participants,

#### Ladies and Gentlemen,

The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), was founded as a subsidiary organ of the Organisation of Islamic Cooperation (OIC) and started its activities in Ankara, Republic of Turkey on 1 June 1978. As being the statistical arm of the OIC, SESRIC not only disseminates socio-economic statistics and information on the OIC member countries but also organises training programmes in official statistics geared to the needs of the OIC member countries and establishes platforms to initiate and enhance co-operation among them.

Based on the Istanbul Declaration of the 2010 Meeting of the National Statistical Offices (NSO), the OIC member countries agreed to organise their annual meetings under the

umbrella of the OIC Statistical Commission (OIC-StatCom). The Commission aims to bring about a platform for exchanging experiences and best practices among its members. In doing so, the Commission also contributes to the statistical capacity building efforts of its members. Acting as the Secretariat of the Commission, SESRIC in collaboration with the Islamic Development Bank (IDB) has organised four annual sessions since 2011 with venues of the first in Istanbul, the second in Izmir (2012), the third (2013) and fourth (2014) sessions in Ankara. The content of each OIC-StatCom Session is determined by its members. In this respect, each Session specifically focuses on the issues articulated by the member NSOs.

Attended at the highest level of representatives from the NSOs of the OIC member countries, the Commission discusses not only issues that are mainstream in the global official statistics agenda; including Millennium Development Goals, Post-2015 Development Agenda, health statistics, poverty statistics and many others but also specific issues of interest that are unique to its members including accreditation and certification mechanism for official statistics. Islamic banking and finance statistics, halal food and products statistics, and waqf statistics. Enjoying the active participation of its members, the OIC-StatCom actively materializes these issues into projects.

#### Distinguished Participants,

#### Ladies and Gentlemen,

I would like to give more details on some of our projects undertaken under the umbrella of OIC-StatCom.

The OIC Accreditation and Certification Programme for Official Statisticians (OIC-CPOS) is a project that basically aims at certifying the expertise and knowledge on the professional conduct of statistical work by official statistics professionals in the OIC member countries. The project further aims at recognizing those who have achieved an acceptable level of professional competence in the understanding and application of statistical methods and are bound by code of ethics, principles and good practices of Official Statistics. The overall project objective is to enhance the quality of human resources in the NSOs of OIC Member Countries and contribute in the capacity development of the National Statistical Systems (NSS) of the OIC Member Countries by supporting and certifying bright junior statistical professionals. The first phase of the project will entail the certification of the junior statistical professionals working in the NSOs of OIC Member Countries with at least 2 years of experience through the Basic Level Certification Exams (CertEx-Basic).

The Project officially started with the First Session of OIC-StatCom in 2011. Following the proposal, a Working Group was formed to prepare the Terms of Reference. In 2012, the procedural details were approved, and the Commission secured the funding from the IDB in 2013. In 2014, the Implementation Plan was approved and in the framework of the project, the Certification Advisory Board (CAB) has been formed composed of 19 OIC member countries. The CAB will review in 2015 the proposed members for the Examination Committee (ExCom) from the nominations submitted by the NSOs of the OIC. The final leg of the first phase will involve the conduct of exams and awarding of the certifications to those who successfully pass the Basic Level Certification Exams (CertEx-Basic).

## Distinguished Participants,

## Ladies and Gentlemen,

Besides the OIC-CPOS project, SESRIC undertook 2 projects on poverty statistics and tourism statistics under the Project Cycle Management (PCM) Programme of the Standing Committee for Economic and Commercial Cooperation of the OIC (COMCEC). Adopted in 2012, the Strategy Document of the COMCEC is the first vision document for six main cooperation areas including tourism. To achieve strategic objectives defined in the COMCEC Strategy, COMCEC Coordination Office launched the COMCEC PCM Programme in 2013. Which received 98 projects from 23 OIC Member Countries (86 project proposals) and 3 OIC Institutions operating in the field of economic and commercial cooperation (12 project proposals). Of those project proposals, 15 of them have been final listed by the COMCEC Coordination Office. SESRIC is the only OIC Institution to be granted a total funding support of USD 165,000 under the COMCEC PCM Programme for its two projects focusing on poverty statistics and tourism statistics.

Carried out under the support of COMCEC PCM Programme and coordinated by SESRIC, the project titled "2013-SESRIC-028 Enhancing National Capacities of OIC Member Countries in Poverty Statistics" aims at producing a policy-oriented research paper for providing insights into the nature and causes of poverty in OIC Member Countries, with a focus on formulating strategies to strengthen capacities in terms of poverty statistics and contributing to the OIC Member Countries in terms of aid effectiveness and monitoring poverty. Within the framework of the project, two Expert Group Meetings were organized and attended by 26 OIC member countries and representatives of COMCEC, Food and Agriculture Organization of the UN (FAO), Islamic Solidarity Fund for Development (ISFD) of the Islamic Development Bank (IDB) Group, Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP).

The project titled "2013-SESRIC-0111 Improving Statistical Capacities of Tourism Sector in Mediterranean and Gulf Regions" aims at building statistical capacities of the OIC member countries in tourism statistics and overall contributing to their NSS through capacity building programs including short-term trainings. So far, six short-term trainings in Albania, Jordan, Oman, Qatar, Tunisia, and UAE; and a Regional Workshop on Tourism Statistics and Tourism Satellite Accounts in collaboration with the UNWTO in Ankara have been conducted. The short-term trainings and the Workshop were attended by over 130 tourism statisticians.

#### Distinguished Participants,

#### Ladies and Gentlemen,

Tobacco is the only consumer product that kills its users when used exactly as recommended by the manufacturer. The epidemic of tobacco use, through the consumption of cigarettes and other tobacco products and exposure to tobacco smoke, is one of the greatest global threats to health. Tobacco products cause deaths of millions of people each year, most of which occur at the productive middle ages resulting in a large number of life years lost to premature mortality. The future appears even worse under the present trends in tobacco consumption.

Today, many developing countries, including OIC member countries, are experiencing an enormous increase in non-communicable diseases, most of which, such as cancer, cardiovascular and respiratory diseases, have been associated with tobacco use. The most recent available data indicate that smoking prevalence in OIC member countries is quite high, placing them among the countries with the highest smoking rates in the world.

Articles 20 and 21 of the WHO Framework Convention on Tobacco Control (FCTC) emphasizes that an essential component of a comprehensive global tobacco control effort is an efficient and systematic surveillance mechanism to monitor the epidemic. Tobacco Questions for Surveys (TQS) was developed with a view to incorporating the globally standardized tobacco questions into the on-going national and international surveys. The subset of key questions from the Global Adult Tobacco Survey (GATS) is meant to improve comparability of tobacco data over time by harmonizing tobacco surveillance activities across various on-going surveys. TQS is a component of the Global Tobacco Surveillance System (GTSS), which was developed by the World Health Organization (WHO), Centre for Disease Control and Prevention (CDC), and other partners to assist countries in establishing tobacco control surveillance and monitoring programs.

To improve the implementation of the WHO FCTC in its member countries, the OIC, through its Strategic Health Programme of Action, 2014-2023, aims to reduce the level of exposure of individuals and populations to the harmful effects of tobacco. TQS integration, facilitated by the SESRIC, in the framework of ongoing surveys in OIC member countries will serve as a mechanism to harmonize and standardize the monitoring of key tobacco control indicators and promote sustainability and integration with other risk factor surveillance initiatives. In this respect, the SESRIC partnered with the CDC, CDC-F, and WHO in 2014. So far, TQS was implemented in 7 OIC member countries. Within the framework of the project, financial/technical assistance will be provided to 15 OIC member countries to facilitate the integration of the TQS in the relevant national level surveys.

#### Distinguished Participants,

#### Ladies and Gentlemen,

Since 2007, SESRIC conducts its statistical capacity development activities under its flagship StatCaB (Statistical Capacity Building) Programme. To collect information on the needs and capacities of the NSOs and carry out our training activities, the StatCaB Survey is being circulated every two years, the last of which was circulated in 2013.

Our analyses show that the NSOs of the OIC countries are actively seeking for collaboration and cooperation activities for statistical domains including Social and Demographic Statistics, Economic Statistics, Environment and Multi-Domain Statistics, Methodology of Data Collection, Processing, Dissemination and Analysis, and Strategic and Managerial Issues of Official Statistics. Starting from 2013, our StatCaB Survey has also included questions concerning the needs and capacities in Professional Skills for Official Statisticians including Effective Communication, Change Management, and Stakeholder Relations and Statistical Literacy.

Given these needs indicated by the NSOs of the OIC countries in Statistical Domains and Professional Skills for Official Statisticians, we – as SESRIC – are carrying out statistical capacity activities for its stakeholders in cooperation with international organisations. So far, a total of around 80 short-term training programmes based on a South-South Cooperation approach and several regional level Workshop programmes in collaboration with international agencies, including those of the UN System, have been conducted in about 35 OIC countries.

#### Distinguished Participants,

#### Ladies and Gentlemen,

Many developing countries have statistical systems and mechanisms where measuring for results is still in its infancy period and has a wide room for improvement. Today, it is a well-known fact that the measurement of progress in terms of reaching objectives set for the development of countries can only be achieved through reliable and good quality statistics as they inform decision makers about the effectiveness of policies and programmes conducted.

Although statistics may not play a direct role in overseeing the whole development process, the complex process of development activities cannot be thought without this essential component.

Statistics-related fields require sound financial and human resources together with technical specialization which at the end are expected to contribute to a well-established statistical capacities of the NSS.

#### Distinguished Participants,

#### Ladies and Gentlemen,

If an NSO and other agencies of the NSS have the ability to provide timely and trustworthy data, this is an indication of the sound policies and institutions existing in that country. This ability is directly proportional to the capacity of these actors within the NSS. In this respect, **statistical capacity is the ability of countries to meet user needs for good quality official statistics which are produced by governments as a public good**. Several approaches have been developed, including the Statistical Capacity Indicator (SCI) by the World Bank, to measure the statistical capacity.

SCI is based on a diagnostic framework and gives an assessment on the capacities of NSS based on three dimensions: Statistical Methodology, Source Data, and Periodicity & Timeliness. For 2013, statistical capacities of 149 countries, mainly within the developing category, have been measured under the SCI approach. My presentation considers the overall SCI and dimension scores available for 50 OIC Countries with available data between the period 2009 and 2013. A limitation for my presentation is the exclusion of statistical

capacities of Brunei and six GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates) as no SCI scores have been disseminated by the data source.

## Distinguished Participants,

## Ladies and Gentlemen,

The Overall SCI score is a simple arithmetic average of the three SCI dimension scores with a scale ranging from 0 to 100. The highest score that can be obtained is 100 and shows the perfect conditions for statistical capacity. The changes in average overall SCI scores from 2009 to 2013 for the groups of OIC, Non-OIC, and the World showed that the group OIC countries achieved a score increase of 1.3 from 62.4 in 2009 to 63.7 in 2013, though its group average being the lowest among others in both years (Non-OIC: 67.5 in 2009 to 67 in 2013, 0.5 point decrease; World: 65.7 in 2009 to 65.9 in 2013, 0.2 point increase).

When examined in more detail, 22 out of 50 OIC countries (44%) managed to increase their SCI from 2009 to 2013. However, the percentage of Non-OIC countries (52% of 96 countries) and the World (49% of 146 countries) with score increases outperformed that of the OIC countries group within the same period.

In 2013, Kazakhstan had the highest SCI score with 94 points and followed by Egypt (90 points), Turkey (86 points), Kyrgyz Republic (84 points), Palestine (83 points), Indonesia (80 points), Morocco (79 points), Mozambique (78 points), Nigeria and Tajikistan (76 points, each). As to the performance of the OIC Countries, Palestine recorded the highest overall SCI score increase with 43 points up from its score in 2009, followed by Guinea-Bissau (17 points up), Togo (16 points up), Lebanon (12 points up), Uganda (11 points up), Benin, Niger, Burkina Faso, and Chad (10 points up, each), and Iraq, and Nigeria (9 points up, each). There was no change in the overall SCI score of Kazakhstan, Bangladesh, Uzbekistan, and Somalia within the same period. The highest score decrease was recorded by Pakistan with 16 points down, followed by Libya and Iran (11 points down, each), Malaysia and Comoros (10 points down), Syria (8 points down), and Indonesia, Cameroon and Suriname (7 points down). Having this overview, let us look into the details of the three SCI dimension.

The first dimension of the SCI is Statistical Methodology (SM) which quantifies the extent that a country follows and implements internationally recommended statistical standards and methods. Ten criteria are equally weighted to score this dimension: National accounts, balance of payments, CPI, production index, external debt, import/export prices, government finance, reporting to UNESCO, vaccine reporting, and SDDS.

The changes in average SM scores from 2009 to 2013 for the groups of OIC, Non-OIC, and the World revealed that the group of OIC countries achieved a score increase of 4.6 from 46.6 in 2009 to 51.2 in 2013, though its group average being the lowest among others in both years. The averages of Non-OIC Countries and All Countries group also increased by 2.0 (from 56.6 to 58.6) and 2.9 points (from 53.2 to 56.1), respectively, in the same period.

In 2013, Kazakhstan and Turkey obtained the highest SM score with 90 points and followed by Egypt, Kyrgyz Republic, Morocco and Palestine with 80 points, and Maldives, Tajikistan,

Azerbaijan, Jordan, Tunisia, and Malaysia with 70 points. As to the performance of the OIC Countries, Palestine recorded the highest SM score increase with 70 points up, followed with the score increase of 30 points by Guyana and Guinea, and increase of 20 points by Côte d'Ivoire, Gambia, Nigeria, Afghanistan, Niger, and Gabon. There was no change in the SM scores of 15 OIC countries within the same period. The highest score decrease was recorded by Pakistan with 30 points down, followed by Morocco, Malaysia, Indonesia, and Iran (20 points down), and Tunisia, Cameroon, Syria, Chad, Turkmenistan, and Sudan (10 points down).

#### Distinguished Participants,

#### Ladies and Gentlemen,

The source data is the second dimension of the SCI and reflects whether a country takes into consideration the internationally recommended periodicity in its data collection activities, and whether data from administrative systems are available and reliable for statistical estimation purposes. The periodicity of population and agricultural censuses, the periodicity of poverty and health related surveys, and completeness of vital registration system coverage are equally weighted in source data dimension to score the countries.

As to the average source data scores, the OIC Countries group recorded no score change and stayed at the level of 60.6 points both in 2009 and 2013. The averages of Non-OIC Countries and All Countries group decreased respectively by 2.1 points (from 66.8 to 64.7), and 1.3 points (from 64.7 to 63.4) in the same period.

In 2013, Egypt, Kazakhstan, and Palestine obtained 100 points, and followed by Albania, Bangladesh, Benin, Burkina Faso, Chad, Indonesia, Iran, Kyrgyz Republic, Malaysia, Mali, Mozambique, Niger, Nigeria, Turkey, and Uganda (80 points). As to the performance of the OIC Countries regarding source data dimension, the 8 OIC countries with the highest source data score increase in 2013 were Chad, Togo, and Palestine (50 points up), Guinea-Bissau and Lebanon (30 points up), and Benin, Burkina Faso, and Uganda (20 points up). No score change was observed for 16 OIC countries. Cote d'Ivoire recorded the largest score decrease (40 points down), and followed by Mauritania (30 points down), and Albania, Algeria, Azerbaijan, Guinea, Guyana, Libya, Pakistan, Suriname, Syria, and Tajikistan (20 points down).

#### Distinguished Participants,

#### Ladies and Gentlemen,

The third and last dimension of the SCI, periodicity and timeliness, focuses on the availability and periodicity of ten components; most of which are Millennium Development Goals (MDG) indicators. The periodicity and timeliness dimension tries to measure the extent to which data are made accessible to users through transformation of source data into timely statistical outputs. Periodicities of the indicators including income poverty, child malnutrition, child mortality, immunization, HIV/AIDS, maternal health, gender equality in education, primary completion, access to water, and GDP growth are the ten criteria used for calculating the periodicity and timeliness score of countries. As to the average periodicity and timeliness scores, the OIC Countries group recorded a 0.5-point-decrease from 79.9 in 2009 to 79.4 in 2013. The averages of Non-OIC Countries and All Countries group also decreased by 1.2 (from 79.0 to 77.8), and 0.9 point (from 79.3 to 78.4), respectively, in the same period.

The 9 OIC Countries with the highest periodicity and timeliness scores in 2013 were Indonesia (100), Tajikistan (97), and Azerbaijan, Kazakhstan, Kyrgyz Republic, Mali, Mozambique, Pakistan, and Senegal (93 points, each). As to the performance of the OIC Countries regarding periodicity and timeliness dimension, Guinea-Bissau, Palestine, and Sierra Leone had the highest score increases with 10 points, and followed by Nigeria, Côte d'Ivoire, Azerbaijan, Syria, Iraq, and Mozambique (7 points up, each). No score change was observed for 17 OIC countries. The highest score decreases were observed for Comoros (20 points down), Libya, and Iran (13 points down, each), Chad, Jordan, Malaysia, and Yemen (10 points down), and Albania, Gabon, Guinea, and Turkmenistan (7 points down, each).

#### Distinguished Participants,

#### Ladies and Gentlemen,

Due to the pace of speed brought by the technological advancements, we witness that the nature of official statistics is not that static any more as it used to be in the past. In the global statistical community, we also witness the emergence of new terms such as; "big data", "open data", and "data revolution". Although taking their place in the agendas of statistical organisations, a lot of people seemed to be confused about these terms.

Big Data is a catch-all phrase. As applicable to most catch-all phrases, Big Data is ambiguous and can mean different things from person to person. One common definition for Big Data states it as "... high-volume, high-velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making."

A position paper prepared by the UNECE in 2013 states that Big Data has the potential to produce more relevant and timely statistics than traditional sources of official statistics. The same report also finds out that private sector may take advantage of the Big Data era and produce more and more statistics that present new challenges to official statistics on timeliness and relevance, as in the example of Google Flu Trends that uses aggregated Google search data to estimate flu activity. Against these emerging new players in the statistics field, statistics disseminated by national statistical of offices should ensure relevancy to the daily lives of people.

In this sense, what should be the way forward for NSOs of OIC countries in the Big Data era? To proactively manage and coordinate activities related to Big Data at the country level, NSOs should establish Big Data Integration Research and Development Divisions with a vital role in guiding the NSS of their countries on how to incorporate relevant Big Data sources into their existing infrastructures and statistical processes to support the accuracy, consistency, relevance and timeliness of the official statistics. These divisions should also train statisticians from other relevant agencies to equip them with a new mind-set and new

skills. In addition, these divisions should conduct research on how Big Data can be used in an official statistics setting.

## Distinguished Participants,

## Ladies and Gentlemen,

As early as 1792, Condorcet asserted the importance of informing citizens about governance, and presenting evidence about the state of society. This call for liberating data has gained a wider audience nowadays. The Open Data Institute (ODI) defines open data as information that is available for anyone to use, for any purpose, at no cost. The ODI also advocates that open data has to have a licence that says it is open data. In many countries, statistical data is already "open" (in the sense that data belongs to people and available to everyone upon request) but is subject to confidentiality and constraints.

A report prepared by the Public Administration Select Committee of the UK House of Commons in 2013 stated that the supply of statistics as open data with minimal restrictions on re-use is a major advance. It facilitates adding value through further products and services, ultimately adding to effective communication of the statistical data.

The economic impact of open data has been mentioned in an October 2013 report prepared by McKinsey&Company, a global consultancy firm. According to their findings, seven sectors including education, transportation, consumer goods, electricity, oil and gas, healthcare, and consumer finance could generate more than \$3 trillion a year in additional value as a result of open data, which is already giving rise to hundreds of entrepreneurial businesses and helping established companies to segment markets, define new products and services, and improve the efficiency and effectiveness of operations.

How should the NSOs of OIC countries approach the "open data" issue? If NSOs are willing to take bold steps in the path to "Open Data", they should (i) exhibit a strong will to proactively support the open data agenda through related activities, (ii) adopt data dissemination practices which are consistent with their strategies, and protect the confidentiality of the individuals, and (iii) embrace "Open Data Principles" of reuse and redistribution, universal participation, and availability and access.

#### Distinguished Participants,

#### Ladies and Gentlemen,

Given this background, the international community took these developments into their agenda. The High-Level Panel Report on the Post-2015 Development Agenda, making recommendations on the development agenda beyond 2015, called for a "data revolution". The Report mentions that "A true data revolution would draw on existing and new sources of data to fully integrate statistics into decision making, promote open access to, and use of, data and ensure increased support for statistical systems."

The Report also proposes a new international initiative to get the job done. The proposed public-private initiative, called the Global Partnership on Development Data, would be responsible for developing a strategy to address gaps in critical information, improving data

availability, and ensuring that quality baseline information is in place to measure and define progress against established development goals.

The Panel proposes that, in future – at latest by 2030 – all large businesses should be reporting on their environmental and social impact – or should explain why if they are not doing so. Similarly, the Panel proposes that governments should adopt the UN's System of Environmental-Economic Accounting, along with the Wealth Accounting and the Valuation of Ecosystem Services (WAVES) introduced by the World Bank, with help provided to those who need help to do this. These metrics can then be used to monitor national development strategies and results in a universally consistent way.

This call will undoubtedly necessitate the involvement of the NSOs and the respective regional and international statistical initiatives which now need to position themselves in new fields to measure sustainable development by embracing the Big Data and Open Data perspective into their infrastructures and processes.

Given the high responsibility in formulating a successful data revolution strategy, the NSOs of OIC countries can play a major role in coordinating the activities in their NSS by:

- Taking the lead in bringing about a culture of quality in statistical activities;
- Improving the human resources capacity of the NSS through statistical capacity programmes;
- Increasing the awareness of the policy-makers regarding the roles NSOs can play in the evidence based decision making processes; and
- Promoting the Open Data idea among the relevant stakeholders.

# Distinguished Participants,

# Ladies and Gentlemen,

SESRIC, with its vast experience in initiating cooperation and collaboration, is ready to cooperate and collaborate with the NSOs of OIC countries, and international stakeholders active in the official statistics domain in fields of mutual interest.

As I conclude, I would like re-iterate my sincere congratulations for the ICCS-13 and my best wishes for its future sessions.

May Allah (Subhanahu wa ta'ala) bestow his mercy on the undertakings of this Conference.

Wassalamu Alaykum we Rahmatullahi we Barakatuhu