

Development as a Matter of Statistics: How an Integrated Statistical System Can Contribute to the Development of a Country?

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Abstract

This is a case study on the role of an Integrated Statistical System in distributing the timely and reliable data on the socio-economic situation of a country and enhancing the rank of the country in the global development reports. In this paper the role of the National Strategy for Development of Statistics in the I.R. Iran to upgrade the status of this country in the United Nations Human Development Report is studied. According to the Iranian Strategy for Development of Statistics, the Statistical Centre of Iran is considered as the focal point of the official statistics and is responsible to distribute data on the existing situation to the international bodies in order to provide a clear picture on this country. The statistics on Iran in the Human Development Report needs revision since the statistics used for analyzing the progress made in this country for achieving the sustainable development goals are gathered from different resources which has led to assigning the wrong rank to this country in this Report. In this paper, the National Strategies for Development of Statistics in the I.R. Iran is introduced and the roles assigned to different stakeholders in this harmonized statistical system are explained. Next, some statistics of the Iran in the Human Development Report are studied and after analyzing the existing evidences, this paper concludes that obtaining statistics from multiple resources and ignoring and marginalizing the role of the Statistical Centre of Iran has led to publishing of low-quality statistics on Iran which cannot be considered as a true resource for determining its development status and the progress made in this country. This paper suggests that existence of an Integrated Statistical System in every country is a key to harmonizing all the statistical activities and publishing high quality and timely data.

Keywords:

Human Development Report, National Statistics Office, National Strategy for Development of Statistics, Integrated Statistical System

1. Introduction

In committing to the realization of the 2030 Agenda for Sustainable Development, Member States recognized that the dignity of the individual is fundamental and that the Agenda's Goals and targets should be met for all nations and people and for all segments of society. By considering the fact that all the people and societies deserve a life of happiness and dignity, obtaining information on people and knowing the exact and reliable statistics on the different aspects of their lives, helps the policy-makers and authorities to decide with open eyes. Moreover, this information helps them to have the needed measures to assess the results of their decisions on the lives of the people.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The National Statistical Office (NSO) is the best resource for statistics on the progress made within the country in line with the international agreed upon development agenda. One duty of the NSOs is to provide timely, relevant, and reliable statistics to public and international agencies in order to report on the progress made in the country within the national or international development programmes. These statistics are useful for making a comparison among countries and identifying the development issues needed to be considered for further development matters.

Since different agencies and organizations are dealing with development issues, various statistics are produced. The NSO in every country is responsible for the collection, compilation, analysis and publication of a wide range of statistical information and related matters. This does not prevent other government departments or institutions from collecting their own statistical data for internal purposes. All of these concerned institutes are essential elements in improving the ability of the government to develop appropriate policies, manage the economy and social development

reform policies, monitor improvements in the living standards of the people and report back this progress to the public using solid evidences.

This paper aims to clarify this issue that the NSOs are capable of establishing the true status of a country compared to other countries through publishing accurate, timely, and reliable statistics. Obtaining statistics from different resources within a country leads to statistical discrepancy and lack of clarity. In this paper, I present the case study of the I.R. Iran in which the published statistics of Human Development Report based on different resources has led to misrepresenting the true and existing situation in this country. The Statistical Centre of Iran has done a lot to correct the statistical discrepancies found in many international reports and provide the entities responsible for these reports with accurate data.

This paper is organized as follow. First, the role and legal status of the Statistical Centre of Iran in the National Statistical System of Iran is presented. Next section, the responsibilities of this the National Statistical Offices for publishing timely statistics on the socio-economic situation of the countries are explained. After that, the statistical discrepancies on Iran found in some international reports are presented and the activities done by the Statistical Centre of Iran to correct them are explained. In the final part, some recommendations are given for a better involvement and engagement of the NSOs in establishing the true image of their countries.

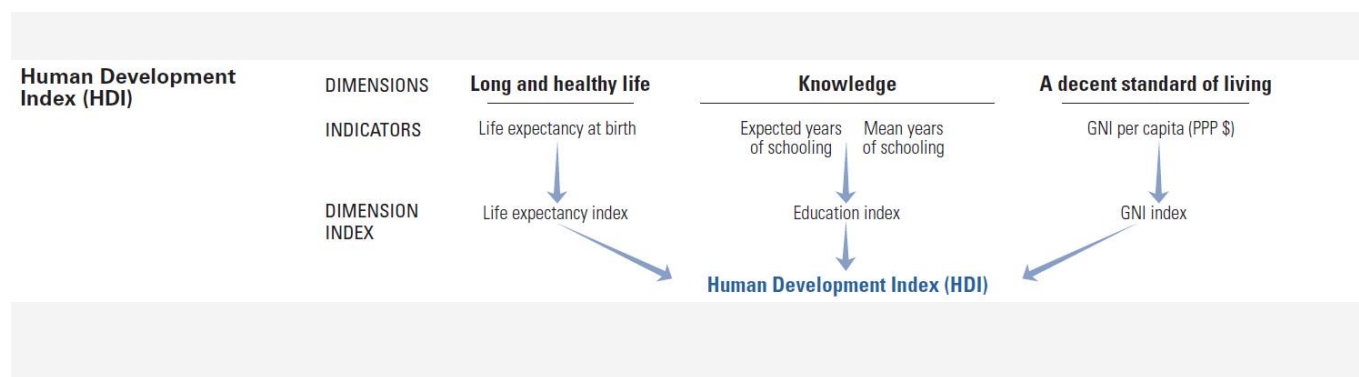
2. National Statistical System of the I.R. Iran

The Human Development Index (HDI) was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI can also be used to question national policy choices, asking how two countries with the same level of GNI per capita can end up with different human development outcomes. These contrasts can stimulate debate about government policy priorities. The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita. The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean. Refer to Technical notes for more details.

The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. The HDRO offers the other composite indices as broader proxy on some of the key issues of human development, inequality, gender disparity and poverty.

A fuller picture of a country's level of human development requires analysis of other indicators and information presented in the statistical annex of the report.



One of the more important achievements of the human development approach, as embodied in successive HDRs, has been to ensure a growing acceptance of the fact that monetary measures, such as GDP per capita, are inadequate proxies of development. The first Human Development Report introduced the Human Development Index (HDI) as a measure of achievement in the basic dimensions of human development across countries.

Voluntary National Review Report on achieving SDG in every country must be done by or under the supervision of the NSOs, since the NSOs are considered as the national statistical focal point.

Creating national hub for SDG statistics is a necessary which should be done by the cooperation received from all the stakeholders.

The I.R. Iran according to its real statistics is a developed country but due to lack of publishing the accurate, timely, and reliable statistics by the national statistical focal point, it is considered a developing one. Many organizations publish statistics on the socio-economic status of the I.R. Iran which has led to uncertainty and lack of statistical clarity.

In 1990 the first Human Development Report introduced a new approach for advancing human wellbeing. Human development – or the human development approach - is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices.

2.1 National Strategy for Development of Statistics in the I.R. Iran

The planners and decision makers in the I.R. Iran took a new look at the national statistical system in 1383 while organizing the Fourth National Development Plan. This new look led to direct inclusion of statistical system into the text of law for country development plans. Because of this approach, the Article 56 of the Fourth National Development Plan, specialised for statistical system, was approved and the First National Strategy for Development of Statistics (2005–2009) was prepared in line with the implementation of this Article. After the approval of the National Statistical System by the High Council of Statistics and implementation of the executive decrees for this system, many useful activities were done for organizing the National Statistical System and the important role of the high quality statistics in the preparation and analysis of the National Development Programme was highlighted. The help received from all the stakeholders of the National Statistical System especially the Statistical Centre of Iran helped to continue this movement and establish the unique status of the National Statistical System in the country Development Programme. In this system, the Statistical Centre of Iran was duty-bound to calculate many of macro socio-economic indices including the statistical indices required for monitoring the Fifth National Development Plan. Moreover, the legislature body appointed the Statistical Centre of Iran as the statistical focal point for production and dissemination of official statistics in the National Statistical System.

The Second National Strategy for Development of Statistics (2011–2015) was prepared after the announcement of the 20-Year National Vision of the Islamic Republic of Iran and in line with the implementation of the paragraph B of the Article 54 of the Fifth National Development Plan. The aim of this Strategy was to pave the way for improving the status of the National Statistical System at the national and international levels. It was expected that the full and comprehensive implementation of this strategy would lead to remove the obstacles and provide the country planners and decision makers with the needed high quality statistics for preparation and assessment of development programmes. Although some achievements were accomplished but many of the objectives of the First and Second National Strategy for Development of Statistics were not fulfilled due to facing structural and organizational difficulties, funding shortage, and lack of cooperation among the concerned stakeholders.

By considering the previous activities done in the last decade, some activities deserve mentioning although they are not comparable with similar ones in the developed countries and need to become compatible with the needs of the country:

- Ratification of the SCI's National Leading Authority of Official Statistics in the Fifth and Sixth National Development Plans and its inclusion in the Permanent Decree of the National Development Plan by the Parliament
- Conducting the first Internet and Tablet-based census in the country in 2016 with a 48 percent participation by households for the first time participation (reaching the first rank in the world ranking) and significant establishment of IT methods for collecting, processing, and dissemination of the statistical data and information
- Issuance of Directives by First Vice President and Vice President and Head of Plan and Budget Organization obligating government agencies to provide the SCI with their statistical microdata in 2017, and other complementary directives issued by all ministries for this cooperation in 2018.
- Creating management and expert belief and determination in the important divisions of the NSS-related organs on the modernisation of the NSS and significant enhancement of cooperation with the SCI,
- increasing in the quality, speed, integrity, and accuracy of the national official statistics and enhancement of their reliability and accountability and provision of interpretive

analysis on released statistics aiming at increase in statistical literacy, awareness and culture.

The Statistical Centre of Iran and government agencies prepared the Third National Strategy for Development of Statistics (NSDS) (2017–2021) with the approach of institutionalising the transformation in the National Statistical System and the High Council of Statistics approved it. This NSDS was prepared in line with Article 10 of the Permanent Decree of National Development Plans.

At the first step, the functions of the National Statistical System during the years of conducting The Second National Strategy for Development of Statistics (2011–2015) and its strong and weak points, and challenges were analysed and assessed. Then, the formed specialised workgroups (expert workgroups) in collaboration with government agencies determined the vision and mission of statistical system and the macro goals and strategies of the National Strategy for Development of Statistics (NSDS) (2017–2021) were determined. To realise these strategies, the National Strategy for Development of Statistics was prepared and presented in collaboration with government agencies in the fields of revision of the laws, regulations and organisational structure of the statistical system; production of statistics and establishing of a register-based system, national accounts and macro indices; information technologies; research and education of statistics; monitoring and managing the statistics quality; promotion of public trust in statistics, and developing national and international statistics.

The Iranian National Statistical System:

It is a system in which all the government agencies are its member, the Statistical Centre of Iran is the statistical focal point and the High Council of Statistics is responsible for directing this system. This system is responsible for production, dissemination and promotion of official statistics by full consideration of the Fundamental Principles of Official Statistics and national rules and laws.

Official Statistic

The statistic which the government agencies produce and disseminate and decision-making at national level is done based on it. The list of Iran official statistics should include the title of this type of statistics.

The Statistical Focal Point in the Iranian National Statistical System

A government institution which is professional and unbiased and is responsible for production, dissemination and documentation of the national official statistics. This focal point is obliged to integrate, organize and build capacity in the Iranian National Statistical System. Only those national official statistics shall be authorised to be published enjoying the approval of this focal point.

Government agency:

Based on the Article 5 of the Civil Services Management Law, all the Ministries, government institutions, NGOs, Public corporations, and all the agencies which should be named in order to be covered by the law such as National Iranian Oil, Industrial Development and Renovation Organization of Iran, Central Bank of the I.R. Iran, Banks, and State-run insurances companies are considered as government agencies.

Vision of the National Statistical System (NSS)

‘An integrated system which is accountable, trusted by the public and professionals, the provider of high-quality official statistics and the pioneer in Asia.’

Mission of the National Statistical System

‘Production and dissemination of official statistics needed by national and international users by full consideration of the Fundamental Principles of Official Statistics and using state-of-the-art technologies and modern methodologies, especially register-based methods.’

Article 3 – Macro Goals and Strategies of National Statistical System (NSS)

Macro Goals of NSS

1. Integration of the National Statistical System
2. Increasing accountability in the National Statistical System
3. Increasing the public and professionals/specialists trust in the National Statistical System
4. Increasing the quality of official statistics produced in the National Statistical System

Macro Strategies

1. Revising and modification of laws and rules related to the National Statistical System in order to integrate, organize and remove any parallel activities in the production and dissemination of official statistics, playing the role of statistical focal point, promoting the application of official statistics within the principles of the Higher Council of Statistics, being accountable for providing statistics and information needs, enhancing users' trust, reducing respondent burden and distributing statistics production in order to prevent duplicated statistics production.
2. Revising the organisational chart, and terms of references of the components of National Statistical System, strengthening and developing the capacities of human resources involved in statistical activities in government agencies, attending the international events in order to improve their efficiencies and effectiveness, and maximum use of the capacities of the Higher Council of Statistics and Statistical Sectoral committees for modernising the National Statistical System.
3. Approving laws and rules ensuring one-way-traffic administrative microdata flow needed by Iran Statistical Registers System to the Statistical Centre of Iran
4. Implementing the Quality Management System and observing the statistical standards in meeting the statistical requirements
5. Systematising the dissemination and information supply of official statistics at the national and international levels based on the approvals of the Higher Council of Statistics through using of state-of-the-art technologies, organizing, preparing and observing Publication Calendar of national official statistics.

3. Data Analysis

Strong NSO is vital for planning development plans and providing efficient and effective approaches for dealing with emerging data challenges. Every country's reliance on data to arrive at the right and evidence-based decision is increasing.

The review of the published statistics on the socio-economic status of the I.R. Iran shows that these statistics are not consistent and there are statistical discrepancies and gaps in different areas. The HDR ranks countries based on their accomplished progress toward sustainable goals during the past year. This ranking is made according to the information received from countries.

Obtaining statistics from different sources within any country results in side-lining or undermining the status of the NSO as the focal point for providing and publishing the official statistics. In this regard after checking various websites used by the secretariat of HDR for preparing the Human Development Report such as UNESCO and ILO we found that the indicators such as " Mean Years of Schooling (Educational attainment of the population aged 25 years and older) , Labour Force Participation Rate, Share of adult population with advanced education, life expectancy, and Maternity Mortality Rate of Iran needs verification. These verifications are shown in the tables one to five.

Table.1. " Mean Years of Schooling (Educational attainment of the population aged 25 years and older) in Iran

| Year | Both sexes | Male | Female |
|-------------|-------------------|-------------|---------------|
| 2016 | 8.6 | 9.1 | 8.0 |
| 2016 | 10.35 | 10.41 | 10.28 |
| 2014 | 10.14 | 10.23 | 10.04 |
| 2013 | 10.07 | 10.18 | 9.94 |

Table 2. Labour Force Participation Rate in Iran

| | Own-Children Method (The Statistical Centre of Iran) | | |
|------------|---|------------------|------------------|
| Age | 2002-2006 | 2007-2011 | 2012-2016 |
| 15-19 | 30.8 | 31.8 | 38.1 |
| 20-24 | 92.1 | 84.3 | 95.1 |
| 25-29 | 109.7 | 100.5 | 109.5 |
| 30-34 | 80.5 | 83 | 91.4 |
| 35-39 | 38.5 | 43.5 | 52.6 |
| 40-44 | 10.8 | 12.1 | 14.5 |
| 45-49 | 2.0 | 2.4 | 1.8 |

Table 3. Life expectancy in Iran

| | 2010 National Population Census | 2016 National Population Census |
|-----------------|--|--|
| Index | | |
| Both sex | 72.7 | 74.2 |
| Female | 74 | 75.5 |
| Male | 71.5 | 72.5 |

Table 4. Maternity Mortality Rate in Iran

| Year | 1990 | 1995 | 2005 | 2010 | 2015 | 2016 | 2017 | 2018 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Maternity Mortality Rate | 91.00 | 37.40 | 23.80 | 22.15 | 20.00 | 18.13 | 19.96 | 17.71 |

Table 5. Share of adult population with advanced education in Iran

| Subject | Indicator | Year | Value |
|---|--|--|-------|
| Population and labour force | Share of adult population with advanced education (%) | 2016 | 20.9 |
| | Labour force participation rate (%) | 2018 | 40.5 |
| | Labour force participation rate, men (%) | 2018 | 64.8 |
| | Labour force participation rate, women (%) | 2018 | 16.1 |
| Employment | Employment-to-population ratio (%) | 2018 | 35.6 |
| | Employment-to-population ratio, men (%) | 2018 | 58.1 |
| | Employment-to-population ratio, women (%) | 2018 | 13.0 |
| | Share of agriculture in total employment (%) | 2018 | 17.7 |
| | Share of industry in total employment (%) | 2018 | 32.0 |
| | Share of services in total employment (%) | 2018 | 50.3 |
| Unemployment and labour underutilization | Time-related underemployment rate (%) | 2018 | 9.5 |
| | Unemployment rate (%) | 2018 | 12.0 |
| | Unemployment rate, men (%) | 2018 | 10.4 |
| | Unemployment rate, women (%) | 2018 | 18.9 |
| Youth | Youth labour force participation rate (%) | 2018 | 27.3 |
| | Youth labour force participation rate, men (%) | 2018 | 41.9 |
| | Youth labour force participation rate, women (%) | 2018 | 12.0 |
| | Youth unemployment rate (%) | 2018 | 27.7 |
| | Youth unemployment rate, men (%) | 2018 | 24.3 |
| | Youth unemployment rate, women (%) | 2018 | 39.9 |
| | Share of youth not in employment, education or training (NEET) (%) | 2010 | 34.4 |
| | Share of youth not in employment, education or training (NEET), men (%) | 2010 | 22.0 |
| | Share of youth not in employment, education or training (NEET), women (%) | 2010 | 47.6 |
| | Working time | Share of employees working more than 48 hours per week (%) | 2018 |
| Mean weekly hours actually worked per employed person | | 2018 | 44 |
| Social protection | Percentage of health care expenditure not financed by private households' out of pocket payments (%) | 2011 | 41.5 |
| | Public social protection expenditure [all functions] as a percent of GDP (%) | 2010 | 12.5 |

| | | | |
|--|--|------|------|
| | Public social protection expenditure [excluding health care] as a percent of GDP (%) | 2010 | 10.7 |
| | Active contributors to an old age contributory scheme as a percent of the working-age population (%) | 2010 | 18.7 |

These correct data were obtained from different sources available in the Statistical Centre of Iran. The review of the discrepancy between the official statistics published in the HDR report and the data available in the Statistical Centre of Iran showed that the data used for preparing the HDR report on the progress made within this country is obtained from different resources namely as Ministry of Education, Ministry of Health and Ministry of Labour. These ministries collected and published their own data without the monitoring of the Statistical Centre of Iran. This led to publishing data of which quality could not be independently verified.

Based on existing of low-quality statistics on the socio-economic situation of Iran, the stakeholders decided to find a solution for this problem. In this regard, the High Council of Statistics invited the representatives of all the government agencies and discussed the situation. This joint working led to creation of The Iranian National Statistical System. It is a system in which all the government agencies are its member, the Statistical Centre of Iran is the statistical focal point and the High Council of Statistics is responsible for directing this system. This system is responsible for production, dissemination and promotion of official statistics by full consideration of the Fundamental Principles of Official Statistics and national rules and laws.

Based on this System, the Statistical Centre of Iran as the statistical focal point is responsible for publishing the up to date and high-quality statistics on the existing situation of countries to international bodies. Other ministries and government agencies are obliged to obtain the quality assessment issued by the Statistical Centre of Iran for their statistical procedures used for collecting and publishing the data. This coordination has led to publishing high quality data and comparable data on Iran in the international publications.

Conclusion

This paper studied the statistical discrepancies found among the published statistics on the socio-economic status of I.R. Iran in the HDR published by the United Nations. The results of this paper showed that this discrepancy is due to obtaining the official statistics of Iran from different sources within the country.

Assessment of these data showed that the provided statistics are obtained from several sources within the country or the data are missing since the concerned data provider is unknown. Data availability for the majority of the indicators cannot be independently assessed due to the time consuming nature of it. In this regard, the NSDS in Iran aims at bringing together and co-ordinate between different data users and producers. This NSDS was prepared through consultation with statistical bureaus in different government agencies in order to ensure the production of more and better data and statistics. This need for the NSDS raised from the lack of cooperation among government agencies and mismatch among the produced statistics which the data users obtained from different sources.

It is recommended that every country should have a road map in statistics in which the NSO is considered as a focal point for the official statistics and publishing data and statistics on every aspect of the socio-economic status of country must be regulated by the NSDS.

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