# The Statistics Code of Practice in Jordan: Challenges and Future

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#### **ABSTRACT**

Statistical code of practice is considered important tool gives deep evaluation for the status of official statistics. In Jordan, evaluation of CoP application revealed that more than 90% of the principles and indicators are practiced. Despite this fact, the application faces many challenges. The lack of involvement of employees in the process of evaluation and improvement is the first challenge. Even though, low awareness of the need of CoP in statistical work is another serious challenge. Moreover, 'who-what-when' is another challenge faces the application of CoP and its follow up to improve its application in the future. Top and middle management should be aware of CoP as a doctrine of the statistical office. This maximizes the role and the burden of top and middle management. The lack of practical tools to measure CoP extent application is another challenge. Moreover, CoP requires building strategy that explains the methods of application and measurements as well as the methods of improvement per time. The study recommended international cooperation to find out general tools for measurement, application and improvement to help different countries to have first step on the track.

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### Introduction

Jordanian Department of Statistics (DoS) is one of the old statistical system in Middle East establish since 1948. The department included different directorates to collect data in agricultural, economic, and social statistics using surveys and indirect administrative records. The department has wide range of stakeholder and participants in statistical work. As a result the department arranged agreements with different public and private institutions to enrich its work in one direction and cooperate with other parties to reach the national statistical goals. The statistical work is managed using international standards in different statistical fields, as well as the different directorates update their procedures through their cooperation with international bodies.

In DoS concerning current and new employees are controlled by the local ethical issues places by the public supervision directorates such as Public Service Bearue. Other integrating ethics are issued by DoS to integrate the public issues related to statistical work. Considerable parts of practice codes issued by United Nations Statistical Division (UN) or European Union (EU) are included in local ones. Moreover, the excellence governmental prizes concern with the procedures applied and its development to meet the requirements of such excellence prizes. Any progress made by DoS toward the requirements of local excellence prizes reflects the extent toward the international CoP issued by UN and EU.

The efforts made to build CoP for the European and Mediterranean countries reflect the concern to have reliable statistical systems in these countries. Understanding the spirit of CoP practice by different levels of management is dependent on believe of CoP as vital tool to move the official statistics toward the international standards. Depending on routine jobs lacking tools to integrate the different directorates in statistical work will form the base to start discussing the importance of CoP and the tools should be used to measure current situation and the progress should be targeted with time reference.

Most of statistical offices are concerned with CoP as a bible controls the official statistics. The context of the official department of statistics will contribute in employing it completely or partially in work. Also, increasing the convenience and distributing the role of employees in deploying CoP will innovate usage of CoP in statistical life. Misunderstanding of the role of CoP or fashioning it by different managements in statistical work will destroy its value and affect its practice by different parties in official statistics.

Adopting the CoP without understanding its principles, its core, method of accomplishment and its relation to statistical work will affect its application in one aspect and confuse the lower statistical levels of its role and application.

### **Literature Review**

The first declaration of good practices was made in 1999 by United Nation Statistical Division (UNSD, 2016). The code of practice issued by UN was composed of 10 principles.

UN code of practice was concerned with the development of statistical offices to reach high quality compared to international statistics, the access to statistical products is available equally for all. The other parts were concerned with the application of high international statistical standards including. Moreover, the UN CoP was concerned with privacy of respondents in publishing statistical data. The historical background of CoP creation in statistical work is to determine the best practices that lead to optimal statistical products as well as building and designing optimal channels to deal with stakeholders, counterparts and end local and international users.

Other CoP was issued by European Statistical System Committee (ESSC, 2011). The developed CoP by European Union composed of 15 principles. The principles for the first moment reflect a new load will be added for any statistician in the official statistical cycle. Moving deeply in different principles, one may figure out that these principles should be existed to build successful statistical system. In any statistical system executing a survey requires the availability of methodology. Moreover, this methodology should use international standards to collect sound outputs. This will represent indirectly the application of principle 7 and 8 of ECoP. The output of such survey will be useless unless it is benefited from others to be used in different aspects including decision making, research, or form an input for other surveys or statistical indicators. The procedure to deal in this issue is covered by principle 15 of ECoP. These two examples explain the relationship between the CoP and the real statistical work. In other words, the CoP will draw the roadmap of any statistical work.

Statistical code of practice measures three aspects. The first one is concerned with institutional environment, while the second one is statistical processes, and the last is concerned with statistical output. Eurostat is concerned with the measurement of CoP establishment in European statistical offices. The standards applied for measurement are designed in cooperation with Eurostat to make it possible for comparison among different countries and enable the measurement of progress made for the application of CoP in the same country. In other countries, the status of CoP measurement is not practiced and if so, it depends on self-assessment for three aspects mentioned. For other countries, to make it possible to evaluate each country situation, there should be a common measurement tool for evaluation.

Effort was extended to derive new CoP for ENP-South countries. The efforts facilitated the production of modified CoP that is applicable in Mediterranean countries. The next step should be directed to have evaluation map and template for CoP in different countries. Self-assessment questionnaire was a good tool for primary assessment but it does not give detailed description of current situation and the progress needed to improve its application.

# Methodology

This paper will concentrate on descriptive evaluation of application of CoP in Jordan using self-assessment questionnaire filled with the cooperation with EuroStat. The questionnaire was divided to three parts. The part was devoted for the evaluation of institutional environment. The part includes principles 1, 2, 3, 4, 5, and 6. The second part was concerned with the statistical processes. This part covered the principles 7, 8, 9, and 10. The third part was concerned with statistical output which covered principles 11, 12, 13, 14, and 15. The questionnaire was filled and checked by Quality Division and General Manager Assistance for Technical Affairs.

# **Results and discussion**

### **Institutional Environment**

Jordanian Department of Statistics (JDoS) is one of the oldest official statistical offices in the Middle East, which was founded in 1949. The long history of JDoS strengthening the cumulative statistical experience and improve its performance. The Department worked very hard to apply all international standards to meet the requirements of its production locally and internationally.

Professional independence is already established in DoS. The Statistical Law (12) of 2012 included different articles that insure DoS independency. The statistical work is handled away of any external interference. Article (4) of the Statistical Law pointed out that DoS is the only governmental directory qualified for the collection of statistical data. Also, DoS is producing and disseminating data dependently of any other bodies either private or public. The produced and disseminated data are managed independently of any other interference of any other body outside DoS. The programs of DoS that expresses the progress of the Department are not published for public as response to indicator 1.5. DoS used to publish the dissemination dates of current statistical activities, but without publishing any more details regarding programs. In principle one, 7 indicators out of 8 are well established according to statistical law.

Principle 2 of mandate for data collection is completely established in DoS. According to law Articles 4, 5 and 7, DoS is the only governmental body that has the right to collect produce statistics, also the law gave DoS the right to use registration records at the governmental bodies to utilize it as administrative sources of statistical data. Moreover, the law gave DoS the right to modify templates of data collect at other governmental bodies the meet the statistical requirements as well as to commit the other bodies to use statistical international standards in their work to have compatible data to be used in statistical work. According to law, DoS can compile response to statistical surveys. The results showed that 100% of indicator of principle two in accomplished in JDoS.

The assessment showed that the staff is adequate to run the surveys executed by DoS, but the financial resources are restricted to cover all statistical activities. The scope and details are commensurate with needs but the cost of statistics is not measured with needs. Also, there is no procedures available to assess and justify demands for new statistics against their cost, besides there is no assessments of the continuing needs for all statistics to free up resources. The results of principle 3 showed that only 70% of its accomplished indicating further work is required to have integrated and sustainable evaluation.

In recent years, quality procedures were developed in DoS but the culture of quality behavior is still restricted in DoS. Still DoS does not have matured quality policy to implement, also there is not procedures to plant and monitor quality of the statistical production processes, the product quality is also not regularly monitored locally or using external experts. The accomplishment of principle 4 regarding commitment to quality does not exceed 50%.

The results of assessment of CoP showed that the statistical confidentiality is completely established by Statistical Law. Article 11 of statistical law ensures the confidentiality of any individual data and also DoS take all procedures to protect the confidentiality of data. The results showed that principle 5 is 100% accomplished in DoS. Concerning principle 6 regarding impartiality and objectivity, the results showed that all the indicators are accomplished except for the advance notice for major revision or changes in methodology. This indicates that more than 95% of this principle is accomplished.

#### **Statistical Processes**

The methodologies applied in DoS using the international statistical standards and comply with the international bodies especially in financial and economic sectors. The classifications applied in most statistical work are using international ISIC classifications as well as the other classifications are applying international standards such as the unemployment surveys. The cooperation with scientific community to improve methodologies, effectiveness and promote other tools is not existed totally. This reflects about 90% of sound methodology is applied in statistical surveys.

Some aspects of using appropriate statistical procedures are not well established nor they are measured totally. For example, the concepts and definitions used by other sources are different from statistical purposes. Also, the agreements with other administrative sources are signed with some bodies but not all. In law, DoS is authorized to use any administrative data that serves its work. On the other hand, the cooperation with other administrative sources in assuring data quality is not practiced totally. This reflects that only 90% of principle eight is accomplished. Concerning non-excessive burden on respondents about 90% is accomplished while, for example, the use of administrative sources to avoid double request of information is not existed, also data sharing to avoid double collection of data is not existed. Concerning cost-effectiveness is not existed as it is not measured totally to determine the suitability of surveys for the cost.

# **Statistical Output**

The relevance of output is not measured in most cases, indicating that the accomplishment of indicators does not exceed 20%. In accuracy and reliability, the only indicator accomplished relatively is 12.2 concerning sampling errors and non-sampling errors measurement. On the other hand, concerning timeliness and punctuality, it is already established in DoS and accomplished 100%. For coherence and comparability is to some extent established (95%). Concerning accessibility and clarity, custom design analysis is not existed, access to microdata for research purposes is not allowed, metadata is not documented according to standardized metadata systems. The accomplishment of this principle is about 80% only.

### **Future of CoP in DoS**

The current level of application of CoP is considerable, but more work is needed to improve the level of application. Knowing that each country has its own privacy, the extent of application will vary. The level of application will be depend on the DoS statistical strategy, the financial sufficiency and staff efficiency to run the evaluation.

The application of CoP requires strategy for application and measurement. The application strategy should be supported by top management and including all employees. The strategy should determine the roles —who, when, how- to ensure the measurement of all principles as well as determine the aspects of improvement that can be made to improve the performance of DoS and to meet the international standards.

#### **Conclusions**

In Jordan, evaluation of CoP application revealed that more than 90% of the principles and indicators are practiced.

Despite the application of CoP reached considerable percentage, its application faces many challenges. The lack of involvement of employees in the process of evaluation and improvement is the first challenge. Even though, low awareness of the need of CoP in statistical work is another serious challenge. Moreover, 'who-what-when' is another challenge faces the application of CoP and its follow up to improve its application in the future. Top and middle management should be aware of CoP as a doctrine of the statistical office. This maximizes the role and the burden of top and middle management. The lack of practical tools to measure CoP extent application is another challenge. Moreover, CoP requires building strategy that explains the methods of application and measurements as well as the methods of improvement per time. The study recommended international cooperation to find out general tools for measurement, application and improvement to help different countries to have first step on the track.

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