

Statistics Governance and Quality Assurance: The Experience of FAO

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Abstract

The Statistical System of the Food and Agricultural Organization of the United Nations (FAO) is decentralized across the organization: for many years each FAO technical department has carried out its own statistical programme of work and has maintained ownership of their data. This has resulted in limited statistical coordination and no formal quality assurance procedures at corporate level. To overcome this problem, there has been a major effort to strengthen FAO's Statistical Governance system over the past few years, starting in 2012 with the establishment of the role of Chief Statistician and the creation of an Inter-Departmental Working Group on Statistics, followed by the development of a corporate Statistical Quality Assurance Framework. More recently, this work has culminated in a new accountability framework for FAO Statistics under the Chief Statistician and a proposal to establish a country membership-based Global Commission on Statistics.

This paper presents FAO's experience in implementing this strengthened statistical governance system and in particular it describes the various issues and challenges that have emerged during a gradual transition from more informal coordination mechanisms to the more formal ones in place today. The important role of Quality Assurance in this process will also be emphasized, as well as the many benefits the strengthened governance system has brought to the organization, including the coordinated approach adopted by FAO in its submission of indicators for the Sustainable Development Goals agenda.

Keywords: FAO Statistics, Quality Assurance, Statistics Governance, 2030 Sustainable Development Agenda.

1. Introduction

In the current globalized world, international and national decision making is increasingly based also on international sources of statistics. Users rely on international sources to put the national data into perspective and to complement them with additional indicators. In short,

International Organizations add value to official national statistics through the transformation of national data to international “Global Public Goods”, provided to users in a standardized and comparable format across countries.

International Organizations also had an important role to play in support of the global monitoring of the Millennium Development Goals, which directed the international development agenda from the year 2000 until 2015. This role has been further reiterated and reinforced for the new round of Development Goals, known as the “2030 Sustainable Development Agenda”, which will run from 2015 until 2030. However, there are some fundamental differences compared to the Millennium Development Goals, and in particular a much stronger emphasis on national ownership of the development agenda, and a greater emphasis on the responsibilities of countries to collect data, validate the indicators, and to monitor progress.

This new situation with a greater involvement of countries in global monitoring places even more pressure on International Organizations to demonstrate their commitment to quality and transparency in the calculation of indicators, particularly when there are differences with national expectations vis-à-vis the results.

In a decentralized statistical system, such as that of the Food and Agriculture Organization of the United Nations, this can only be guaranteed through a strong and robust Governance System and a transparent and publicly available corporate Quality Assurance Framework.

This paper offers the experience of FAO in developing and progressively implementing its own governance system and quality assurance framework, as well as the associated tools and building blocks, in order to effectively support of the agreed International Development Goals.

Statistical Governance at FAO

2.1. Role and Mandate of FAO in Statistics.

The central role of the Food and Agriculture Organization of the United Nations (FAO) in international agricultural statistics is embedded in its mandate. Article 1 of the FAO Constitution stipulates that “the Organization shall collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture.”¹ Regarding the responsibilities of countries at national level towards FAO, the Constitution further specifies that “all Member Nations and Associate Members shall also communicate regularly to the Director-General statistical, technical and other information published or otherwise issued by, or readily available to, the government.”²

In addition to providing access to harmonized, internationally comparable statistics, FAO has a recognized global role in developing, promoting and implementing methods and standards for food and agriculture statistics, and in providing technical assistance services to improve statistical capacities at national and regional level, with as ultimate goal to reduce hunger and poverty through informed decisions based on the best and highest quality data available.

2.1. The Business Case for Strengthening Governance of the FAO Statistical System

The FAO Statistical System is decentralized across the various domains of technical expertise (e.g. forestry, fisheries, natural resources management, etc.). Each unit is responsible for the collection, processing, analysis and dissemination of its own particular domain of interest, which over the years had proceeded with limited overall coordination and no formal statistical leadership or governance. Such a silo-based approach led to a number of difficulties and inefficiencies at corporate level, some of which the Organization is still struggling with today. Consequently, just eight years ago, FAO was facing a number of major challenges with

¹ Basic Texts of the Food and Agriculture Organization of the United Nations Volumes 1 and 2 (2015), p. 3.

² Basic Texts of the Food and Agriculture Organization of the United Nations Volumes 1 and 2 (2015), p. 10.

respect to the efficiency, effectiveness and quality of its Statistical work at corporate level. Firstly, there was no strategic approach to planning and producing the corporate Statistical Programme of Work and the associated activities proceeded in isolation, without coordination. This resulted in duplication of efforts and at times inconsistent/conflicting data. The lack of an official mechanism for the endorsement of unified and harmonized corporate statistical standards and methodologies led to multiple standards and methods being implemented, thereby impairing internal and international comparability of data. Interactions with other international organizations also proceeded in seclusion without coordination, increasing the risk of a perception that FAO does not speak with one consistent voice.

2.2. Measures Taken to Improve Statistical Governance.

The Evaluation of FAO's Statistical Programme³ conducted in 2008 made a number of recommendations to improve statistical governance at FAO. Firstly, to be consistent with the practices of all International Organizations, it advised that FAO should establish the role of Chief Statistician. This was put into practice in 2012, when the Director of the FAO Statistics Division was also given the role of Chief Statistician as a dual responsibility. The Chief Statistician ensures stronger governance of FAO statistical systems by: fostering the consistency of the overall Statistical Programme of Work; leading initiatives to reduce data duplication and inconsistencies; in collaboration with other units, guaranteeing better harmonization of FAO statistical practices; providing clearance on questionnaires and statistical information in FAO publications; and ensuring stronger representation at international statistical meetings.

Another follow-up to the Evaluation of FAO's Statistical Programme, was the creation of two internal coordinating bodies within the organization: one at a Director-level for policy and decision making on statistical matters and one at a technical level for technical discussions, problem solving and knowledge sharing. Membership at both levels comprises all units within

³ Independent Evaluation of FAO's Role and Work in Statistics (2008)

FAO concerned with the collection, compilation and dissemination of statistics including the FAO Regional Offices. Both levels promote inter-divisional coordination and cooperation on statistical activities, as well as corporate consistency and alignment in statistical practices. Both levels endorse methodologies, common conceptual frameworks and innovations and ensure the implementation of corporate standards.

The higher-level body meets about twice a year, while the technical body meets on a monthly basis. The technical body is further broken down into specific sub-groups designed to address specific technical issues and challenges. For example, one sub-group works towards harmonizing data collection procedures and reducing the number of questionnaires. Another subgroup strives to streamline statistical methodologies and standards and addresses quality related issues. Another sub-group coordinates work on the indicators within FAO's remit for monitoring progress of the 2030 Sustainable development Agenda.

As an additional follow-up to the Evaluation of FAO's statistical activities, since 2010 the Organization has been producing a consolidated FAO Statistical Programme of Work⁴ for each biennium. This publication provides an overview and a detailed description of the statistical activities carried out by all FAO Divisions active in the field. It is organized around five principal statistical functions⁵ coded according to the Classification of Statistical Activities⁶ to facilitate internal coordination and information exchange with other International Organizations. The publication provides an overview of the key outputs, activities, priorities and areas for development. Internal to FAO it is used as a planning and programming tool. As such, it not only provides a basic inventory of FAO statistical activities, but it also allows in depth analysis of ongoing activities, gaps and areas for development, as well as potential

⁴ [FAO Statistical Programme of Work 2014-2015](#) (2014)

⁵ data collection and dissemination; statistical methodologies and standards; data analysis; capacity development; and statistical coordination and governance.

⁶ <http://unstats.un.org/unsd/iiss/Classification-of-International-Statistical-Activities.aspx>

reference to reduce duplication. Externally, it can be used as a guide to learn more about the substantial and complex FAO Statistical System.

Another major area of significant progress in internal statistical governance is the development of a corporate Statistical Quality Assurance Framework⁷, which is based largely on recognized quality initiatives⁸ already available at national and international levels. The framework complements the efforts made to increase coordination and to improve consistency of FAO's overall Statistical Programme. It also helps to ensure that sound and internationally accepted statistical concepts and definitions are adhered to, standard methodologies are adopted and that accurate, high quality, timely and accessible data are produced by FAO. The framework provides a definition of quality and is based on a set of "Principles". Each Principle is associated with a number of "good practices", which provide practical guidance on how to assure compliance with the Principle. Finally, a number of tools are provided to assist in measuring the degree of compliance of a given statistical process with respect the quality framework. Successful implementation of this corporate quality assurance framework will further strengthen and sustain FAO's reputation and credibility as a centre of excellence in agricultural statistics, and improve the confidence of users in FAO statistical outputs.

2.3. Challenges for Internal Governance and Recent Developments

While the measures progressively taken in response to the Evaluation of 2008 have certainly helped to improve internal governance and the quality of statistics at FAO, the Organization continued to face a number of challenges that impeded further improvement and for which additional corrective actions were recently taken by FAO Senior Management. In particular, the role of Chief Statistician was originally established with insufficient means to exercise its authority and insufficient resources to carry out its work. Participation within the internal

⁷ [The FAO Statistics Quality Assurance Framework \(2008\)](#)

⁸ <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx> and
http://unstats.un.org/unsd/methods/statorg/Principles_stat_activities/principles_stat_activities.htm

statistics coordination bodies was deemed to be more voluntary than mandatory, and participants often represented more their own immediate interests rather than serving as focal points that act on behalf of larger organizational units. As a result of these weaknesses in the system, decisions taken by the Chief Statistician were not sufficiently binding; the Statistical Programme of Work was incomplete due to lack of full reporting from the decentralized statistical units; Statistical activities in the Field continued to proceed uncoordinated and without the knowledge of the Chief Statistician; assessments under the Statistics Quality Assurance Framework were only done on a voluntary basis and without any commitment to implementing a quality improvement plan (for which there were no resources available in any event as an additional incentive). Moreover, the Chief Statistician was not included in the strategic planning process that the Organization engages in every two years, and was not included in key meetings related to resource mobilization for future project opportunities. Finally, the dual role of Director, Statistics Division and Chief Statistician at the same time was perceived by some to be a conflict of interest between divisional and corporate levels.

2.4. Further Strengthening of the Role and Accountability of the Chief Statistician.

In response to these limitations of the FAO Statistical System, a corporate instruction was issued late in 2015 further strengthening the role and accountability of the Chief Statistician. The instruction decreed that the Chief Statistician, supported by the internal statistics coordination bodies, now has overall authority of FAO's statistical work. In particular, the role would now be responsible for: the review and approval of all data collection activities and data requests addressed to countries or other international organizations; the review and approval of the dissemination of all statistical indicators and new datasets; the review and approval of all statistical capacity development projects and initiatives; the review and approval of all new statistical methods, standards and tools. The Chief Statistician would now be responsible for the functional supervision of all staff and consultants carrying out statistical work throughout the Organization.

An immediate impact of this corporate decision was that no statistical activity could now proceed without the approval of the FAO Chief Statistician, who suddenly was presented with

a significant new workload for which there were no dedicated resources to take on. In response to this, the Chief Statistician put into place a number of new measures not only to address the additional workload but also to fully exploit the existing governance mechanisms progressively put in place since 2008.

2.4.1. Team Created in Support of the Chief Statistician and Engagement of Staff.

The first action taken was the creation of a new team exclusively dedicated to supporting the corporate level functions of the Chief Statistician and the associated workload. This not only addressed the urgent need for additional resources to support the Chief Statistician, but now having a team with an independent and direct reporting line to the role of Chief Statistician, it also helped to alleviate the concerns about the potential conflict of interest between the role of Director, Statistics Division and the Role of Chief Statistician.

The new team then worked on establishing and documenting new procedures that would make the clearance process as objective and transparent as possible. It was decided that this should be done with the full complicity of the internal statistical coordination bodies as well, on one hand to better distribute the associated workload across the organization, on the other hand to further engage with the rest of the organization in providing support to the overall accountability of the Chief Statistician.

2.4.2. Full Integration of the Quality Assurance Framework with the Planning Process.

At this point a strategic decision was taken to fully integrate and synchronize the Statistical Quality Assurance function together within the overall planning cycle for statistical work. This provided a rare opportunity to scale-up quality assessment from a voluntary function carried out by a few people to a mandatory one carried out by all involved in statistical processes. At the same time, it also offered a unique occasion to elaborate a an exhaustive inventory of statistical activities at FAO, from which the Statistical Programme of Work could then be produced and published.

2.4.2.1. Quality Assessment and Planning Survey.

Critical to achieve full integration of the statistical quality and planning functions was the development of a Quality Assessment & Planning Survey (QAPS), covering six key statistical functions⁹ six key statistical functions¹⁰. In this on-line questionnaire, all FAO units involved in statistical processes are requested to provide details about their current and new statistical activities while at the same time invited to provide an indication of how these activities comply with FAO's Statistical Quality Assurance Framework.

The results of the survey will be analyzed by the various sub-groups of the internal statistical coordination bodies, and subsequently endorsed by the Chief Statistician to then produce the Organization's official Statistical Programme of Work for 2016-2017 to be published on the FAO web site. At the same time, for those processes that fall short in complying with the quality framework improvement plans will be formulated. Under this approach, the "approval" role of the Chief Statistician is less related to "what" the Organization does in terms of statistical activities and much more on "how" those activities are to be conducted, with a particular emphasis on guaranteeing the highest possible level of quality, as documented in the Quality Assurance Framework. Moreover, it makes the entire approval process very transparent and efficient as the QAPS survey only needs to be completed only once per process, unless there are major changes in the future or if new processes emerge in future years.

2.5. External Statistics Governance.

While there has been excellent progress with respect to internal statistical governance at FAO, the same is not the case for external governance, where unfortunately at the global level, there

⁹ Data Collection and Processing; Data Dissemination; Data Analysis for Publications; Statistical Standards; Statistical Capacity Development; and Statistics Coordination and Governance

¹⁰ Data Collection and Processing; Data Dissemination; Data Analysis for Publications; Statistical Standards; Statistical Capacity Development; and Statistics Coordination and Governance

still is no international platform for country involvement and participation in strategic discussions on agricultural statistics, and the consequences of this are quite serious. With weak country engagement, FAO has limited possibilities to facilitate the adoption and implementation of statistical norms and standards. Moreover, priorities for statistical capacity development are not established in consultation with countries, inevitably resulting in gaps, overlaps and inconsistencies across initiatives. In the absence of a proper peer-review process with country involvement, FAO's data is occasionally criticized and challenged, posing a threat to the organization's reputation. Finally, without a strong country mandate, matters relating to agricultural statistics cannot be strongly represented by FAO at the United Nations Statistical Commission, the world's apex governance body for official statistics. This affects the statistical work of all Departments at FAO, and it is particularly important for the development of new indicators under global initiatives such as the Post-2015 Development Agenda.

The International Advisory Group on FAO Statistics, which was established in 2013 as a first step towards improving statistical governance at a global level, is only an informal body with purely advisory functions and is based on a very limited and incomplete membership. It was therefore designed to serve as an interim platform for international involvement in FAO statistical matters until a formal statutory body on statistics could be established..

To address this, a proposal to establish a Global Commission on Statistics¹¹ is currently being considered by FAO Member Countries. This new platform would serve as a forum for formal engagement of Members in the formulation, review and monitoring of FAO's overall Statistical Programme of Work. Moreover, a stronger ownership and commitment of countries in the application of agreed statistical norms and standards across regions will further strengthen FAO's facilitation role towards this effort, improve the overall quality of data and statistics as a Global Public Good, and increase the opportunities for support from strategic development partners.

¹¹ <http://www.fao.org/3/a-ml503e.pdf>

The absence of a formal external statistical governance mechanism makes the work of Global Monitoring more challenging, which is even more evident at this key moment in time when the indicators for the new 2030 Sustainable Development Agenda are about to be finalized. Nevertheless, the existing strong internal governance mechanisms are particularly helpful and at complete disposal of Organization to coordinate its own inputs into the process.

2. FAO and Monitoring the Sustainable Development Goals

Working in close collaboration with the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDG), FAO is custodian for 20 of the 230 SDG indicators agreed by the 47th Session of the United Nations Statistical Commission¹² “as a practical starting point”¹³ for monitoring progress for the 2030 Sustainable Development Agenda. This represents a major increase in workload for FAO as it had only been responsible for monitoring 4 indicators during the previous Millennium Development Goals phase.

With respect to these new indicators, FAO will have an important role to play at Global, Regional and National levels. Globally it will develop methods and survey tools to support data collection activities. It will actively participate and engage with the IAEG-SDG and report on progress in both FAO and UN publications. Regionally, it will interact with Regional Bodies and provide advice and assistance in supporting additional regional indicators, and contribute to regional reports. Nationally, the Organization will provide direct support to countries to produce the required global indicators and offer technical assistance and advice to develop additional national indicators.

To achieve these objectives in a coordinated manner, the existing robust internal governance mechanisms will be fully exploited. First and foremost, the Organization will speak with one

¹² <http://unstats.un.org/unsd/statcom/47th-session/documents/>

¹³ Report of the 47th Session of the UN Statistical Commission (2016), p. 9.

voice. FAO's contribution to the 20 SDG indicators under its responsibility will be coordinated by, and communicated to the United Nations Statistics Division through, the FAO Chief Statistician. Moreover, the internal statistical governance bodies will be called upon to monitor the FAO-relevant SDG targets on a regular basis, and a dedicated sub-group has been established for this purpose. The FAO Regional Offices will also have an important role to play to provide capacity development services and technical assistance at both national and regional levels.

3. Conclusion

As can be seen above, quality is at the forefront all of FAO work in the area of Statistics. In an Organization where the production of statistics is vastly decentralized, a strong and robust system of internal and external statistics governance is of paramount importance for the delivery of statistical services at global, regional and national levels. The building blocks for Statistical Governance developed over the past ten year have proven to be robust, sustainable, flexible and completely re-usable even to meet entirely new needs, such as those required for supporting the 2030 Sustainable Development Agenda. The strategic approach of FAO to Statistical Governance and Quality Assurance as presented in this paper, as well as the lessons that the Organization has learned in the process, hopefully can provide valuable inputs to other international organizations currently striving to improve and strengthen their own statistical systems.