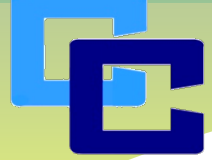


Headquarters of the CARICOM Secretariat, Guyana



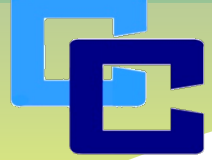


Caribbean Thematic Conference: Managing a statistical organization in times of change

Ensuring Quality in the Production and Dissemination of Statistics- Development and Implementation of a Quality Assurance Framework and harmonization of Core Areas of Statistics

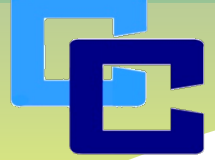
The Regional Statistics Programme,
CARICOM Secretariat

25 - 27 November 2019
BARBADOS



Overview of Presentation

- Mandate of the Regional Statistics Programme (RSP);
- Background to the CARICOM Quality Assurance Framework – Past work put in place prior to development of the CQAF;
- Approach to developing the CQAF – Decision on Phases;
- Structure of the CQAF;
- Highlights of the CQAF - Principle 4 – Quality Commitment;
- Current work in Progress;
- Next steps



OVERVIEW OF THE RSP



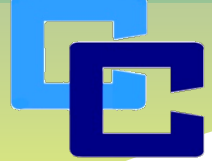
■ Mission Statement

- To develop a sustainable statistical infrastructure within the CARICOM Secretariat providing accurate, timely and reliable statistical information of a high quality and broad scope, facilitating analysis and dissemination of these data, promoting their use in effective and efficient decision making and simultaneously, fostering a similar enabling environment for statistical development among Member States of the Caribbean Community.



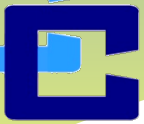
■ Main objectives of the RSP

- ❑ To collect data from Member States of the Community to produce harmonized high quality databases to guide decision making within the Community.
- ❑ To enable harmonization of key social, economic, environmental and other statistical systems and frameworks across countries.
- ❑ To provide support to the strengthening of statistical capacity in Member States with own resources, through funding received or collaboratively with IDPs



Mandate of the Regional Statistics Programme

- In the early years of integration , prior to the Community–Trade statistics was the main data collected and GDP and Population Statistics;
- Eventually in the early period of the Community data collection expanded to other Economic Statistics were collected followed much later by Social Statistics. In roads into Gender and Environment Statistics came around the late 1990s with a CARICOM/UNSD project
- The deepening of the integration process and specifically the CARICOM Single Market Economy (CSME) critically depends on the production and dissemination of statistics to guide and monitor the CSME;



Articulation of Statistics in the Revised Treaty

- Article 25 – where it is stated that the CARICOM Secretariat shall:

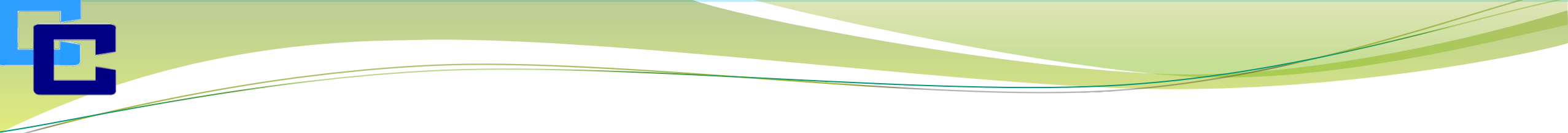
“...collect, store and disseminate to the Member States of the Community information relevant for the achievement of its objectives”;

- Article 44 states in part:

“...the establishment of market intelligence and information systems” rights of establishment services, capital movement;

- Article 57:

“...improvement of the collection and analysis and dissemination of empirical data & other relevant information”.



BACKGROUND TO THE CQAF



■ Documentation of Metadata:

- 2001/2002- Earliest effort at quality assurance – the Secretariat encouraged Member States to document their methodologies and also began to collect documented metadata in various areas of statistics namely:
 - ❑ National Accounts
 - ❑ Business and Household Surveys
 - ❑ Merchandise Trade
 - ❑ Consumer Price Index
- ❑ At that time, the Secretariat had designed standardised formats for summarizing methodologies received from Member States to enable comparison across countries.
- ❑ The process was also assisted by countries following the IMF General Data Dissemination System (GDDS).



Background to the CQAF

- **Proposal by Suriname on use of League Tables (DeVries):**
- 2005 - Paper presented at Sixth Meeting of the Advisory Group on Social Gender and Environment Statistics (precursor to current AGS) on application of League Tables for Measuring Performance of Statistical Offices.
 - The presentation examined the feasibility of implementing a Ranking System for NSOs of the CARICOM member countries in order to encourage the improvement in quality of the data produced.
 - The proposal was to score NSOs based upon performance indicators that were a combination of the quality of Actual Statistical Series and Other criteria.
 - These series included Life Tables data, Annual Real GDP per capita, CPI, Labour Force Statistics;
 - Other criteria examined the resources available to the NSO.



■ **Development of a Common Regional Statistical Work Programme:**

- 2005-Regional Statistical Work Programme (RSWP)– Approved by the Community Council of Ministers in January 2005 and provided the basis for:
 - ❑ Culture of evidence-based policies
 - ❑ Sustainable statistical infrastructure
 - ❑ Harmonized framework of comparative statistics
- ❑ RSWP was updated through two complementary projects funded by the EU in 2009 and the IDB in 2010
 - ❑ EU project-created a framework to classify the various areas of statistics based on Classification of Statistical Activities (CSA) (out of Europe)
 - ❑ Levels of priority were established- least urgent (LU), Moderately Urgent (MU) and Very Urgent (VU)
 - ❑ IDB project- incorporated the work under the EU project to finalise a Five-Year Work Plan that would guide the work of the NSOs into the creation of a widened core of harmonized statistics



- **Common RSWP:**

- Comprises five Domains:

1. Demographic and Population Statistics
2. Economic Statistics
3. Environment and Multi-Domain Statistics
4. Methodology of Data Collection, Processing and Dissemination; and
5. Strategic and Managerial Issues of Official Statistics.

- Of which Theme 5.3 incorporated Quality Frameworks and Measurement of Performance of Statistical Systems and Offices

"GDDS, SDDS and DQAF to be considered here"

- The RSWP has a reporting framework and a Monitoring and Evaluation Framework is to be developed to monitor its implementation.



- **Inroads into CQAF:**
- 2009: the RSP included the development of a Quality Assurance Strategy under the project, Strengthen the Capacity of Economic Statistics in CARIFORUM, through funding provided by the European Development Fund.
- As a consequence at the 2nd Regional Statistical Research Seminar, the RSP of CARICOM Secretariat presented a paper on concept of a Core Data Quality Assurance Framework, as it was called. This paper outlined the following:
 - Guiding principles for setting up the CDQAF a
 - The prerequisites of quality (based on the IMF DQAF)
 - Five core dimensions of quality and
 - A generic CDQAF



The paper outlined the following core dimension for the structure of a CDQAF [based upon the IMF DQAF plus other sources]:

1. Assurance of Integrity

- Adherence to principles

2. Methodological Soundness

- Adherence to internationally acceptable standards, guidelines and good practices

3. Serviceability

- Need for statistics to be disseminated with appropriate periodicity in a timely fashion

4. Accessibility/Clarity

- The format of the available data and availability of supporting information

5. Accuracy and Reliability

- Statistical outputs sufficiently portray the reality of the economy



■ **Survey on Quality Assurance:**

- In 2010, the RSP embarked on a data quality assessment programme including the administering of DQA questionnaire to 19 Member Countries. Response was received from only six (6) Member States. The following are some of the main findings from the responses received:-

- *Quality Assessment Framework in Place*

- Only one (1) country indicated that some form of quality assurance framework is in place- informal and two (2) indicated that they have plans in place to develop and use a quality assurance framework in the near future

- *Possible Challenges to the Quality Assessment Framework*

- Lack of adequate resources,
 - Lack of technical capacity (need for technical assistance)
 - The need to change systems and procedures to facilitate proper documentation



☐ **Survey on Quality Assurance:**

☐ *Documentation of Processes*

- ☐ All six countries reported having some form of documentation (either completely or partially) on their methodologies.
- ☐ However only for classifications used in surveys did all six countries had complete documentation.
- ☐ At least four countries reported having complete documentation on their Methodology for National Accounts estimates as well as computations for indices (CPI, RPI, PPI, etc.)

☐ *Feedback on Needs of Customers*

- ☐ Area of concern- Only 3 countries reported having partial documentation on methods of assessing customer needs, the rest had zero documentation– yet this is pivotal to improvement in data quality.

☐ *Number of Trained Staff*

- ☐ The number of staff trained in the area of statistics in which they are currently working ranged from a low of 10 percent to a high of 100 percent across the responding six NSOs.



- **CARICOM Code of Good Statistical Practice (CGSP):**
- At the 6th Meeting of the AGS in 2010, the need was recognised for the development of a Code of Ethics for Statisticians in CARICOM as suggested by the consultants working on the RSWP project funded by the 9th European Development fund).
- The consultant suggested using the European Union's Statistics Code of Ethics as a model and it was first administered in the Member States and Associate Members in 2010 under the above mentioned project.
- It was recommended to distribute this questionnaire every three years, hence it was re-administer in 2013, 2016 and 2019.
- The CARICOM Statistics Code of Practice is based on 15 principles and uses country responses to determine a score reflecting adherence to good statistical practices.



Background to the CQAF

- The 15 principles of the CGSP are as follows:-

Institutional Environment	Statistical Processes	Statistical Output
<ul style="list-style-type: none">• Professional independence• Mandate for data collection• Adequacy of resources• Quality commitment• Statistical confidentiality• Impartially and objectivity	<ul style="list-style-type: none">• Sound Methodology• Appropriate Statistical Procedures• Non-excessive burden on Respondents• Cost Effectiveness	<ul style="list-style-type: none">• Relevance• Accuracy and Reliability• Timeliness and Punctuality• Coherence and Comparability• Accessibility and Clarity



- **Upgrading of the CGSP – Introduction of Peer Review:**
- Work is in Progress to enable the development of a Peer-Review mechanism to upgrade the CGSP and to make it a more robust system;
- This work has been led by the AGS and the Member State for Suriname did the research for the introduction of this mechanism
- Status: there is a Guide to Peer Reviewers, Peer Reviewers have volunteered, NSOs have volunteered to be Peer Reviewed and Training of Peer Reviewers has been conducted;
- Next steps- preparation of a Checklist of Requirements for Peer reviewers/reviewees and the scheduling of the pilot.



- **Regional Data Policy:**
- 2012 : Regional Data Policy - prepared collaboratively with the CARICOM Secretariat, the CARICOM Advisory Group and Statistics (AGS) and the Standing Committee of Caribbean Statisticians (SCCS) under an IDB funded project.
 - Applies to “Statistical Agencies” :
 - CARICOM Secretariat RSP
 - NSOs of Member States
 - Other National or Regional agencies with officially designated role
 - Covers use of IT tools to capture, store, analyze and present statistical data.



Background to the CQAF

- **Regional Data Policy:**

- The following topics are covered under this policy:-
 - ❑ Data Quality and Integrity
 - ❑ Data Capture and Sourcing
 - ❑ Data Storage and Management
 - ❑ Access and Security
 - ❑ Standardization of Databases
 - ❑ Data Submission
 - ❑ Use of Microdata
 - ❑ Metadata
 - ❑ Data Archiving



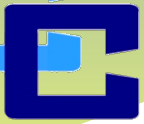
CARICOM Model Statistics Bill:

2012 - CARICOM Model Statistics Bill developed by Member States and SCCS and includes the following clauses to impact quality:-

- AN ACT to provide for the establishment of a National Statistical Institute in [Country] with the functions of developing an integrated statistical system, *establishing standards for statistical purposes*, collecting, compiling, analyzing and publishing official statistics and for matters incidental thereto
- The Model Bill provides the **basis for greater Integrity in Statistics – Independence of Statistics produced;**
- Data Sharing, Use of Data from administrative data sources for statistical purposes only that all impact quality issues within the National Statistical System;



THE CQAF – PHASED APPROACH TO DEVELOPMENT



Major Decisions of the SCCS on the CQAF

The 20th and 21st Meetings of the AGS (June 2017/ Suriname and October 2017/ Cayman Islands respectively) considered the Agenda in relation to the development of a CARICOM Quality Assurance Framework (CQAF) in Statistics.

THE ADVISORY GROUP ON STATISTICS (AGS):

Further recommended that the CQAF should be based on four principles of the CGSP, namely, Quality Commitment (4), Sound Methodology (7), Relevance (11) and Timeliness and Punctuality (13). Subsequent to the 20th AGS Principle 5 on Statistical Confidentiality was added to be part of this first phase of the CQAF;

Noted the presentation on the redrafted CQAF based on the five principles as recommended by the AGS;

Recommended that the draft framework of the CQAF, should be presented to the 42nd Meeting of the SCCS.



Major Decisions of the SCCS on the CQAF

The 42nd MEETING [OF THE SCCS]

Noted the report of the AGS on the development of a CQAF;

Also noted that the original first draft of the CQAF framework was developed out of the CARICOM regional workshop facilitated and funded by PRASC in St Kitts and Nevis in 2016;

Further noted that the First Draft CQAF arising out of the PRASC/CARICOM workshop, taking into consideration its magnitude, did not recognise the challenges in implementation that the relatively small countries would experience, and was not effectively grounded in the work already being put in place through the CGSP;



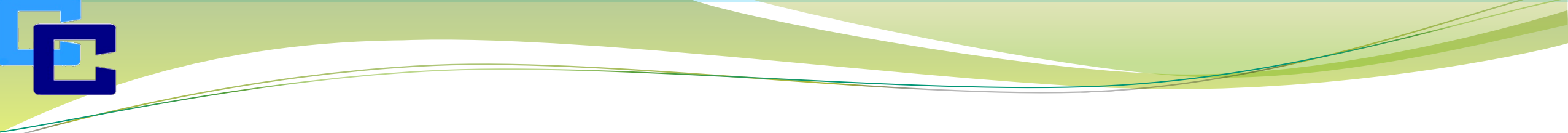
Major Decisions of the SCCS on the CQAF

SCCS endorsed the following relative to the CQAF:

- that the CQAF must not be so tedious that it gets in the way of the production of the actual statistics that were required to be produced;
- that the CQAF should be more directly grounded in the CARICOM CGSP which was already being implemented in the Region;
- that the CQAF should be based on **five principles of the CGSP namely, Quality Commitment (4), Sound Methodology (7), Relevance (11), Timeliness and Punctuality (13) on Statistical Confidentiality (5);**

Also endorsed that the implementation of the framework be done on a phased basis as this would be more feasible and manageable for countries;

Expressed appreciation to Statistics Canada for its inputs into the development of the draft CQAF framework.



STRUCTURE OF THE CQAF



CQAF STRUCTURE

CQAF - PHASE I- Based on a subset of five principles of the CGSP within the three core groups namely :-

- **Institutional Environment**
 - Quality Commitment (4)
 - Statistical Confidentiality (5)
- **Statistical Processes**
 - Sound Methodology (7)
- **Statistical Output**
 - Relevance (11)
 - Timeliness and Punctuality (13)



CQAF STRUCTURE

The CQAF presents for each of the selected principles of the CGSP the following information:

- A *brief introduction* of each of the three groups containing the principles namely institutional environment etc.;
- A *brief statement* of the principle;
- The *context* of the principle



The context of the principle comprises:-

- The indicators for each principle are listed;
- The High Level or Strategic Level actions that are required to be put in place are listed for each indicator;
- Actions required at the Operational Level are listed for each indicator. These actions are the practical activities, procedures and instructions to make operational the framework and to routinize the application of each principle. Essentially the operational level provides information on “how to do it”.
- A Checklist of Performance Measurements is presented for each indicator to enable a quick assessment of key requirements for appropriate application of the principles.



EXAMPLE- PRINCIPLE 4 – QUALITY COMMITMENT HIGHLIGHTS



Meaning and Context

- This Principle requires that Member States commit to operate according to a high level of quality in producing and disseminating official statistics.
- In terms of context, it is therefore important to have a commitment to high quality in producing official statistics because data will only be useful if the quality is good. Accurate, reliable and timely information contribute to sound decision-making.
- Therefore, commitment to sound processes for collecting, compiling, processing and disseminating data are essential in ensuring that the statistical outputs are of high quality.



The indicators of Quality Commitment are:

- Indicator 4.1: An overarching policy document on Quality has been prepared and made available to the public
- Indicator 4.2: Systems and Procedures are in place to monitor the quality of the statistical production processes
- Indicator 4.3: Product quality is regularly monitored and assessed
- Indicator 4.4: There is a regular and thorough review of the key statistical outputs using external experts where appropriate



PRINCIPLE 4 – HIGHLIGHTS

Re. Indicator 4.1: An overarching policy document on Quality has been prepared and made available to the public.

High/Strategic Level:

- **The CARICOM Code of Good Statistical Practices (CGSP)** complemented by the Peer Review system is in place as a standard for Quality Assurance across the region;
- **Infrastructure exists for the application/use of the quality guidelines .**
- **Related to (2) country-specific or national Quality Assurance Framework** based on the CQAF could also be developed



The steps in applying the CQAF should essentially comprise:

- An **overarching statement** or **declaration** of commitment to quality and specific **statements where required**;
- Incorporation within the Organisational Structure of the NSO of a function/position(s) for Quality Assurance.
- **An Implementation guide** should be developed to facilitate the implementation of both the High Level and Operational Level practices and actions in the CQAF.



The steps in applying the CQAF should essentially comprise (cont'd):

- **Staff Training Programme** on quality should exist;
- **Communication Programme** to inform users of the CGSP and the CQAF framework and results should exist;
- A **Business Process model** should be developed that clearly articulates the various stages of the statistical production process around which the management of quality would be required;



PRINCIPLE 4 – AN EXAMPLE

Example of Indicator 4.1: An overarching policy document on Quality has been prepared and made available to the public.

Operational Level:

- **Undertake self- assessment of the CARICOM CGSP** (every three years);
- **Conduct of Peer-Review** (every three years or as determined by the SCCS);
- **Sign/Commit to the declaration on quality;**
- **Undertake country-specific quality assessment, CQAF** at a time-period to be determined.



PRINCIPLE 4 – AN EXAMPLE

Indicator 4.1: An overarching policy document on Quality has been prepared and made available to the public.

Operational Level cont'd:

- **Undertake Training programme at regular intervals** to ensure effective training of staff and training-of trainers;
- **Prepare more detailed and unambiguous procedures and instructions** and explanatory notes as required to support the implementation of the specific relevant processes listed under this section.
- **Inform Members of the public about the guidelines**, the declarations /statements on quality and the outcome of the reviews.
- **Develop a Business Process Model (RPG supported)**



PRINCIPLE 4 – HIGHLIGHTS

Indicator 4.1: An overarching policy document on Quality has been prepared and made available to the public.

Checklist of Performance Measurement:

- Self-assessment score from CGSP; (Periodic)
- Report from Peer-Review Activity (periodic)
- An officially adopted and implemented quality policy.
- A declaration/statement on the quality commitment developed and publicised.
- Clearly established quality checklists to assure methodological soundness.
- Implementation Guide
- Communication Plan

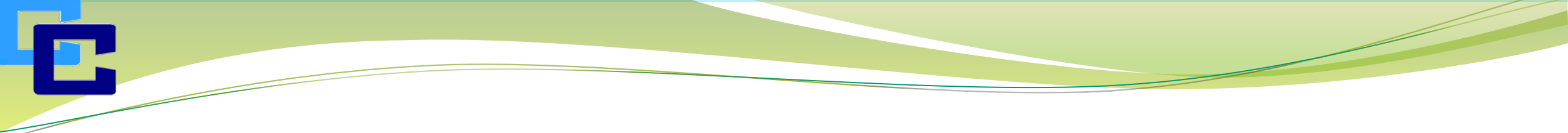


CURRENT WORK IN PROGRESS



CURRENT STATUS

- A remote meeting has taken place relative to commencing the pilot.
- The volunteering Member States (Grenada, St. Kitts and Nevis, Suriname and The Bahamas) were fully briefed on the work that was involved in preparing the first phase of the Quality Framework. In the case of Suriname all presentations were sent to them
- Member States were directed to activities relative to Principle 4: Quality Commitment as the first step towards developing their own National Quality Framework.
- Integral to this preparation as well is the development of an Implementation Plan by countries identifying activities plausible in the short, medium and long term.



NEXT STEPS



CQAF - PHASE 2- For countries that have the capacity to undertake work beyond the Phase 1, Phase 2-CQAF will be developed based on the remaining principles of the CGSP that can be readily incorporated in the CQAF namely:-

Institutional Environment

Impartiality and Objectivity (6)

Statistical Processes

Appropriate Statistical Procedures (8);
Non-Excessive Burden on Respondents (9);
Cost Effectiveness (10);



CQAF - PHASE 2 cont'd:-

Statistical Output

Accuracy and Reliability (12);

Coherence and Comparability (14)

and

Accessibility and Clarity (15).



NEXT STEPS

- Continued collaboration and follow-up with Member States relative to the development of their Implementation Plans and general quality-related work as follows:

- Piloting the Peer Review;
- Developing the Implementation Plan with Countries which should include:
 - Establishing a focal point/position for the implementation;
 - Developing the Overarching Statement of Quality;
 - Developing the Implementation Guide (Regional Public Good that can be adapted by countries);
 - Sensitising/Training of Staff and establishing a training programme (RPG)
 - Developing a Communication Programme on Quality (RPG);



THANK YOU FOR YOUR ATTENTION