Economic Commission for Latin America and the Caribbean

ECLAC SUBREGIONAL HEADQUARTERS FOR THE CARIBBEAN

# Report of the Seminar on positioning the Caribbean in the knowledge economy

## The role of data

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**Economic Commission for Latin America and the Caribbean**
**Subregional Headquarters for the Caribbean**

Seminar on positioning the Caribbean
in the knowledge economy: the role of data
1 and 2 November 2023
Port of Spain, Trinidad and Tobago

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# REPORT OF THE SEMINAR ON POSITIONING THE CARIBBEAN IN THE KNOWLEDGE ECONOMY: THE ROLE OF DATA

This report has been produced without formal editing.

**CONTENTS**

## A. CONCLUSIONS AND RECOMMENDATIONS

1. Leveraging the Caribbean human capital to develop knowledge economies requires, among other things, a better appreciation and utilization of data. Fortunately, the 2030 Agenda for Sustainable Development has produced a data-friendly environment for development purposes, incorporating innovation in data collection, analysis, and dissemination. Modern methodologies and approaches have been developed to allow a broader scope of data sources for development purposes, such as recent advances in information systems, big data and artificial intelligence (AI), making digitization and data access easier than ever. Thus, the subregion needs to invest in information and communications technology (ICT), artificial intelligence and big data to build a knowledge economy.

2. The Sustainable Development Goals (SDGs) have helped Caribbean countries benchmark and standardize their monitoring of and reporting on the achievements of Global Goals, strengthen collaboration across public agencies, and improve subregional and international collaboration.

3. Although there has been a better appreciation of the value of data for monitoring the implementation of the SDGs in the Caribbean, there are still major data gaps, particularly regarding those SDGs on poverty, inequality, unemployment and the environment. Structural constraints faced by the Caribbean limit the statistical capacity of the countries.

4. A culture of data secrecy in the Caribbean hinders the dissemination of information and thus contributes to the seeming data poverty of the subregion. The question of political interference in the publication of data and statistics and limitations imposed on the statistical systems due to infrastructure and human resources constraints constituted areas of concern. Notwithstanding, the evolution of an enabling data culture for statistics depends on the evolution of a research culture in the Caribbean that would promote the value of data collection and data sharing as crucial pillars of effective economic and social policymaking in the subregion.

5. To optimally harness AI in positioning the Caribbean for the knowledge economy, the subregion should invest in building AI models by Caribbean experts with creative content tailored to address problems specific to the subregion.

6. Non-traditional and unofficial sources of data, such as citizen-generated data, should be leveraged to complement official statistics, thus enhancing the timely collection and dissemination of data by Caribbean countries. The success of citizen-generated data, a complementary source to official statistics, rests on the participation, collaboration, and empowerment of communities and civil society organizations. Such sources of data tend to be non-probabilistic and, therefore, may produce unrepresentative samples of the general population, making the inclusion of diverse communities critical in their usefulness for official statistics. Community collaboration can be leveraged to generate statistics that reflect the reality and diversity of Caribbean communities in a manner that is meaningful and practical to them.

7. Digital inclusion is a prerequisite for positioning the Caribbean in the knowledge economy. In this regard, measuring progress towards digital inclusion in the Caribbean is essential. However, gathering gendered-disaggregated data presents a challenge, making developing evidence-based and effective policies on digital inclusion difficult. Although accessibility is largely well-measured in the Caribbean, other dimensions of digital inclusion, such as skills, trust, and motivation to use digital technologies, are underreported.

8. Caribbean citizens must develop data literacy. The global data economy is a trillion-dollar industry, and the Caribbean needs to move up the value chain. While the Caribbean has challenges to address in

data collection, countries need to advance in creating value from data through analysis and insights. Advancing on the data value chain will also advance the position of the Caribbean in the new global knowledge economy.

## B. ATTENDANCE AND ORGANIZATION OF WORK

### 1. Place and date of the meeting

9. The Seminar on positioning the Caribbean in the knowledge economy: the role of data was held on 1 and 2 November 2023 in Port of Spain, Trinidad and Tobago.

### 2. Attendance[1]

10. The Seminar was attended by Caribbean policymakers and practitioners in the areas of data, statistics, sustainable development, artificial intelligence and digital inclusion from the member States of the Bahamas, the Dominican Republic, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago; and associate members of the British Virgin Islands, Curaçao, Martinique and Montserrat. Representatives of the diplomatic corps and officials of the United Nations system were also in attendance. Representatives of regional and international organizations such as the Association of Caribbean States (ACS), the Caribbean Public Health Agency (CARPHA), the Caribbean Telecommunications Union (CTU), the Organisation of Eastern Caribbean States (OECS) and the Organization for Economic Cooperation and Development (OECD), as well as academic institutions also participated. The full list of participants is annexed to this report.

### 3. Agenda

1. Opening of the meeting
2. Panel discussion – Better data, better decisions, better lives: the value of data in a knowledge economy
3. Panel discussion – The culture of data: where does the Caribbean stand?
4. Panel discussion – Artificial intelligence and the Caribbean data revolution
5. Panel discussion – Beyond official statistics: a look at citizen-generated data and other unofficial sources of data
6. Panel discussion – Advancing digital inclusion through data and measurement
7. Close of the meeting

[1] See annex I for a full list of participants.

## C. SUMMARY OF PROCEEDINGS

### 1. Opening of the meeting

11. The Director of ECLAC subregional headquarters for the Caribbean delivered the opening remarks at the Seminar on positioning the Caribbean in the knowledge economy, where she emphasized the pivotal role of data in the development of the Caribbean, especially in the context of fostering a knowledge-based economy.

12. She noted that while member States have increasingly recognized the vital role of data in monitoring and reporting progress toward the SDGs, data availability challenges remain. A common issue among Caribbean Development Cooperation Committee (CDCC) member States that have presented their voluntary national reviews (VNRs) was the lack of data for some SDG indicators, which posed challenges in monitoring and measuring sustainable development progress and highlighted the need for improved data infrastructure.

13. Several sectors, particularly in the environmental realm, are adversely affected by data scarcity, which poses a critical challenge for countries particularly vulnerable to climate change and extreme weather events, as it hinders the accurate measurement of the impact of disasters on essential environmental services crucial for tourism and other industries. Furthermore, the absence of and delay in data release calendars or schedules of socioeconomic data, such as poverty and unemployment rates, by national statistical offices, are also pressing concerns. Despite the Caribbean's high level of human development, issues like declining labour productivity and youth unemployment persist, suggesting an underutilization of data in shaping human capital development and policymaking.

14. The Director stressed the need to enhance capacity in data analytics and big data. The significance of leveraging web technology for more effective and timely data dissemination in user-friendly formats and modernizing official statistics with the integration of technology in data collection, analysis, and dissemination are fundamental requirements to align with global statistical and technological best practices. Investing in information and communications technology, including artificial intelligence and digitization, is also crucial, as ICT skills need to be tailored to the digital era to enhance labour productivity.

15. In his opening statement, the Minister of Foreign Affairs, International Business and International Cooperation of Suriname, in his capacity as Chair of the CDCC, indicated that data is a critical element within the context of the knowledge economy and the fifth industrial revolution. He noted that the Caribbean has been internationally acknowledged for its distinguished technological contributions to many sectors, such as the economy and health. However, the subregion is not progressing fast enough to keep up with the advancements of the fourth industrial revolution. Against the development of new digital technologies, in a scenario of international uncertainty and shifting geopolitics that can impact domestic economies, an important objective for the Caribbean is to determine how to reposition itself in this new global economic scenario for its benefit and strategically achieve its development goals. Leveraging human capital is key for such an objective.

16. The Minister further discussed the need to appreciate the challenges related to data collection, production, standardization, and timely use analysis and dissemination. These activities are crucial for policymaking and providing market signals for economic sectors to respond to market forces. Therefore, data is relevant to technicians and technical ministries, high-level political leaders and the private sector. He proposed introducing improved mechanisms to align the pursuit of the SDGs with national and subregional goals and priorities. Undertaking this challenge calls for a subregional approach to share and communicate countries' priorities, activities, and best practices. He indicated that this was not solely a government responsibility but a shared one that should include various actors, such as nongovernmental

organizations, businesses, faith-based groups, and other regional and international organizations, including ECLAC and CARICOM.

## 2. Panel discussion – Better data, better decisions, better lives: the value of data in a knowledge economy

17. The first panel, "Better data, better decisions, better lives: the value of data in a knowledge economy", which was moderated by the Resident Coordinator for Trinidad and Tobago, Suriname, Aruba, Curaçao and Sint Maarten, featured the perspectives of high-level policymakers on the benefits that the subregion derives from a better coordinated and resourced data ecosystem, including how the Caribbean should approach data science innovation to inform better public and private decision-making.

18. Data is the new oil. It is a commodity that countries can use to fuel their economies. It is known from developed countries that data is the engine of the economy, particularly the knowledge economy. Data helps to save lives, as shown by the COVID-19 pandemic. Real-time information allows policymakers to manage policies and responses to different events. However, data governance and literacy are not well-developed in the Caribbean. Many countries of the subregion lack key SDG indicators, such as poverty and hunger. A reliable statistical ecosystem is crucial to support sustainable development. The Caribbean must develop its knowledge economy to compete in the global market, which requires better data.

19. The panellists noted that the statement that the Caribbean is data-poor is debatable. The subregion produces data, but the problem is accessibility. Relatively small national statistical offices (NSOs) have structural limitations that do not allow them to collect data on a large range of SDG indicators. Small island developing States (SIDS) have resource constraints that larger and developed countries do not have, such as limited statistical capacity, which especially limits the collection and reporting of poverty, education and health data. Moreover, there is substantial heterogeneity in the statistical capacity of Caribbean countries. It is important to differentiate accessibility problems to existing data from non-availability. The quality of available data is also crucial. The legislative framework of Caribbean countries often does not promote data accessibility. Many national agencies have the necessary statistical capacity to collect relevant data for development indicators but may be hindered in widely disseminating such data.

20. Regarding reporting progress on the SDGs, the Caribbean scores relatively poorly, with only Sub-Saharan Africa performing worse than the subregion. However, the SDGs emphasize the need for data, and they create benchmarks for data collection, help evaluate countries' statistical ecosystems, and improve data quality and the timeliness of its reporting. The SDG framework provides an international mechanism for standardizing national data, which enables countries to improve their statistical capacity through multilateral data monitoring mechanisms and international cooperation. Such coordination helps overcome the structural limitations of small economies and contributes to closing the gaps in national statistical capacity. The extent to which the SDG framework guides countries' development agendas becomes evident when monitoring and evaluating SDG implementation at the ministry level, as it helps align national developmental policies with the global framework.

21. The inability to collect and report socioeconomic data inhibits allocating state resources for social interventions, such as alleviating poverty. Statistical capacity building in Caribbean countries has focused primarily on macroeconomic indicators, and the collection of socioeconomic indicators has not been a policy priority due to the limited resources of the statistical offices, including the necessary human resources to conduct large-scale surveys. Data collection jobs can often be unattractive to job seekers, increasing the difficulty in acquiring and retaining qualified staff. A further challenge to collecting socioeconomic data comes from the reluctance of respondents to provide information to survey officers. This reluctance may stem from a lack of trust that their data will be protected or an outdated legal framework for data

governance. Investments in public advocacy and relations are needed in these areas to encourage greater response rates.

22. Discussions focused on the relationship between public and private sectors for enhanced data collection. Delegates agreed that while the private sector uses data for profit maximization and improving its products and services, the government uses data to inform policy planning and decision-making; as such, a partnership that promotes capacity building and the development of statistical standards for both sectors can help improve national data collection.

23. There was a consensus that statistical offices should be statutory bodies rather than being located within a government ministry. A more autonomous statistical office would have greater control over their finances and greater autonomy in decision-making. In addition, a separation from the government can create more trust in respondents, which makes them more willing to provide information.

24. Delegates also emphasized the relationship between technology and data quality. Adopting current technologies was essential for improving data collection and processing, except where infrastructural limitations exist. For example, the use of tablets for enumeration in the population and housing and censuses is more efficient.

### 3. Panel discussion – The culture of data: where does the Caribbean stand?

25. The second panel, entitled "The culture of data: where does the Caribbean stand?" addressed the validity or lack of it of the notion that the Caribbean is a "data poor" subregion and what factors contribute(d) to this notion. Panellists also elaborated on data literacy in the Caribbean and provided recommendations on how to build/sustain a positive data culture in the subregion. The Senior Economist, Ministry of Finance, Economic Planning, Sustainable Development and Information Technology of Saint Vincent and the Grenadines moderated the panel.

26. The former Director of the Central Statistical Office of Saint Lucia began the discussion by examining the state of the latest round of population and housing censuses in the Caribbean, the foremost traditional source of data in the subregion. As of October 2023, only the Bahamas had released census data, which it began collecting in 2022, although Barbados began collecting census data in 2021. However, six Caribbean countries had not started collecting census data, a delay probably due to the COVID-19 pandemic. Another problem is the slow adoption of new technologies, such as tablets, to carry out census enumeration. The slow pace of census implementation will delay labour and household survey collection and reduce the quality of socioeconomic indicators, such as those relating to unemployment and inequality, which rely on census data for estimating their baselines.

27. Furthermore, the capacity constraints faced by small countries, such as Caribbean SIDS, trying to produce official statistics are well known. These constraints are compounded by the relatively high cost of household surveys. In the current census round, recruitment, management and retention of field workers have been a serious problem in numerous countries, suggesting that the current approach to census fieldwork needs to be reconsidered.

28. Multidimensional poverty indicators can be produced from censuses and other surveys. Such solutions and other types of data, including data collected from online sources, can help increase the collection of heavily underreported indicators in the Caribbean, as is the case of poverty.

29. The Director of Research, Design and Evaluation of the Statistical Institute of Jamaica (STATIN) stated that quality data are characterized by accuracy, relevance, timeliness, and reliability. In turn, data quality is the product of statistical capacity. Leveraging data from data sources beyond censuses and

household or labour surveys is critical to increasing data availability, such as using administrative data to compile economic and demographic statistics. Similarly, leveraging emerging sources of non-traditional data is critical. For example, geospatial data and small-area estimation techniques show great potential to supplement census data and improve the availability of statistics about local areas. Nevertheless, disseminating statistics through multiple means, such as official websites, social media and press releases, is essential to reach various civil society stakeholders. The Director also discussed the challenge posed to statistical capacity by insufficient staffing and high turnover of qualified staff. She suggested that increased remuneration of the staff of NSOs is important to maintain statistical capacity.

30. The Technical Specialist in Statistics of the OECS discussed how data availability often has more to do with the data being inaccessible rather than not existing. In addition, when data are available, they are not necessarily widely used because the community of national data users and researchers is small. She mentioned how attitudes towards governments manifest themselves in an unwillingness to cooperate in official surveys and censuses and how a lack of technical capacity in data anonymization hinders data release. There has been gradual progress in expanding the availability of statistics. However, to make the most effective use of government investments in statistics, statistical systems need to be professionalized and enabled to make better use of technology, administrative and alternative data sources. The World Bank's Statistical Performance Indicators is a useful framework for monitoring progress and benchmarking national statistical systems.

31. The Representative of the British Virgin Islands acknowledged that a culture of data secrecy and the unwillingness of government agencies to share the data they collect reduces the amount of internationally available data from the Caribbean. Changing such cultural norms in Caribbean government agencies is key to increasing data availability. Implementing partnerships between government agencies and international organizations can help break institutional barriers detrimental to data-sharing, as they help increase trust among stakeholders that the data released will protect confidentiality and be used only for developmental purposes.

32. The Principal Consultant of WThomas Consulting appealed for a cultural change of different sorts than previously mentioned. Data is a byproduct of research; thus, a research culture needs to prevail, not just a data culture. Stakeholders of official data in the Caribbean need to understand and appreciate research processes, which will, in turn, incentivize the collection, dissemination and analysis of the data needed to fill the data gaps in the subregion. Producers of data in the subregion are not undertaking a full analysis to determine their stakeholders and why the information would be important to them. Caribbean producers of data must treat data collection as more of a business endeavour but also as a valuable public good that helps meet developmental goals benefiting the whole of society.

33. The ensuing discussion raised concerns by the Representatives of Martinique about data disaggregation between French overseas territories and the parent country, an issue inhibiting data availability from associate member countries. The OECS has been advocating for the disaggregation of data from the French overseas territories and associate member countries.

34. The representative of STATIN elaborated on the organization's mandate and explained that although funding for STATIN came from the national government, the organization was independent regarding its operations, providing it with greater client orientation. Stakeholders can request the collection of specific data, allowing STATIN to respond to the data needs of Jamaican society.

### 4. Panel discussion – Artificial intelligence and the Caribbean data revolution

35. The Director of Incus Services Limited moderated the third panel on "Artificial intelligence and the Caribbean data revolution" and explored the policy implications of AI on the Caribbean data revolution.

Furthermore, this panel highlighted developments in big data and artificial intelligence and the use of these modern approaches in deriving more and better information from a wide spectrum of data sources. The panellists assessed the state of readiness of the subregion to advance on a Caribbean data revolution for sustainable development.

36. One of the primary areas of concern raised in the panel was elaborated by the Head of Control Systems Group at the University of the West Indies, relating to the fear of job displacement caused by AI, as the technology can make some jobs redundant. However, AI can also potentially create and augment jobs in the Caribbean. Crucially, changing and updating educational institutions through curricula that correspond with technological changes is the key to making AI a force of job creation and augmentation rather than job displacement. The Caribbean needs to leverage its rich diversity to build public-private-academia partnerships that drive change. Such an approach can develop the necessary human capital to position the Caribbean for a knowledge economy where AI plays a central role.

37. Another concern raised by the IT Security Manager, the consultant and Attorney at law, and the Chief Operating Officer of Teleios Systems was the importance of adopting mechanisms to mitigate bias in results that do not match the Caribbean reality. For example, it was noted that existing datasets are likely to paint biased pictures of low-income and high-income families, which are not necessarily congruent with the Caribbean experience. Moreover, bias is considered a regional security concern, where biased datasets may lead to corrupted or compromised data. Furthermore, because Caribbean data are underrepresented in most AI datasets, this can result in computational, human and systemic biases being reported in AI results. Therefore, it is important that the Caribbean actively invest in building appropriate models that optimally represent the Caribbean context, utilizing Caribbean-trained AI expertise.

38. During the discussion segment, delegates called for deliberate interventions to adapt and facilitate the subregion's attempts to harness and leverage AI. Within this context, data is viewed as key to digital dominance. Therefore, it will be necessary to change mindsets on data and to increase investment in the data ecosystem to extract and protect the requisite inputs needed to harness and leverage AI in the subregion. Moreover, greater attention should be paid to AI regulatory oversight, accountability, and privacy and security concerns considerations. Possibilities such as "taking a machine to court" and the need for human oversight in deploying AI systems in the Caribbean should be considered. Participants argued that the subregion would benefit from regionally harmonized legislative frameworks as an important response to these threats. Moreover, regulatory oversight is required and should be grounded in public-private-academia partnerships. In this regard, delegates were advised that several Caribbean member States had already started to draft policies and strategies, including Barbados, the Dominican Republic and Jamaica, all seeking to provide requisite guardrails for data protection, cybersecurity, and the ethical and accountable use of AI.

39. Notwithstanding the challenges, advancing AI was viewed as a promising opportunity to be embraced. Panellists considered AI more transformative than disruptive, especially compared to the societal disruptions produced by the development of the Internet and mobile technologies. Delegates were encouraged to understand the technology and not let fear immobilize policy and collective action. For example, the unique characteristics of SIDS offer opportunities to contribute authoritatively to the body of knowledge on the interconnectedness of climate change in the subregion. Furthermore, the small size of Caribbean countries offers the prospect of greater agility in changing policy direction than in larger jurisdictions.

40. Policymakers were urged to prepare the subregion to transition to a knowledge economy where AI plays an important role. Policies on AI will need to consider implementing programmes of reskilling and upskilling of the workforce to reposition Caribbean society from consumers of AI to developers of applications. The subregion will need to get more actively involved and not remain on the sidelines. In this

regard, the experience of the Dominican Republic was instructive. Within their recently launched AI strategy, the government's role is viewed as the creator of a framework to facilitate, among other things, intelligent government, where AI fosters the enhanced delivery of services to citizens; skills development, with the "I am the future" programme, which allocates 2% of the gross domestic product to cybersecurity, data science and AI scholarships; and create a national data hub for open data access of nationally collected data.

## 5. Panel discussion – Beyond official statistics: a look at citizen-generated data and other unofficial sources of data

41. The fourth panel of the Seminar, "Beyond official statistics: a look at citizen-generated data and other unofficial sources of data", was moderated by the Social Affairs Officer of the Statistics and Social Development Unit of ECLAC and addressed the use of citizen-generated data and other unofficial data sources to generate statistics in areas where official statistics are lacking. The fast pace of technological development across the globe has led to unprecedented growth in the amount of data generated by humans and machines, which promotes the transition from the traditional notion of official statistics to incorporating non-traditional sources of data in development data. The panel interrogated the opportunities to engage more stakeholders to actively participate in the data ecosystem and ways for Caribbean governments to get the most out of citizen-generated data and other sources of data.

42. The Professor from The University of the West Indies highlighted the difference between data and statistics. Data in its raw form mainly served as the foundation for generating statistics, but data come in several formats, including numbers, text and images. In contrast, statistics utilizes data after it is organized, analysed, and interpreted to provide insights into trends, issues and hypotheses testing, which can be used to make informed decisions. However, capacity constraints contribute to the relatively low availability of official data from the Caribbean. Despite progress in developing indicators to monitor the SDGs, many data gaps remain. In this regard, citizen-generated data, crowd-sourced data, and data collected by civil society organizations enable the generation of statistics to fill gaps in the reporting of data from the Caribbean to monitor progress on the SDGs.

43. Regarding citizen-generated data, these are the product of technological advances allowing the population to contribute data that can inform different SDG indicators. Importantly, citizen-generated data, like other non-traditional and unofficial sources of data, can be cost-effective alternatives to complement official statistics. Nevertheless, such a source of data comes with its disadvantages. The data generated by this source will not generally adhere to the same quality standards as official statistics. Issues of representativeness and biases will arise. For example, citizen-generated data collected online, such as through online surveys, will exclude the sectors of the population without Internet access, reducing the representativeness of the data gathered through such an approach. However, without official statistics for many indicators, citizen-generated data and other unofficial data sources provide complementary information to inform policy development, implementation, and monitoring.

44. The Coordinator of the Inter-Secretariat Working Group on Household Surveys of the United Nations Statistics Division indicated that for several cross-cutting SDGs such as climate action (SDG 13), gender equality (SDG 5), and peace, justice and strong institutions (SDG 16), less than half of the 193 countries or areas have internationally comparable data since 2015. The United Nations Statistics Division is leading the development of a conceptual framework and establishing a community of practice on citizen-generated data to guide the use of alternative data sources for monitoring national and international development goals. The success of citizen-generated data as a non-traditional source of data complementing official statistics rests in the inclusivity of the methods used to collect the data, which must ensure that the underrepresented and hard-to-reach subpopulations of society are adequately included. Thus, ensuring inclusivity in deploying citizen-generated data will increase the representativeness of such sources of data.

45. The Policy Analyst of PARIS21 observed that the Caribbean is not a data-poor region, as the subregion appreciates data and has competent statistical offices, as seen in the good practices of Caribbean countries preparing voluntary national reviews. The success of initiatives that leverage citizen-generated data and other unofficial data sources will depend on participation, collaboration and empowerment of communities and civil society organizations. Community collaboration can be leveraged to generate statistics that reflect the reality and diversity of Caribbean communities in a manner that is meaningful and practical to them. Crucially, there must be frameworks to help assess the quality of citizen-generated data, improve their quality, and ensure that users are provided with information about the quality of these statistics. Furthermore, the leveraging of citizen-generated data to complement official statistics has the potential of increasing the trust of the population in official statistics and the work of governments more generally, as such type of data source allows the population to see their views and experiences reflected in the narratives produced by official statistics.

46. Discussions focused on how governments in the Caribbean can leverage data produced by businesses and citizens, and the consensus was that public-private partnerships and frameworks to incorporate citizen-generated data, which are already being developed, are needed. In the next four to five years, adequate frameworks to leverage citizen-generated data will likely be operational in the subregion. Another issue raised was the difficulty governments face in retaining qualified data analysts who often leave the Caribbean public sector in search of better remuneration and career opportunities in the private sector or abroad.

### 6. Panel discussion – Advancing digital inclusion through data and measurement

47. The last panel, "Advancing digital inclusion through data and measurement", moderated by the Representative of the International Telecommunication Union (ITU) for the Caribbean, focused on the critical role of internet connectivity in knowledge creation and innovation and how data and measurement could promote digital inclusion in the Caribbean.

48. The digital inclusion consultant explained that there are four major dimensions to digital inclusion: (i) accessibility (the reach of the ICT network and its affordability), (ii) ICT skills, (iii) trust in digital technologies and solutions (including institutional strengths and accountable government) and (iv) motivation to use digital solutions (such as e-governance and e-business). Regarding accessibility to ICT, the Secretary General of the Caribbean Telecommunications Union elaborated that the collection of data for the relevant indicators, such as Internet access and mobile penetration, is deficient. A substantial segment of the Caribbean population lacks Internet access even though the infrastructure exists. Furthermore, the affordability of devices and Internet service is a major factor preventing Internet access. Initiatives are being developed to increase digital inclusion, including taxing Internet and mobile service providers to fund Internet access in underserviced rural or impoverished areas. Furthermore, partnerships between subregional organizations, such as the Caribbean Telecommunications Union, the private sector and other subregional organizations, such as the Caribbean Disaster Emergency Management Agency, help increase the reliability of digital inclusion projects.

49. A challenge is gathering gendered-disaggregated data, which are key to developing effective policies on digital inclusion. Knowing the number of people with cell phones is not enough; policymakers and stakeholders need to know how many among subgroups like women and children have cell phones. Accessibility is largely well measured in the Caribbean, but other dimensions of digital inclusion, like skills, are not. Measurements of trust in digital technologies and solutions and the motivations to use them are deficient in the Caribbean. If data are not widely published in the Caribbean, it reduces trust. Moreover, there are no standardized datasets on cybersecurity perceptions in the subregion.

50. In the ECLAC 2022 review of digital inclusion, the regional commission identified that outcomes need to be measured more than outputs. Gender-disaggregated data on ICT indicators is key to developing effective policies on digital inclusion. Another challenge regarding digital inclusion measurement is noting investments in digital inclusion projects as an output. However, such an approach does not measure the outcome of such investments. Furthermore, strategies need to be developed to collect data on ICT skills, trust in digital technologies and solutions, and motivation to use ICT, and not just accessibility. The private sector collects data relevant to digital inclusion since they need to assess the market and the demand for their products and services. Thus, public-private partnerships are critical to collect relevant data.

51. The digital inclusion consultant argued that data can be transformed into wealth if more people are allowed to use it. Caribbean governments collect data, but government agencies often do not share them, as there is a culture that sharing data can lead to negative results and thus must be kept secret. Such an approach reduces the possibilities of using data productively.

52. The Director of the Centre of Excellence and Innovation of the University of the West Indies explained that data are important as a new source of wealth and there is a need for data capacity building across society through digital literacy programmes. It is now imperative for Caribbean citizens to develop data literacy so that they are not confined to “digital skills poverty”. The global data economy is a trillion-dollar industry and the Caribbean needs to move up the value chain. While Caribbean countries have challenges to address in collecting data, they need to eventually move beyond just collection and publication into being able to analyse data and create value from insights. Moving up this data value chain is essential to not being left behind in the new global knowledge economy.

53. He further noted that the Caribbean has faced challenges transitioning to the digital economy. The COVID-19 pandemic exacerbated the low volatility, uncertainty, complexity, and ambiguity of the environment that generally characterizes Caribbean businesses and economies. In the post-COVID-19 environment, digital agility is as important as productivity in making Caribbean societies more resilient and sustainable.

54. During the discussion session, many delegates shared the view that data collection in the Caribbean was unsatisfactory. This insufficiency of data collection efforts affects the effectiveness of policies and highlights the need for improved data collection. For example, digital transformation is impacting the education sector, and there is a need to get children excited about data and data analysis very early to ensure that they become data literate and competitive in the global market. School curricula need to be updated to reflect current digital trends.

55. The principal challenges requiring attention include the culture of closed data and secrecy. Often, the data have been collected but are confidential and not publicly accessible, which limits the ability to use data to inform effective policy decisions. Data collectors need to share their data with other stakeholders. Furthermore, institutional and cultural barriers were identified as contributing to a reduced effectiveness of policies. While policies may be implemented, there may be no accountability regarding their implementation. Without proper monitoring and evaluation of policies after implementation, it is impossible to determine their true effectiveness.

## 7. Close of the meeting

56. The Director of ECLAC subregional headquarters for the Caribbean delivered the closing remarks and congratulated the panellists for their exceptional contributions to presentations and discussions throughout the Seminar.

57. One issue that emerged from the Seminar was organizational lethargy, which impedes the adaptation to the rapidly changing landscape of data. This challenge calls for an approach to ensure that countries can keep pace with the demands of this new reality. Another key point recalled was the need for legislative changes to align with these transformations. Legal frameworks must adapt to facilitate innovation and data sharing in ways that promote progress.

58. Regarding data sharing by governments and public agencies, the Director emphasized the impasse that seems to challenge these actors. On the one hand, there is a valid concern regarding data confidentiality, but it is equally essential to break free from a culture of data secrecy that hinders progress. Striking a balance between these concerns is pivotal to finding a way forward.

59. Additionally, the challenges related to low levels of implementation were also raised. Efficiency is vital for avoiding implementation gaps that result in the return of donor funds. Thus, ensuring implementation efficiency is essential in building donors' trust to secure necessary additional funds for future projects. The evaluation of implementation effectiveness, focusing on practical aspects of implementation, was underscored as crucial to addressing the root issues hindering progress in the subregion.

60. She concluded her remarks by expressing gratitude to the panellists for their invaluable insights on repositioning strategies to ready the Caribbean for the knowledge economy. These insights promised to provide substantial material for further discussions at the twenty-first meeting of the Monitoring Committee of the Caribbean Development and Cooperation Committee the following day.

Annex I

## LIST OF PARTICIPANTS[2]

### A. Member States

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[2] The information contained in this list is as supplied by the participants themselves, in the register provided for the meeting.

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Annex II

**PROGRAMME**

**Wednesday, 1 November**

| | |
|---|---|
| 8.30–9.30 a.m. | Registration |
| 9.30–9.50 a.m. | Opening of the meeting<br>• Welcome remarks by Diane Quarless, Chief, Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters for the Caribbean<br>• Statement by Albert Ramdin, Minister of Foreign Affairs, International Business and International Cooperation of Suriname, in his capacity as Chair of the Caribbean Development and Cooperation Committee (CDCC) |
| 9.50–10.15 a.m. | Coffee break/Group photo |
| 10.15 a.m.– 12 (noon) | Panel discussion – Better data, better decisions, better lives: the value of data in a knowledge economy<br>Moderator: Joanna Kazana, United Nations Resident Coordinator, Trinidad and Tobago<br>Panellists<br>• Pennelope Beckles, Minister of Planning and Development of Trinidad and Tobago<br>• Joseph E. Farrell, Premier of Montserrat<br>• Ambassador Angella Comfort, Undersecretary for Multilateral Affairs Division, Ministry of Foreign Affairs and Foreign Trade of Jamaica<br>• Carlos Rodríguez-Castelán, Practice Manager, Poverty and Equity Global Practice, Latin America and the Caribbean Region, World Bank (virtual) |
| 12 (noon)– 2 p.m. | Lunch break |
| 2–3.30 p.m. | Panel discussion – The culture of data: where does the Caribbean stand?<br>Moderator: Giselle Myers, Senior Economist, Ministry of Finance, Economic Planning, Sustainable Development and Information Technology of Saint Vincent and the Grenadines<br>Panellists<br>• Edwin St. Catherine, Retired Director, Central Statistical Office, Saint Lucia<br>• Jessica Campbell, Director, Research, Design and Evaluation, Statistical Institute of Jamaica (STATIN)<br>• Sherma Beroo, Technical Specialist-Statistics, OECS Commission<br>• Wendell Thomas, Principal Consultant, WThomas Consulting<br>• Emery Pemberton, Economist, British Virgin Islands |

3.30–3.45 p.m. Coffee break

3.45–5.15 p.m. Panel discussion – Artificial intelligence and the Caribbean data revolution

Moderator: Leslie Lee Fook, Director, Incus Services Limited, Digital Inclusion

Panellists

- Javed Sajad, Attorney at law
- Kevin Khelawan, Chief Operating Officer and Director of Innovation and New Business, Teleios Systems
- Khafra Murray, IT Security Manager
- Craig Ramlal, Head, Control Systems Group, The University of the West Indies

**Thursday, 2 November**

9–9.15 a.m. Recap of day 1

9.15–11 a.m. Panel discussion – Beyond official statistics: a look at citizen-generated data and other unofficial sources of data

Moderator: Abdullahi Abdulkadri, Coordinator, Statistics and Social Development Unit, ECLAC subregional headquarters for the Caribbean

Panellists

- Lloyd Waller, Professor, The University of the West Indies, Jamaica (virtual)
- Haoyi Chen, Coordinator, Inter-Secretariat Working Group on Household Surveys, Statistics Division (virtual)
- Cara Williams, Assistant Director of International Cooperation and Methodology Innovation Centre, Statistics Canada (virtual)
- Liliana Suchodolska, Policy Analyst, PARIS21 (virtual)

11–11.15 a.m. Coffee Break

11.15 a.m.–12.45 p.m. Panel discussion – Advancing digital inclusion through data and measurement

Moderator: Cleveland Thomas, ITU Representative for the Caribbean, International Telecommunication Union (ITU)

Panellists

- Kwesi Prescod, Digital Inclusion Consultant
- Rodney Taylor, Secretary General, Caribbean Telecommunications Union (CTU)
- Maurice McNaughton, Director, Centre of Excellence and Innovation, Mona School of Business and Management, The University of the West Indies

12.45–1 p.m. Close of the meeting

- Statement by Diane Quarless, Chief, ECLAC subregional headquarters for the Caribbean

ECLAC

Economic Commission for Latin America and the Caribbean (ECLAC)
Comisión Económica para América Latina y el Caribe (CEPAL)
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