UNITED NATIONS E

ECONOMIC AND SOCIAL COUNCIL

Distr.
LIMITED
E/ESCWA/C.1/2021/CRP.1
17 December 2020
ORIGINAL: ENGLISH

Economic and Social Commission for Western Asia (ESCWA)

Statistical Committee
Fourteenth session
Online, 10-11 February 2021

Item 8 of the provisional agenda

Webinar on localized big data for effective decision-making in crisis situations

I. Background

1. In the past two years, the world has witnessed historic developmental challenges brought about by the COVID-19 pandemic and its devastating effects, which span across all sectors of societies and economies. In the Arab region, those challenges are compounded by conflict and displacement, which were not halted despite the United Nations Secretary-General's appeal for a global ceasefire on 23 March 2020, in which he stressed that it was "time to put armed conflict on lockdown and focus together on the true fight of our lives".

2. In those unprecedented times, the digital space has become a "plan B" enabler, offering unimaginable capacity for all, in sectors as diverse as health, education, trade, public and private service delivery, business continuity, etc. Numerous digital dimensions and applications have demonstrated their effectiveness and efficiency, creating new possibilities and practices that will probably outlast the pandemic.

3. On the subject of data, the Data Strategy of the Secretary-General for Action by Everyone, Everywhere: With Insight, Impact and Integrity, which was released in May 2020, highlighted its problem-driven approach as a mode of operation to focus efforts on local contexts and constraints, and invest in data and analytics to deliver value and solve real problems. The Strategy called for using data to better understand 'what happened', 'why it happened', 'what may happen next', and "respond with insight, impact and integrity". As for the required enablers, the strategy relied on "partnerships to connect to ecosystems outside the UN family, so we can deliver more value at scale".

4. In addition to the Data Strategy, on 29 May 2020, the Secretary-General released a "Road map for digital cooperation: implementation of the recommendations of the High-level Panel on Digital Cooperation", in which content governance was stressed as the "The Internet has to provide a safe space for information-sharing, education, expression, mobilization and participation" (para. 52).

5. In this context, and in implementation of the recommendation of the Statistical Committee of the United Nations Economic and Social Commission for Western Asia (ESCWA) at its thirteenth session, held in Beirut on 29 and 30 January 2019, to "prepare a manual to benefit from international principles on big data and related ethical standards, develop a comprehensive platform for existing initiatives on big data, and assess statistical offices' readiness to use it", ESCWA has developed a national guide for big data readiness assessments (E/ESCWA/CL4.SIT/2020/TP.11). The Guide advises public sector organizations to consider starting small,

with single-function big data applications aligned with their current systems. Once this experience is realized and digested, scaling-up is possible. In addition, the guide promotes readiness and effectiveness capabilities by focusing on institutional processes with dedicated data science expertise and information technology (IT) governance. The guide warns that inadequate applications of big data before mature readiness can backfire and cause serious long-term operational and institutional damage.

II. Topics for discussion

6. The webinar will be guided by the findings and challenges of projects of local big data applications, implemented by ESCWA in partnership with the Central Administration of Statistics (CAS) in Lebanon and the Department of Statistics (DOS) of Jordan. The projects were selected to address pressing local problems stemming from crises experienced by several member States, namely the refugee and COVID-19 crises. They are entitled "Leveraging Behavioural and Humanitarian Data Sources to Analyse the Development Challenges Faced by Syrian Refugees and Host Communities in Lebanon", and "Leveraging Big Data Sources for Policy Evaluation and Analysis in Crisis Settings: COVID-19 in Lebanon and Jordan".

7. The living and social conditions of refugees and their host communities have featured recurrently as a priority on the policy agendas of humanitarian and development players, in addition to decision makers in host countries. Vulnerabilities are aggravated by other type of shocks such as the COVID-19 pandemic and the resulting socioeconomic hardships on host countries. In Lebanon, political, economic and financial crises and the 4 August Beirut port explosion have also compounded challenges for the Lebanese population and some 1 million Syrian refugees. In Jordan, the pandemic is exacerbating existing vulnerabilities for Jordanians and over 650,000 hosted Syrian refugees, in a humanitarian crisis that has spanned ten years.

8. In such circumstances, traditional data can be costly, time-consuming and difficult to collect. Also, they are infrequently updated, which can make the late information they contain obsolete, especially within the highly volatile political and socioeconomic context of the Arab region.

9. The project combining the Jordan and Lebanon cases sought to achieve two main objectives:

(a) Evaluate the effectiveness of a diverse selected set number of government policies or decisions (5) in both countries adopted to respond to the crisis and mitigate its effects on the populations, with a particular emphasis on using alternative sources of data in evaluation. This includes analysing the main priorities, features and key observable effects of governmental and other institutional responses to COVID-19 in Jordan and Lebanon on both refugee and host communities and point to how data have played an enabling or impeding factor;

(b) Develop a prototype of a platform for policymakers to help formulate responses, implement and monitor adopted policies by leveraging new kinds of data and analytical approaches with the goal of being more agile and targeted in the face of the many shocks and stressors. This implies drawing and disseminating key lessons and recommendations on the basis of the project analysis and other sources and developing a dedicated tool (the prototype) to enhance the capacities of policymakers and present incentives to access and use new kinds of data to develop better policies and programmes.

10. Such big data projects would not have been possible without the process of creating the conditions, systems, governance standards, incentives and capacities for systematic and safe access and analysis of non-traditional data sources. The stewardship of local and multilateral actors made the iterations of the research process and questions, as well as data access and analysis, possible.

11. Through Mobile Call Detail Records (CDR), the projects were able to conduct thorough and safe research with strong privacy considerations, including on-site data processing, and geographic and temporal data aggregation. Not only does this confirm that a privacy conscientious research design is possible - even

with its trade-offs - but it also elicits opportunities to do further research, while keeping privacy as one of the key research focuses.

III. Guiding questions

(a) The Lebanon project included Facebook data showing that the number of male users as per registration was about three times higher than that of females among Syrian refugees in the country in 2019. While phone calling activities suggest that the male population is around 6 times higher than the female population of all residents over the period 2016-2019 in the North and Beqaa Districts, official statistics have males and females being on par demographically in 2018. Thus, either females are falsely registering as males for security reasons, or men are probably handling the registration of most Facebook accounts and mobile phone lines of female family members. **Who can utilise such findings and how to leverage them for public awareness, education and planning for affecting security and cultural aspects**?

(b) Scraping local social media platforms and news articles in Arabic and English revealed an increase in hostility in Lebanon towards issues related to Syrian refugees (negative rating increased by 9 per cent between 2017 and 2019 in a sample of 1,054 Arabic articles on refugee-related incidents). Local community tensions are growing steadily and with time volatile feelings are dangerous. **Who can utilise such findings and how to leverage media sentiment analysis to avoid friction and security problems?**

(c) The mobility mapping analyses of COVID-19 governmental responses in Jordan and Lebanon confirmed with better granularity evidence that the poorer districts are less likely to strictly abide by lockdown measures, driven by necessity to go out to work. How can national statistical offices provide timely data to support Governments to identify populations with high urban mobility in order to limit and reduce potential risks?

(d) How can we institutionalize cooperation between users (national statistical offices or others) and telecom operators in order to pave the way for fruitful research and action to exploit the potential of calls and Internet consumption data, while maintaining user privacy? How can policymakers take advantage of the wealth of data that is only available to them in public records to offer timely responses to the fast-paced and evolving challenges and crises experienced in our countries, which are, in many cases, cross-boundary by nature?

(e) In a global crisis mode, multinational platforms (Google and Facebook) made critical data sources available to all. What are the criteria and who determines the classification of “local/international crises”?

(f) In a cyclic crisis like COVID-19 or internal conflicts, is it possible to supply data in support of “near real time” decision-making and correction?
