Big Data for Good

Can Big Data Illustrate the Challenges Facing Syrian Refugees in Lebanon?

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DATA-POP ALLIANCE

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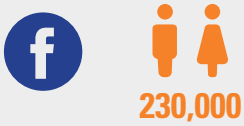
Strong correlation and predictive power of different non-traditional data sources were verified with corresponding ground truth data from UNHCR's annual VASyR, and Official Central Agency for Statistics Labor Force CASLFS Survey 2019.

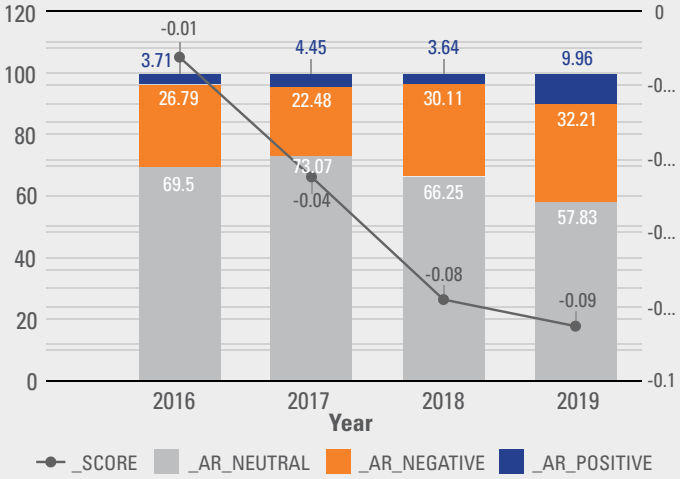


Syrian refugees Facebook users over 13 years old in Bekaa and North during 2019 were estimated to be 230,000 out of 291,000 based on UNHCR registration in the same areas and age group for that year.

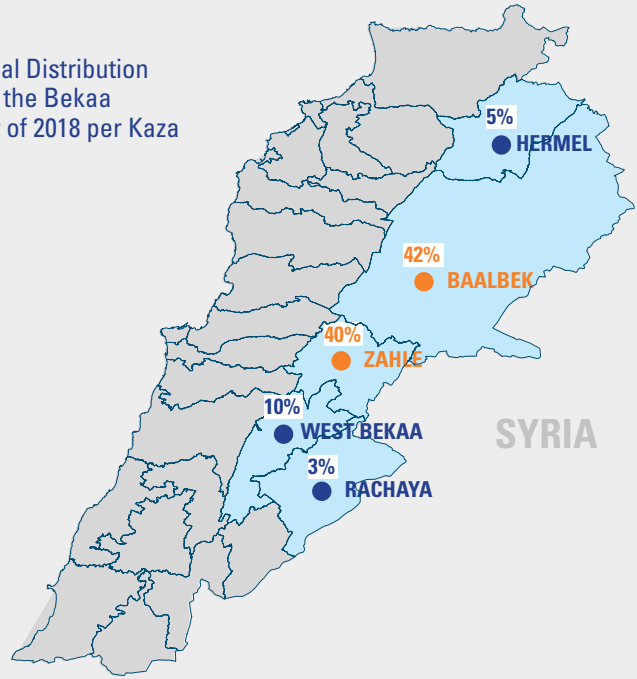
Syrian refugees and host communities have similar high school attainment, with a gap of less than 1 per cent.

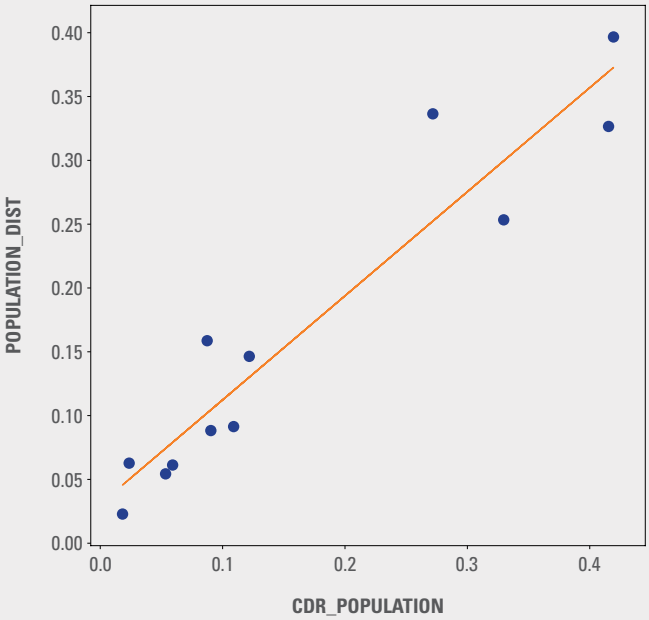
number of articles in Arabic covering Syrian refugees fell by 49 per cent between 2016 and 2019. On the other hand, the number of articles in English covering the same topic increased by 86 per cent.

Sentiment of articles on Syrian refugees, 2016-2019



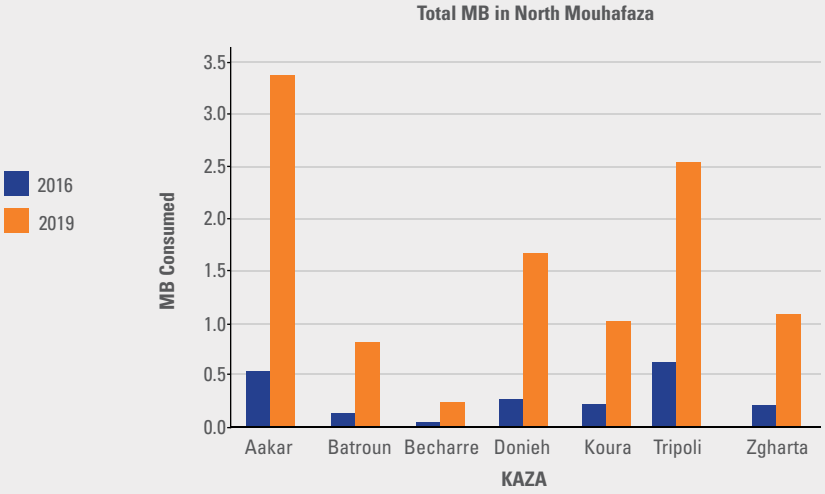
Residents Geographical Distribution based on total calls in the Bekaa Muhafaza for the year of 2018 per Kaza

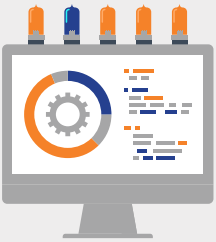




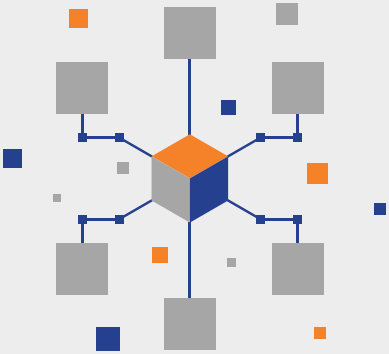
Linear regression of population distribution of the 12 Kazas (R2 score: 0.9 Mean Squared Error: 0.002) the CDR population indicator (x-axis) and the CASLFS population (y-axis).

Bar graph showing the variation of the total mobile data usage (in MB) in the North Muhafaza in April 2016 and June 2019





The proof of concept showed the potential of disparate data sources to predict the demographic and economic characteristics of communities despite the high levels of data aggregation.



The significant political will, and strong partnerships developed in the framework of this project, made possible its completion. Furthermore, the CODE (Council for the Orientation for Development and Ethics) was a crucial body to ensure the appropriateness and soundness of the research, as well as its ethical standards.