

DATA-POP ALLIANCE

Changing the world with data



OVERVIEW
AND
OUTLOOK
2019 - 2020

About Data-Pop Alliance

Data-Pop Alliance is a collaborative laboratory of researchers, experts, practitioners, policymakers, and activists created in 2013 out of MIT, Harvard and ODI. We aim to change the world with data through our three pillars of work: **diagnosing** local realities and human problems with data and AI, **mobilizing** capacities, communities, and ideas towards more data literate and inclusive societies, and ultimately, **transforming** the systems and processes that underpin our *datafied* communities and countries.

What We Do



Diagnose



Mobilize



Transform

Core Members



HARVARD
HUMANITARIAN
INITIATIVE



MIT Connection Science
the technology of innovation



FLOWMINDER.ORG

**“Overview and Outlook
2019 - 2020”**

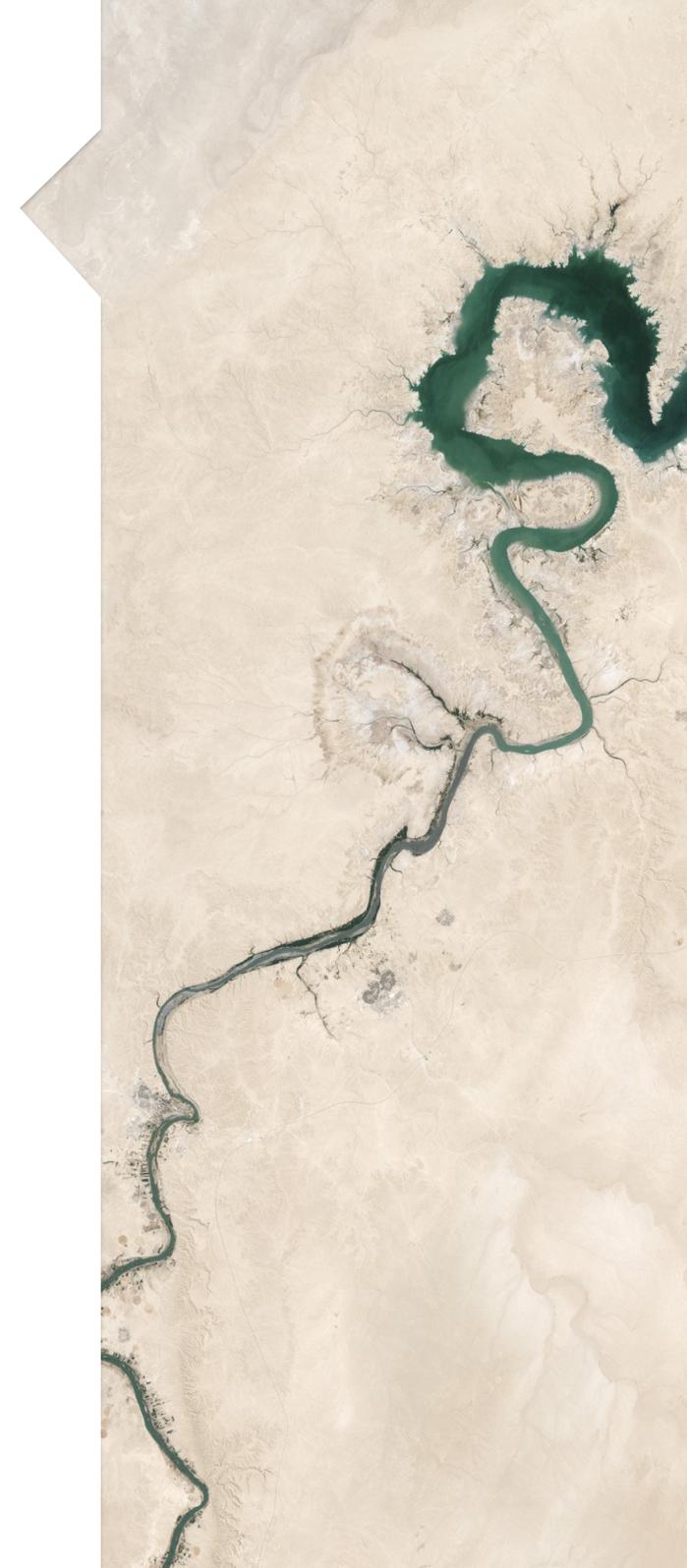
Data-Pop Alliance

January 2020

Design: Ivette Yáñez

Table of Contents

Our Vision: Changing the world with data	3	• Refugees and Communities in Lebanon with UN ESCWA	23
Projects and Workshops 2019 (<i>map</i>)	4	• DataMex: Data and Inequality with OXFAM Mexico	24
2019 in Data (<i>infography</i>)	5	• Evaluation of the European Commission's Digitalisation Projects in Sub-Saharan Africa	25
DIAGNOSE	7	• AI for Mapping Poverty Hotspots in Brazil	26
Inequalities and Discriminations	8	• Open Algorithms (OPAL) Pilots	27
Migration and Displacement	9		
Violence and Crime	10	INSTITUTIONAL REVIEW	28
Sustainable Futures	11	Partners	29
Human AI and Society	12	Leadership and Team	30
		Contact Information	31
MOBILIZE	14		
Workshops 2019 (<i>timeline</i>)	15		
Conferences, Events and Media in 2019	17		
TRANSFORM	19		
Projects 2019 - 2020 (<i>timeline</i>)	20		
Featured projects:			
• Big Data Strategy for Colombia	21		
• Ciudata Segura			



Our Vision: Changing the world with data

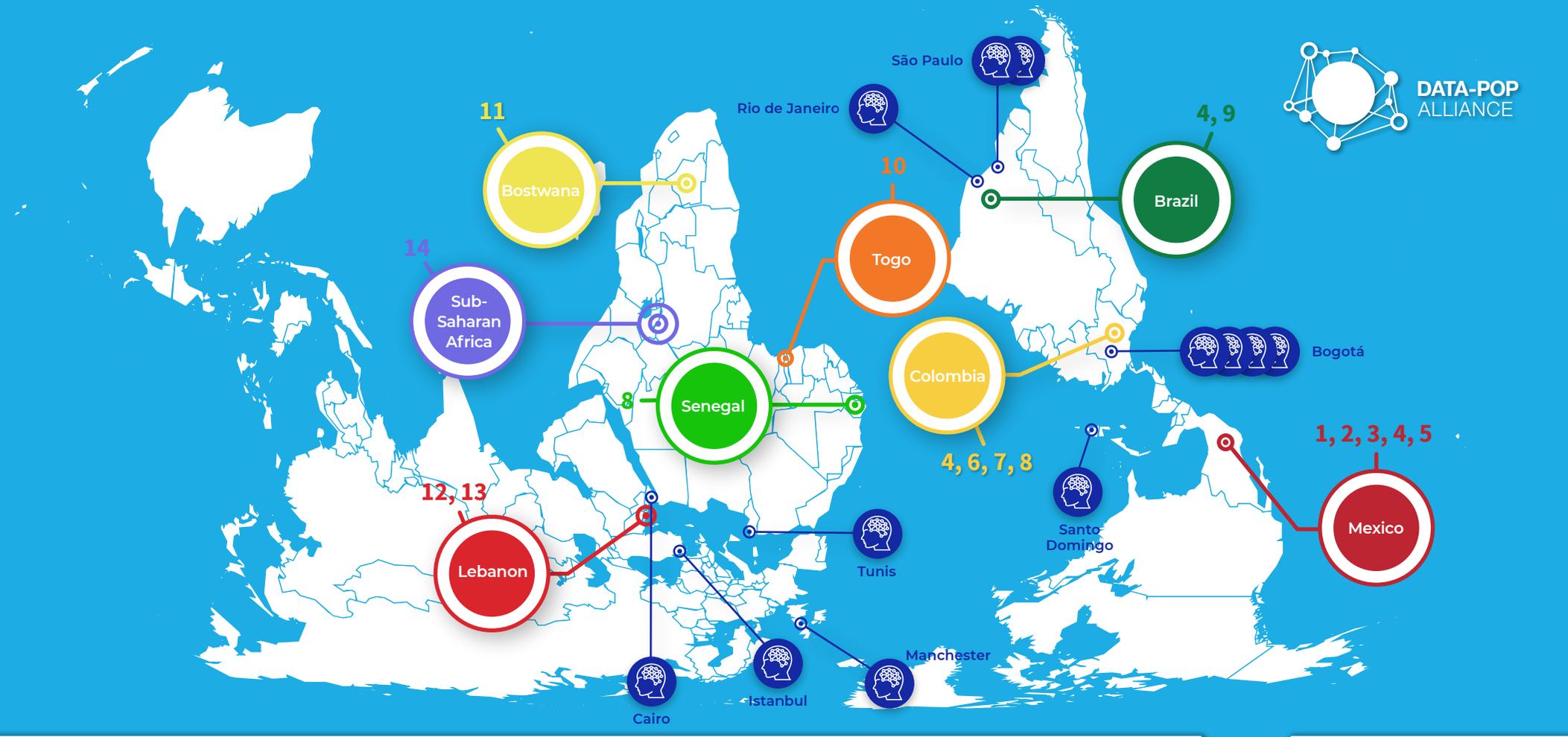
Data-Pop Alliance was born 7 years ago out of the recognition that the defining element of the 21st century would be data. Since, phrases such as "Big Data" and "Data Revolution" have been largely replaced by "Fourth Industrial Revolution" and "Artificial Intelligence", but the key question remains essentially the same: how can data-infused systems and societies be shaped to foster human development and not just improve the insights and means of surveillance of corporations and governments?

If history has taught us anything, it is that technology is not so much neutral as it is a magnifier of human intent and capacity. For it to play a positive transformational role, a large enough critical mass of people and groups needs to be willing and able to leverage it for positive purposes. In our age of widening inequalities, rising dissatisfaction with democratic processes, growing concerns about the implications of digitalization and AI, we want to contribute to "changing the world with data", first and foremost by making data *matter*.

As this Overview and Outlook 2019-2020 report hopefully conveys, we have tried and will strive to do so by reflecting and promoting 4 key features that make up our DNA, and the word DATA:

- **D for Down-to-earth philosophy:** we operate with teams and partners on the ground, in Latin America, Sub-Saharan Africa, the Middle-East and North Africa, and more, to try and answer local human problems.
- **A for Academic excellence:** we seek to meet the intellectual standards of our founding groups at Harvard and MIT and can rely on some of the best minds of the world to do so.
- **T for Trans-disciplinary:** we combine and assemble deep expertise and experiences in several disciplines including data and computer sciences, economics, demography, ethics, political science, humanitarian action (and even some cartooning).
- **A for Activism:** we aim to do, test, deploy, and ultimately affect outcomes, and we aim to do so in ways that reflect and promote humanistic values of empowerment, equity, participation, and inclusion.

Emmanuel Letouzé, Patrick Vinck, Alex 'Sandy' Pentland, Nuria Oliver, Julie Ricard, Phuong Pham and Emma Samman.

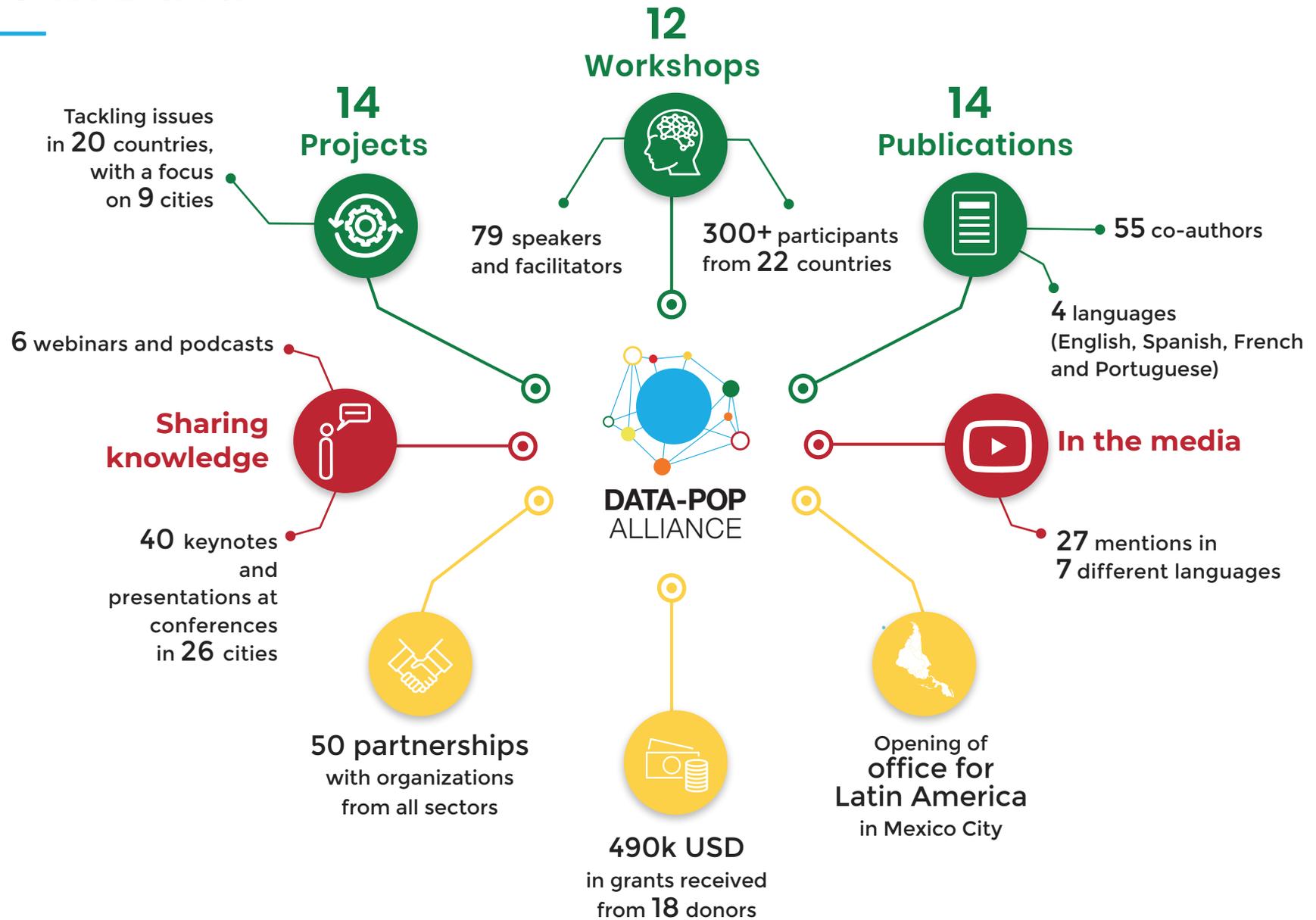


Projects and Workshops 2019

- | | | |
|---|--|---|
| <ul style="list-style-type: none">  1. DataMex: Data and Inequality with OXFAM Mexico  2. Data Literacy for International Development Practitioners Video (for GIZ)  3. Impact of Crime and Inequalities   4. EmpoderaData    São Paulo and Manchester workshops | <ul style="list-style-type: none">  5. Scoping Study about Urban Crime Risk Factors with UNODC  6. Big Data Strategy for Colombia   Bogotá workshop  7. Ciudadata Segura   8. Open Algorithms (OPAL) Pilots  9. AI for Mapping Poverty Hotspots in Brazil  10. Data for Development Strategy for UNDP Togo | <ul style="list-style-type: none">  11. Measuring the Unmeasured: SDG Tier III Indicators  Cairo event  12. Refugees and Communities in Lebanon with UN ESCWA  13. D4R: Data for Refugees Turkey Challenge  Istanbul event  14. Evaluation of the European Commission's Digitalisation Projects in Sub-Saharan Africa |
|---|--|---|

*The rest of the workshops marked in the map were independent from the projects.

2019 in Data



DIAGNOSE

—

DIAGNOSE

As scientists, we believe in the value of evidence to understand and address complex human problems. In the "data deluge" era, where data is abundant, knowledge continues to be scarce and unevenly distributed across regions of the globe. Leveraging the unique strengths of our founding institutions and network, we work to diagnose local realities using innovative data and technologies to create actionable insights, for and with our partners on the ground.



5 thematic areas

1. Inequalities and Discriminations
2. Migration and Displacement
3. Violence and Crime
4. Sustainable Futures
5. Human AI and Society



14 publications
in collaboration with
55 co-authors

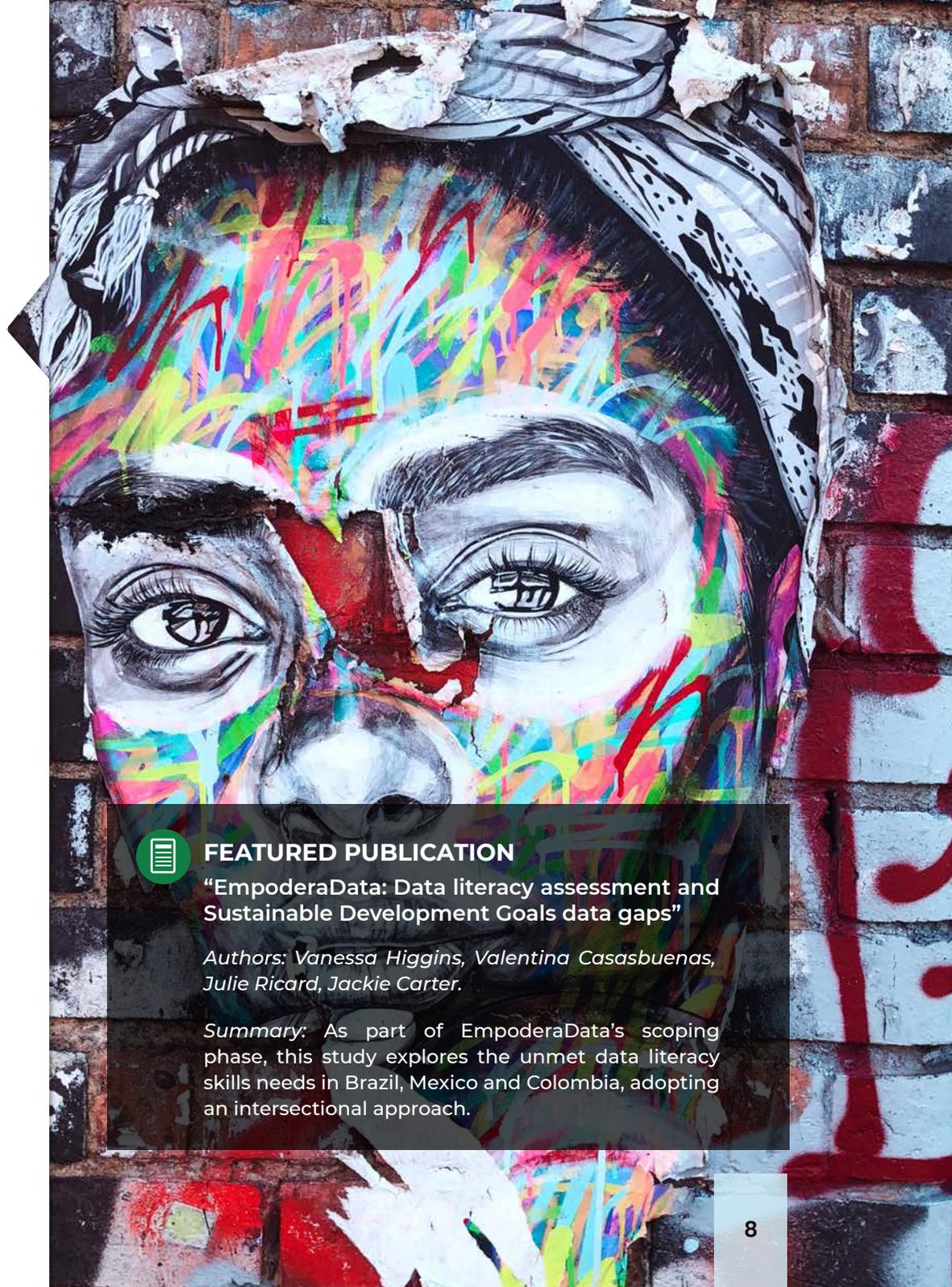


Published in
4 languages
(English, Spanish,
French and Portuguese)



Inequalities and Discriminations

Despite some progress made on the world's most pressing development challenges, such as extreme poverty, inequalities and discriminations remain pervasive and structurally embedded in societies across the globe. Where and how one is born too often determines life-long access to opportunities and services such as education and employment. Our goal is to contribute to the growing body of knowledge on intersectional inequalities, leveraging (big) data to build evidence that considers vulnerable populations and subgroups – their identities and experiences – and leads to the suggestion of corrective actions.



FEATURED PUBLICATION

“EmpoderaData: Data literacy assessment and Sustainable Development Goals data gaps”

Authors: Vanessa Higgins, Valentina Casasbuenas, Julie Ricard, Jackie Carter.

Summary: As part of EmpoderaData’s scoping phase, this study explores the unmet data literacy skills needs in Brazil, Mexico and Colombia, adopting an intersectional approach.

Migration and Displacement

More and more people move across and within the borders of their country of birth – freely, in the search of better opportunities; sometimes forcibly to flee conflict, persecution or starvation; or more often due to a combination of factors. New data sources such as cell phone records and social media data, combined with traditional survey data and official statistics, can yield unique insights into the drivers and effects of population movements in both 'sending' and 'host' communities. Our goal is to contribute to more informed policy discussion and decisions on one of the most contentious issues of our time.

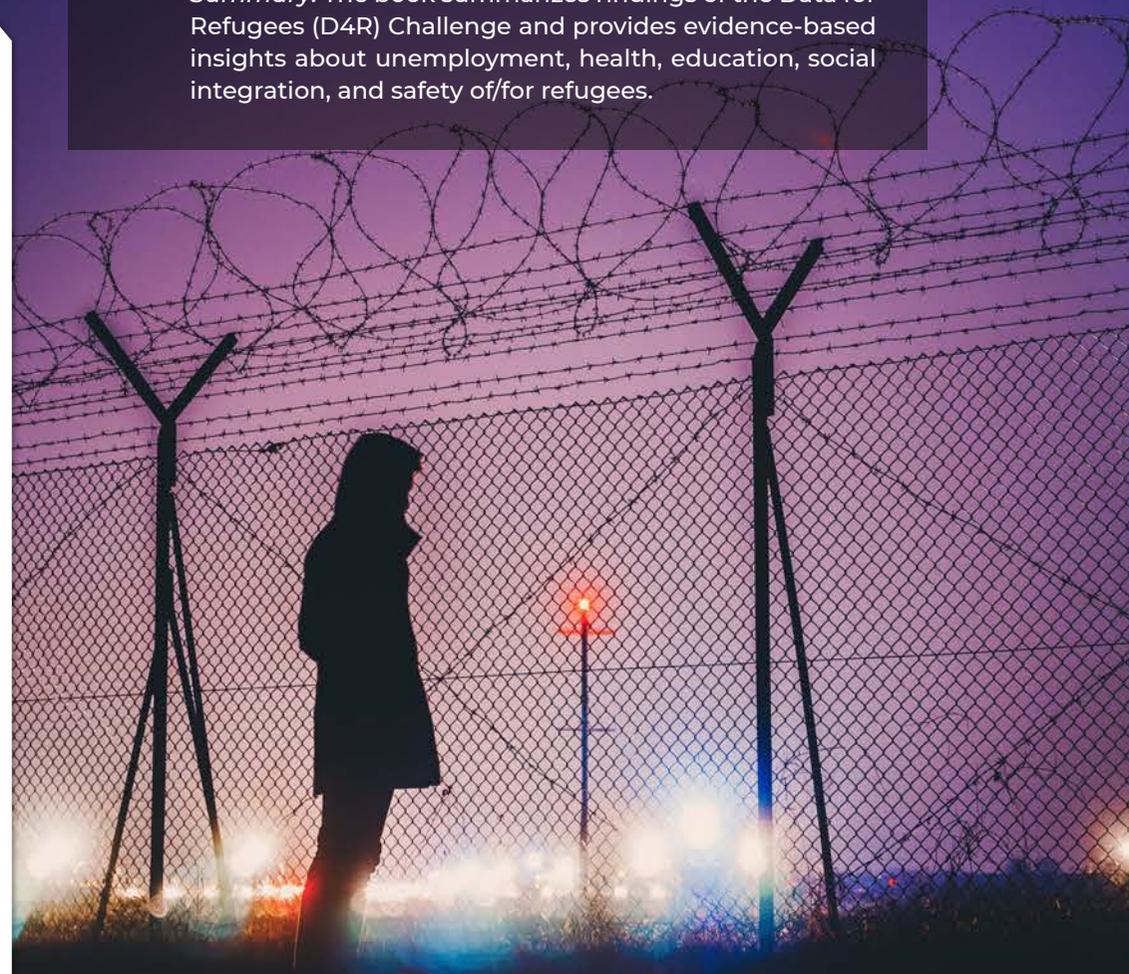


FEATURED PUBLICATION

“Guide to Mobile Data Analytics in Refugee Scenarios”

Editors: Salah, A.A., Pentland, A., Lepri, B., Letouzé, E.

Summary: The book summarizes findings of the Data for Refugees (D4R) Challenge and provides evidence-based insights about unemployment, health, education, social integration, and safety of/for refugees.



Violence and Crime

While war-related deaths have declined since the 1950s, murder rates have been on the rise in certain regions of the world, especially in the Global South. With the emergence of new forms and drivers of conflict and violence, the call for evidence-informed crime prevention makes new data and technologies essential to understand this complex and multifaceted issue. Our goal is to use data and technology for a greater understanding of crime dynamics, while helping governments and communities design interventions conducive to more peaceful societies.



FEATURED PUBLICATION

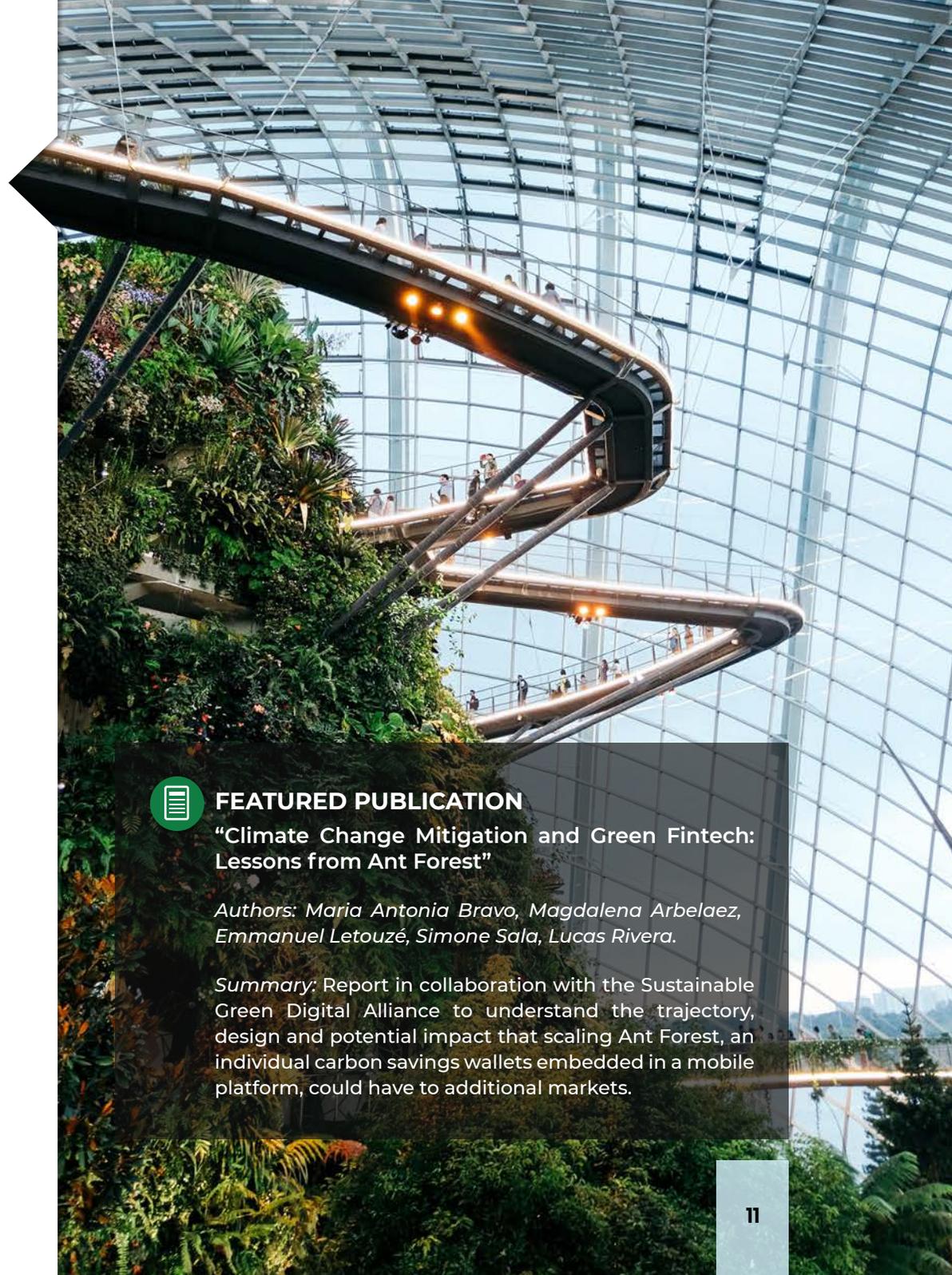
“The Impact of Crime Shocks Across Gender and Socioeconomic Groups: A Large-scale Mapping Of Behavioral Disruption”

Authors: Rodrigo Lara Molina, Alejandro Noriega, Eaman Jahani, Julie Ricard, Alex Pentland.

Summary: Use of bank card transactions’ metadata to assess the effect of crime shocks on daily lives in Mexico, with a focus on the differential impacts between subgroups, starting by women and men.

Sustainable Futures

Market-based policies and economies have helped hundreds of millions of humans escape poverty over the past decades. However, the current trends and patterns of consumption, exploitation of natural and human resources, and concentration of power and wealth in the hands of a few are clearly not sustainable. Our research in this area seeks to understand how to best leverage the positive transformational effect of digital data and technology to shape more inclusive and sustainable human systems.



FEATURED PUBLICATION

“Climate Change Mitigation and Green Fintech: Lessons from Ant Forest”

Authors: Maria Antonia Bravo, Magdalena Arbelaez, Emmanuel Letouzé, Simone Sala, Lucas Rivera.

Summary: Report in collaboration with the Sustainable Green Digital Alliance to understand the trajectory, design and potential impact that scaling Ant Forest, an individual carbon savings wallets embedded in a mobile platform, could have to additional markets.

Human AI and Society

Artificial Intelligence is poised to enter - and alter - almost all spheres of human life in the years and decades to come. From jobs, health care, education, to justice, AI will, more broadly, impact how we make collective decisions. Such prospects raise many legitimate concerns and questions over ethics and privacy, amongst others, but AI can be leveraged both as an inspiration and as an instrument to build more efficient and fairer human societies. Our research in this area seeks to understand the risks and requirements of developing what we term "Human AI" systems, including by promoting ethical systems and standards for data sharing and use, and a healthy data culture within societies.

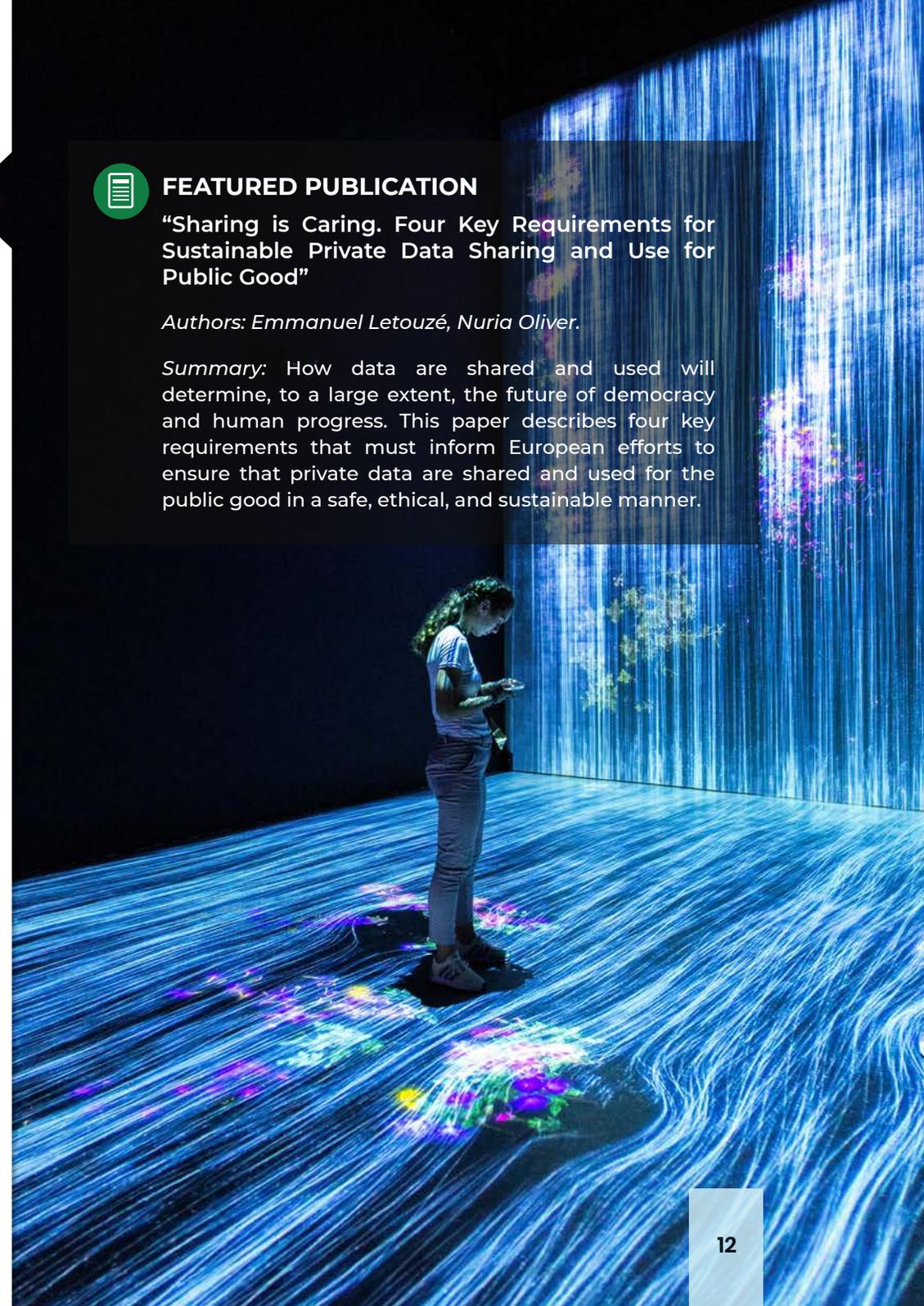


FEATURED PUBLICATION

"Sharing is Caring. Four Key Requirements for Sustainable Private Data Sharing and Use for Public Good"

Authors: Emmanuel Letouzé, Nuria Oliver.

Summary: How data are shared and used will determine, to a large extent, the future of democracy and human progress. This paper describes four key requirements that must inform European efforts to ensure that private data are shared and used for the public good in a safe, ethical, and sustainable manner.



MOBILIZE

—

MOBILIZE

"Revolutions begin with people, not with reports, and the data revolution is no different" (Independent Expert Advisory Group on the Data Revolution for Sustainable Development, 2014). Through trainings, policy and strategy workshops, conferences and events, we seek to mobilize and nurture capacities, connections, ideas among and between key stakeholders in governments, civil society, international organizations and the private sector. Our core objective is to enhance "data literacy", or rather, "literacy in the age of data" at scale to help individuals and institutions become agents of positive social change using data in ways that reflect and promote core ethical principles of equity and empowerment.



12 workshops in 2019
over 25 days in 7 countries



7 capacity building workshops,
5 policy and strategy workshops



79 speakers & facilitators
from 18 nationalities



35% female, 65% male*



300+ participants
from 22 countries



42% female, 58% male

*Looking forward, from 2020 and on, we will strive to achieve gender balance.



Workshops in 2019

Policy and strategy workshops led or co-led by DPA ●
 Capacity building workshops designed for policy makers and development practitioners, led or co-led by DPA ●

Istanbul,
Turkey
21 January



Data for Refugees (D4R) Turkey Challenge

Cairo,
Egypt
23 -24 January



Progress Meeting for the Cross-Regional Data Innovation Project “Measuring the Unmeasured”

Santo Domingo,
Dominican Republic
9 - 11 April



Big data, economía digital y desarrollo sostenible

Tunis,
Tunisia
22 - 24 April



Mobiliser le Big Data pour le Développement Durable

Bogotá,
Colombia
7 - 9 May



Big data, economía digital y desarrollo sostenible

São Paulo,
Brazil
16 - 17 May



Big Data para o bem comum



Workshops in 2019 (continued)

Policy and strategy workshops led or co-led by DPA ●
 Capacity building workshops designed for policy makers and development practitioners, led or co-led by DPA ●





Conferences, Events and Media in 2019



Team members were keynote speakers or panelists in **40** conferences and **5** webinars/podcasts



Conferences took place across **26** cities and **5** continents



Organizing institutions include The World Bank, UNDP, INEGI, CEPAL, Latam Digital, Eurostat, Volkswagen Foundation, etc.



27 mentions of Data-Pop Alliance in the media



Published in **9** countries and **7** languages



Media outlets include El País, Les Echos, Nature, etc.

TRANSFORM

—

TRANSFORM

We provide support to governments and organizations in the process of designing and consolidating their digital transformations. This includes processes to conceive socio-technological innovations, as well as to support in developing data and digital strategies, contributing to building evidence and methods to tackle societal issues such as inequality and crime.



3 major projects finalized in 2019
and **11** ongoing projects
in 2020



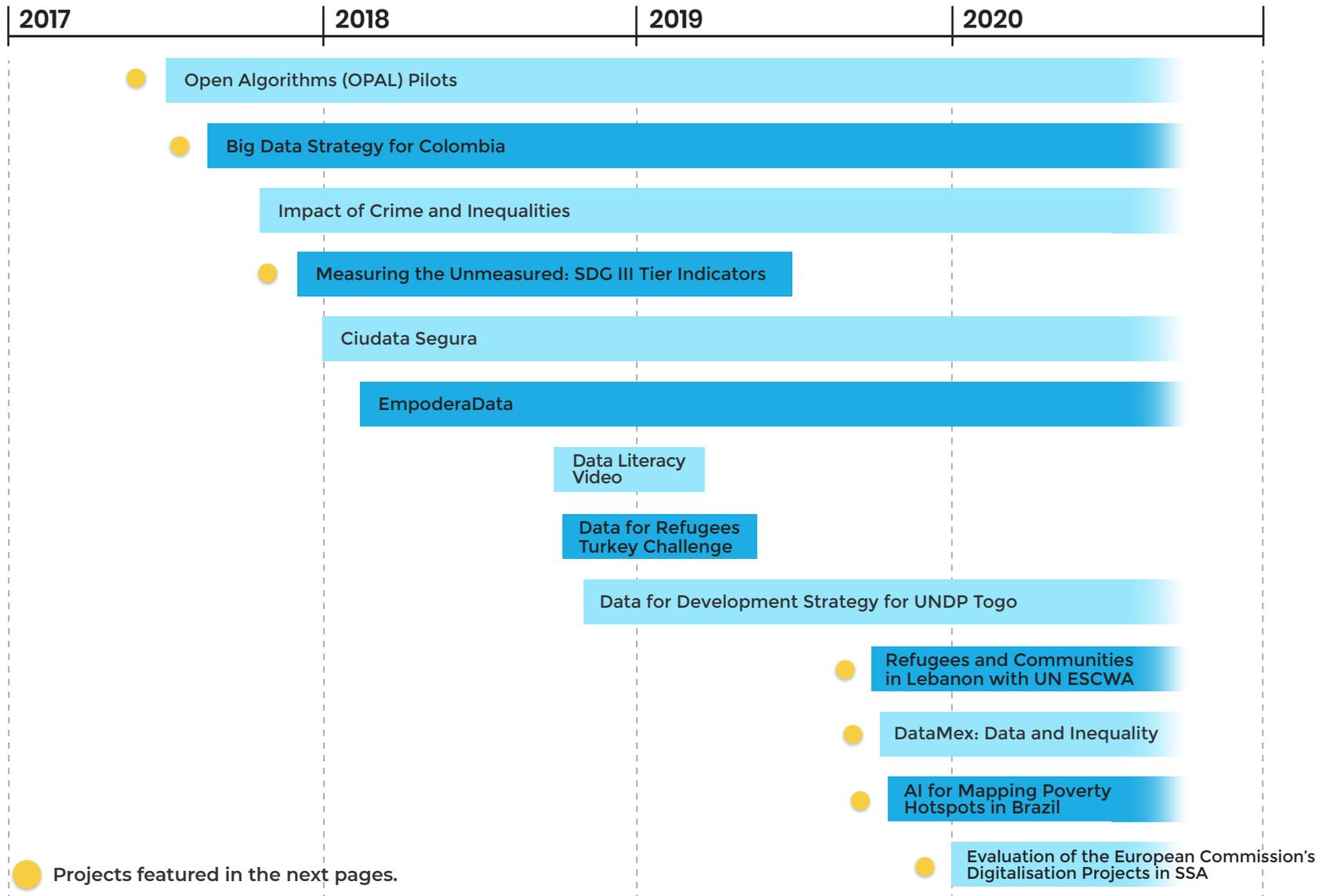
Tackling issues in
20 countries, with a
focus on **9** cities



50 partnerships
with organizations
from all sectors



2019–2020 Projects



Big Data Strategy for Colombia

June 2017 - April 2020

MIT and Data-Pop Alliance have been providing technical assistance to iNNpulsa, Colombia's entrepreneurship and innovation agency, and to the National Planning Department (DNP), in the design and development of the country's first ever national Big Data strategy to be presented to the President of Colombia in 2020.

Outputs: A series of six documents, including an implementation proposal and evaluation of potential impact of a national Big Data strategy, and two training workshops have been completed. In 2020, DPA and MIT will finish providing support to two data analytics pilot projects.

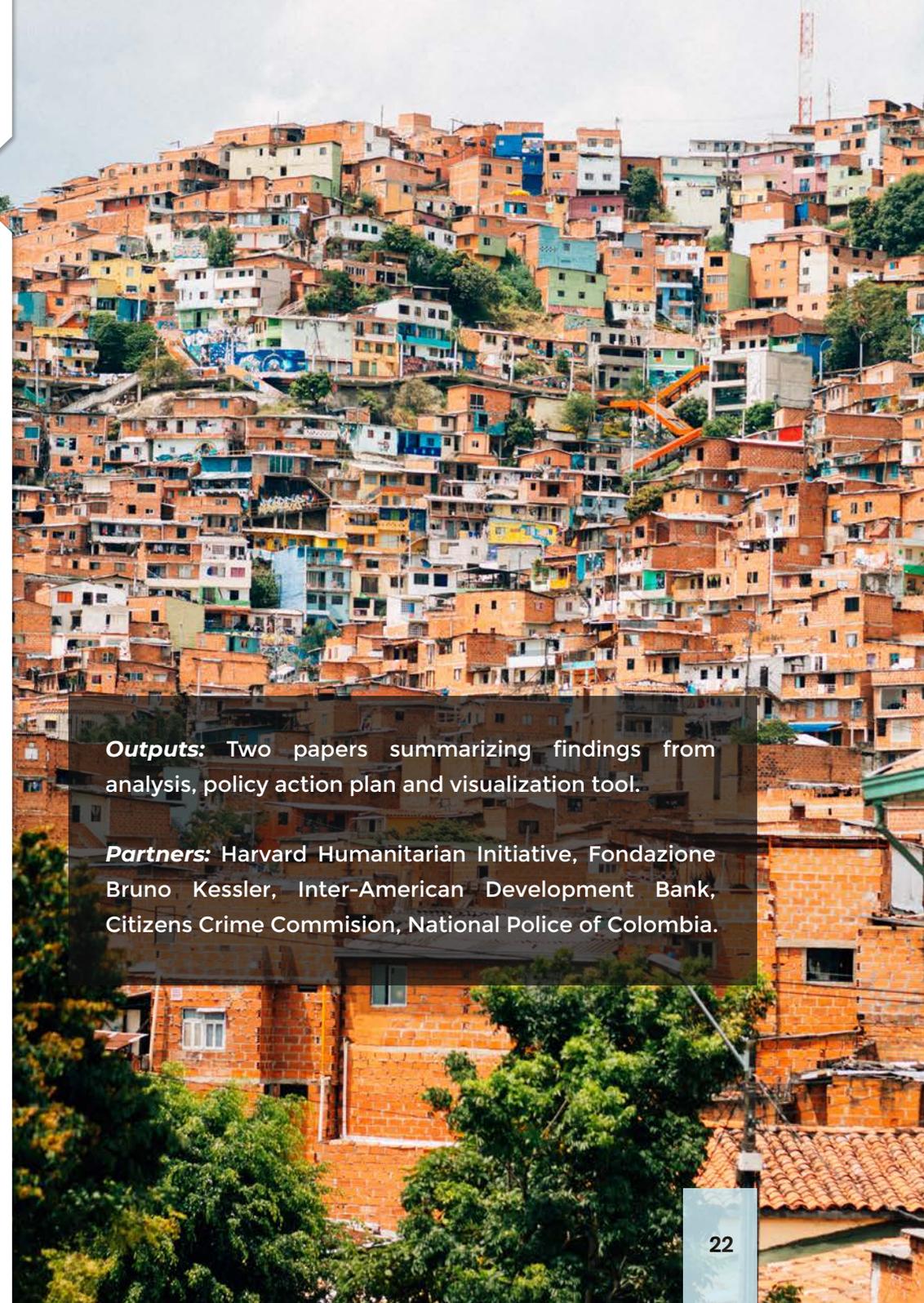
Partners: iNNpulsa Colombia, Department of National Planning, MIT Media Lab.





January 2018 - June 2020

This project, funded by Inter-American Development Bank (IDB), aims to build a granular spatio-temporal tool to diagnose crime factors and better inform security policy-making by leveraging traditional and non-traditional data sources (CDRs). By understanding why crime clusters in certain parts of the city and why certain individuals develop a criminal behavior, Ciudata Segura will generate policy recommendations addressed to reduce and prevent urban crime in the city of Medellín.



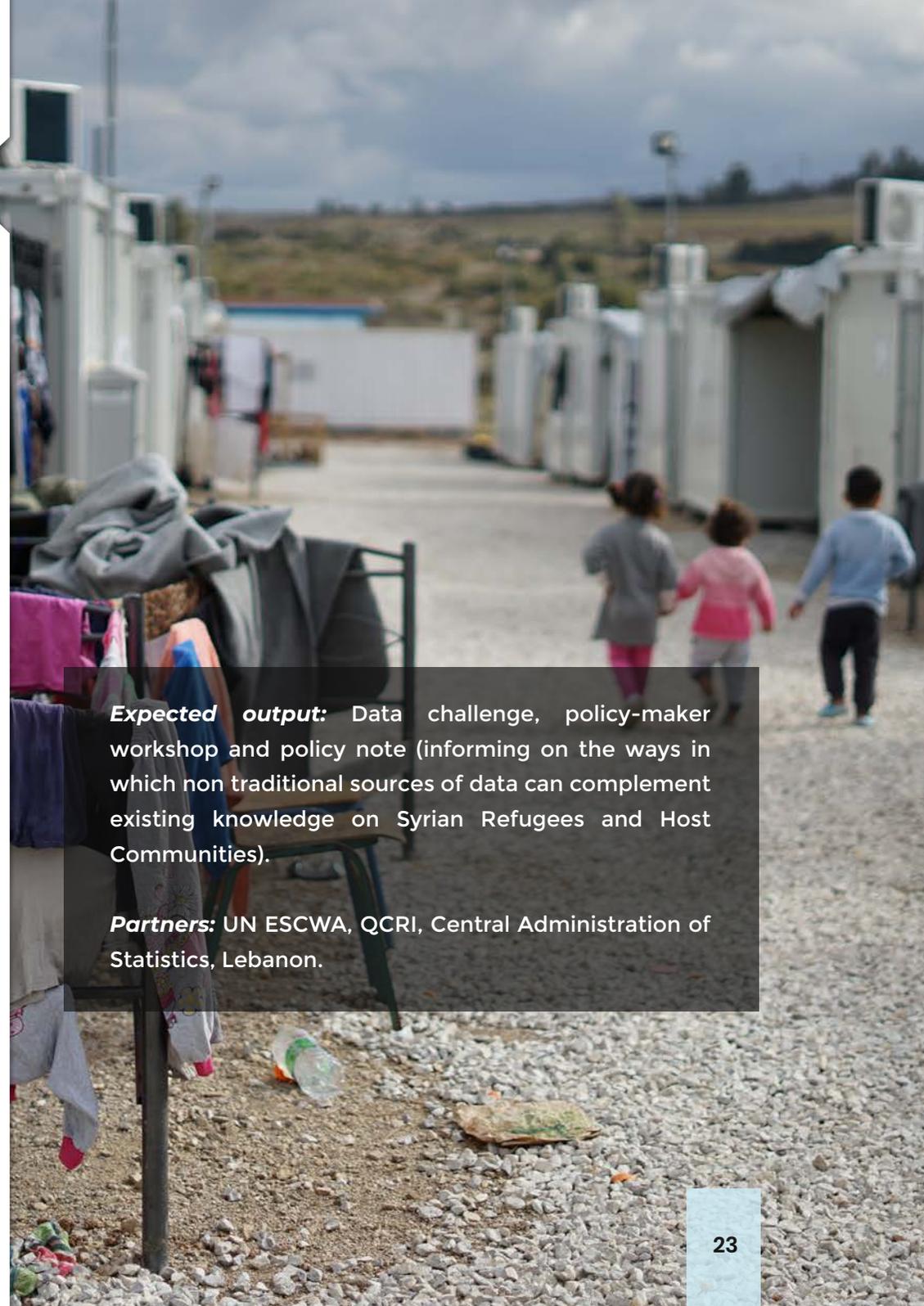
Outputs: Two papers summarizing findings from analysis, policy action plan and visualization tool.

Partners: Harvard Humanitarian Initiative, Fondazione Bruno Kessler, Inter-American Development Bank, Citizens Crime Commission, National Police of Colombia.

Refugees and Communities in Lebanon

September 2019 - April 2020

Big Data has the potential to offer insights on social behavior that can complement traditional data sources, including the living conditions of vulnerable and hard to read populations. This pilot, led by UN ESCWA, QCRI and Data-Pop Alliance, aims at leveraging traditional and non-traditional data sources, to provide novel insights on the living conditions of Syrian refugees and host communities in Lebanon.



Expected output: Data challenge, policy-maker workshop and policy note (informing on the ways in which non traditional sources of data can complement existing knowledge on Syrian Refugees and Host Communities).

Partners: UN ESCWA, QCRI, Central Administration of Statistics, Lebanon.

DataMex

November 2019 - April 2020

In partnership with Oxfam Mexico, this project leverages insights from big data to study urban segregation and spatial inequality in Mexico City, aiming at generating advocacy content and public policy recommendations. In particular, it explores two lines of research: (1) the characteristics of urban spaces promoting social integration and resilience to segregation and (2) the participation of the private sector in efforts against social segregation.



Outputs: Analysis of public policies that can be promoted to fight urban segregation in priority areas and inputs for an advocacy strategy.

Partners: OXFAM México.

Evaluation of the European Commission's Digitalisation Projects in Sub-Saharan Africa

January 2020 - May 2020

Commissioned by the Directorate-General for International Cooperation and Development (DG DEVCO), Data-Pop Alliance (DPA) and ADE (Aide à la Décision Économique) are assessing the extent to which current EU-cooperation projects and programmes with a digital component are advancing and contributing to the digital transformation in Sub-Saharan Africa (SSA).



Expected Output: Strategic and comparative analyses of EU cooperation in digitalisation in Sub-Saharan Africa to inform recommendations for future EC work.

Partners: DEVCO, ADE.

AI for Mapping Poverty Hotspots in Brazil

November 2019 - May 2020

One of the greatest challenges for inclusion in social programs remains reaching the most marginalized populations. By leveraging Prosperia Lab's technology for building high-resolution socioeconomic maps of large urban areas, using satellite imagery and artificial intelligence methods, the project aims at mapping extreme-poverty at low cost throughout Brazil's metropolitan areas.



Expected output: Pilot data product able to map and find “clusters” of poverty in a systematic and massive manner at the sub-block level, starting with one metropolitan area in Brazil.

Partners: MIT Sloan Latin America Office, ProsperIA.





2017 - Ongoing

OPAL ("for Open Algorithms") is a groundbreaking socio-technological innovation that aims to unlock the potential of private sector data for public good in a privacy-preserving, participatory, and sustainable manner. It is designed to provide a far better picture of human reality to official statisticians, policymakers, businesses, and citizens, while fostering inclusion and inputs of all kinds and uses of analysis performed on data about them. OPAL has been piloted in Senegal with Orange-Sonatel and Colombia with Telefónica and their National Statistical Offices since 2017, with core funding from the Agence française de développement (AFD).

Founders, Funders and Key Partners



Outputs: OPAL combines two complementary components to create a self-sustaining system: the technology and the governance track. These are being implemented in two initial pilot countries, Senegal and Colombia.

Founders and Funders: Data-Pop Alliance, Imperial College London, MIT Media Lab, Orange, Sonatel, Telefónica, the World Economic Forum, AFD, DIAL, Hewlett Foundation.



INSTITUTIONAL REVIEW



Partners*

*Thank you to all our partners and funders for collaborating and supporting our work. A full list of partners and funders is available on our website.



Leadership



Dr Emmanuel Letouzé
Director and Co-Founder



Dr Patrick Vinck
Co-Director and Co-Founder



Prof. Alex 'Sandy' Pentland
Co-Founder and Academic Director



Julie Ricard
Deputy Director and Head for Latin America



Dr Nuria Oliver
Chief Data Scientist



Dr Bruno Lepri
Head of Research



Dr Phuong Pham
Co-Founder for HHI



Dr Linus Bengtsson
Co-Founder for Flowminder



Dr Emma Samman
Co-Founder for ODI

Team



Emmanuel Letouzé
Director and Co-Founder
· *New York City*



Julie Ricard
Deputy Director and Head for Latin America
· *Mexico City*



Rodrigo Lara
Research Scientist
· *Santiago de Chile*



Valentina Casasbuenas
Partnerships and Training Officer
· *Bogotá*



María A. Bravo
Project Officer and Researcher
· *Bogotá*



Andrés Lozano
Project Officer and Researcher
· *Bogotá*



Luis García
Program Operations Officer
· *Mexico City*



Guillermo Romero
Researcher
· *Mexico City*



Berenice Fernandez
Researcher
· *Mexico City*



Ivette Yáñez
Communications Officer
· *Mexico City*



Silvia Rodrigues
Project Officer
· *São Paulo*



Roaa Al Feel
Data Scientist Consultant
· *Beirut*

Data-Pop Alliance Headquarters

contact@datapopalliance.org

Hosted at ThoughtWorks NYC
99 Madison Avenue, 15th Floor
New York, NY 10016
USA

ThoughtWorks

Data-Pop Alliance Latin America

latinoamerica@datapopalliance.org

Headquarters

Chihuahua 222, Roma Norte
Ciudad de México, CDMX 06700
México

Colombia Office

Calle 69A #9-66
Bogotá, 110231
Colombia

Support our work!

Help us change the world with data by making a tax-deductible contribution through our website.

www.datapopalliance.org/donate



Brazil

[@datapopalliance](https://twitter.com/datapopalliance)

www.datapopalliance.org