

# OPEN DATA RESEARCH & INNOVATION FOR AFRICA AND ASIA

At the Web Foundation we believe that everyone should have access to the data on issues that affect them, and the capability and right to re-use it to participate freely and fully in building a just and thriving society. Realising this vision demands diverse approaches that are rooted in local realities, meet local needs, and build local capacity.

Building on research with 17 global south partners, as well as key insights from the Open Data Barometer, we opened the world's first open data innovation lab in Jakarta, Indonesia last year. We are now launching a round of action research projects that will further the work of the Southeast Asia lab, and serve as pilots for a lab in Africa.





## **BUILDING AN INCLUSIVE AGENDA**

Carefully phased research and consultation over the past three years allowed us to build our understanding of diverse contexts and practices around the production and use of data in the developing world. Now, through the innovation labs, we aim to build lasting practical partnerships with local stakeholders, enabling them to set and own the agenda for research and action, and drive open data to scale.

#### RESEARCH INTO CURRENT PRACTICES

As part of the Open Data in Developing Countries project, we have been working with local research partners from 13 countries to better understand how open data operates in practice across the global South. A key finding of the global research project was that there is no one-size-fits-all approach to open data. Experimentation, evaluation, and shared learning must be a priority for all who want to see a world where open data operates to scale to drive real social, political, and economic change.

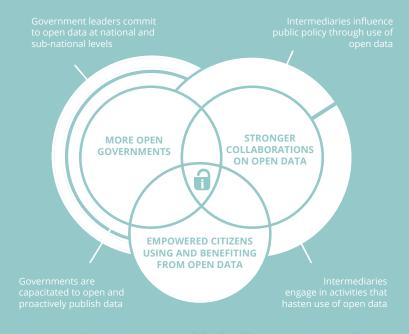
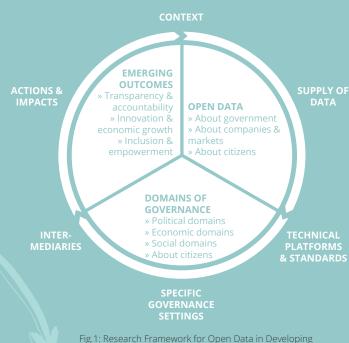


Fig. 2: Vision for Open Data in Asia jointly developed by Participants at Regional Workshop in Jakarta

#### FROM RESEARCH TO ACTION

Informed by our research findings and the outcomes of the regional workshops, we are establishing innovation labs that will use action research to build sustained local capacity, identifiable scaleable and replicable models, and start changing data practices from closed to open. We want to identify context-specific challenges, co-create customised solutions on the ground, and evaluate their effectiveness for securing impacts from open data.



#### **ENGAGE WITH COMMUNITIES**

Countries Project

Earlier this year we conducted regional workshops with a wide variety of stakeholders in Jakarta and Addis Ababa. The outcomes of these events have not only helped us and our partners in the prioritization and design of our action research projects, but have informed discussions in other fora like the Africa Data Consensus.



Fig.3: Focus Areas for Open Data Action Research in Africa and Asia

## INNOVATING WITH OPEN DATA FOR DEVELOPMENT

Realising the innovation labs' goal to push open data to the forefront and drive it to scale requires the identification of focus areas. Based on key findings from our multi-year research project and the priority topics identified at the regional agenda-setting workshops, we determined six key areas that the labs will be working on.

#### AFRICA



#### ILLICIT MONEY FLOWS



Illicit financial flows drain Africa of billions of dollars every year. It is estimated that the continent loses more through these outflows than it receives through foreign direct investment and aid. While partly due to drug trafficking and smuggling, commercial tax avoidance, trade mis-invoicing, and the abuse of shell companies are major causes. We will be working with local partners in a number of African countries to better understand the types and potential uses of data that exist to track money flows into and out of these countries.

#### INFORMATION ASYMMETRIES IN AGRICULTURE



Agriculture is the backbone of African economies. We will investigate how open data in the agriculture sector can benefit every single stakeholder along the value chain, most importantly farmers themselves. Data intermediaries could be the key in unlocking these benefits, but it cannot be assumed that they act in the interests of all stakeholders. We will investigate information asymmetries, the role of intermediaries, and develop and test innovative solutions to tackle the issues identified.

#### ASIA



#### FOLLOW THE MONEY COMMUNITIES (††)



Granular information on government revenues, budgets, contracts, and spending can be a valuable tool to improve accountability and reduce waste. However, many patterns can only be revealed when combining data from various sources, which requires different communities to collaborate closely. Through action research to identify such patterns, we will seek to understand the challenges in bringing these groups together.

#### OPEN DATA IN CONSTRAINED CONTEXTS



A number of studies are pointing to challenges for open data engagement in situations where connectivity, broadband speed, or even access to devices is limited. At the same time, organizations working in these contexts have developed innovative approaches for data accessibility and use. We will study these approaches in order to build and test novel models of open data engagement in countries where connectivity is a challenge, governance structures are opaque, and where supply and demand capacities are limited.

#### **CROSS-REGIONAL**



#### OPEN CITIES



Cities provide the perfect ground for open data engagement. Among other supporting factors, access to the Web, as well as data availability, is often greater in urban compared to rural areas. Aside from the data collected by city governments, there is a wealth of digital data generated by citizens, including mobile phone and social media data. We will investigate ways to combine public and citizen-generated data, while ensuring safeguards to personal and community privacy, in order to tackle some of the challenges cities in Africa and Asia are facing.

#### OPEN DATA MODELS



A number of developed economies have realized social and economic impacts from open data. We will look into how these models have worked and what developing countries in Africa and Asia can learn from these experiences. The focus will be on understanding the various models of data provision, socialization, and citizen engagement to see how these approaches and strategies can be appropriated by developing countries as they start building their open data initiatives.

# OPEN DATA LABS - THE EXPERIENCE SO FAR

We established our first lab in Jakarta in early 2014. Located in the middle of Southeast Asia's hustle and bustle, the Jakarta Lab is working with national and local governments, civil society groups, journalists, researchers, and citizens throughout Southeast Asia. Its work is organised around four key pillars: Research, Incubation, Capacity-Building, and Engagement.



#### **RESEARCH**

We conduct and support thematic research into the supply, use, and impact of open data with the aim of documenting or identifying workable models, replicable trainings, and scalable open data projects that would help optimize open data benefits.



#### **INCUBATION**

We support local organizations in the design and implementation of projects through trainings, tools, and mentoring to increase or hasten access, understanding, and dissemination of open data to generate wider impact.



Governments spend an estimated USD 9.5 trillion annually through contracts, but there is minimal public information as to how, when, and where this money is spent. Building on our work to create the first ever Open Contracting Data Standard, the Jakarta Lab has conducted scoping studies in Indonesia and the Philippines to inform policies that would enable users to easily access details of public contracting processes and monitor spending, ensuring citizens get the best value for money.



After several unsuccessful attempts to access the city's budget and spending data in electronic form, the Yogyakarta-based civil society organization IDEA decided to digitize, scrape, and clean data from the paper-based fiscal reports. With training and technical support from the Jakarta Lab, IDEA managed to turn 4"-thick books of fiscal reports into easy-to-understand visual media. Citizens learned of the budget and spending for the various departments, allowing for a more transparent local government and an engaged citizenry.



#### **CAPACITY-BUILDING**

We implement capacity building programs that increase the capability of governments to proactively disclose data and the capacities of intermediaries to access, analyse, and disseminate relevant information derived from open data.



We convened government officials and civil society organizations to develop concrete measures for improving school performance in the city of Banda Aceh. Training them in the basics of data analysis, participants saw that some local schools performed worse than others despite receiving more government resources. They also found that some schools barely utilise a special fund to improve infrastructure. The city's education agency promised to take action.

# LOOKING AHEAD -AFRICA OPEN DATA LABS

A physical lab in Africa similar to the one in Jakarta is currently in the scoping phase with the central building blocks being informed by the consultations with local stakeholders and the initial results of the pilot projects. We are already harnessing and building on our large network of partners in Africa, including universities, tech hubs, and innovation labs, to build a decentralized network of labs. Initially, the network will be coordinated by a core team spread across Africa and Europe who will provide location-specific support.



#### **ENGAGEMENT**

Through regular events and targeted outreach activities, we build and foster a diverse, interdisciplinary community that benefits from the experience and expertise of its members.



With over 100 participants working on more than 50 projects, Jakarta's first open data hackathon was crucial in demonstrating the power of open data to tackle urban challenges. Together with the Jakarta city government and other organizations from the local technology scene, we aided young developers in creating applications that would help Jakarta citizens understand the city's tax spending and how to navigate the city using public transport.



# **GET INVOLVED**

Are you a researcher interested in the tackling the same issues we are working on as part of our research and innovation agenda for Africa and Asia? We want to hear from you!

Are you from an international organization and interested in partnering with us on one of the projects? Talk to us!

Are you a practitioner or activist working on something similar in Africa or Asia? Get in touch!

Contact us by sending an email to info@webfoundation.org.

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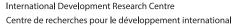
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