



**Third Edition**

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## Regional Report



## East Asia and the Pacific



**WORLD WIDE WEB  
FOUNDATION**



## Open Data Barometer – Third Edition

Regional Report: East Asia and the Pacific – May 2016

The World Wide Web Foundation

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### Note on the selection of countries in this report:

*This report focuses exclusively on the East Asia and the Pacific countries in the 3rd Edition of the Open Data Barometer: Australia, China, Indonesia, Japan, Republic of Korea (South Korea), Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand and Vietnam. When the report mentions region, this means the East Asia and the Pacific countries, but only those covered in this report. This report does not include the small island developing states of the Pacific (Fiji, FS Micronesia, Kiribati, Palau, Marshall Islands, Papua New Guinea, Solomon Islands, Tonga and Vanuatu) as well as the East Asian countries of Lao PDR, Cambodia, and Mongolia, for which data is not yet available in this 3rd Edition.*



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# 1

## Overview

The 3rd Edition of the **World Wide Web Foundation's Open Data Barometer** (ODB), released in April 2016 and covering 92 countries, ranks nations on three open data criteria:

- Readiness: How prepared are governments for open data initiatives? What policies are in place?
- Implementation: Are governments putting their commitments into practice?
- Impact: Is open government data being used in ways that bring practical benefit?

In this regional report we dig deeper into the Barometer's results to take a closer look at the performance of the 12 countries in the East Asia and the Pacific region featured in the latest edition. The purpose of this regional analysis is to use the rich data to assess the state of play of open data across the region, evaluating the readiness of governments to implement open data practice and realise its potential to impact positively on the lives of citizens.

» Philippines emerged as the biggest improver among all countries in the region

**The 2015 Barometer results indicate that while East Asia and the Pacific performed relatively well as a region compared to Latin America and Africa, individual country performance remains stagnant, if not in decline**, with the exceptions of Japan, South Korea, Singapore and the Philippines. The Philippines emerged as the biggest improver among all countries in the region, while Australia and New Zealand remain among the top ten highest scoring countries since the Barometer was launched. In

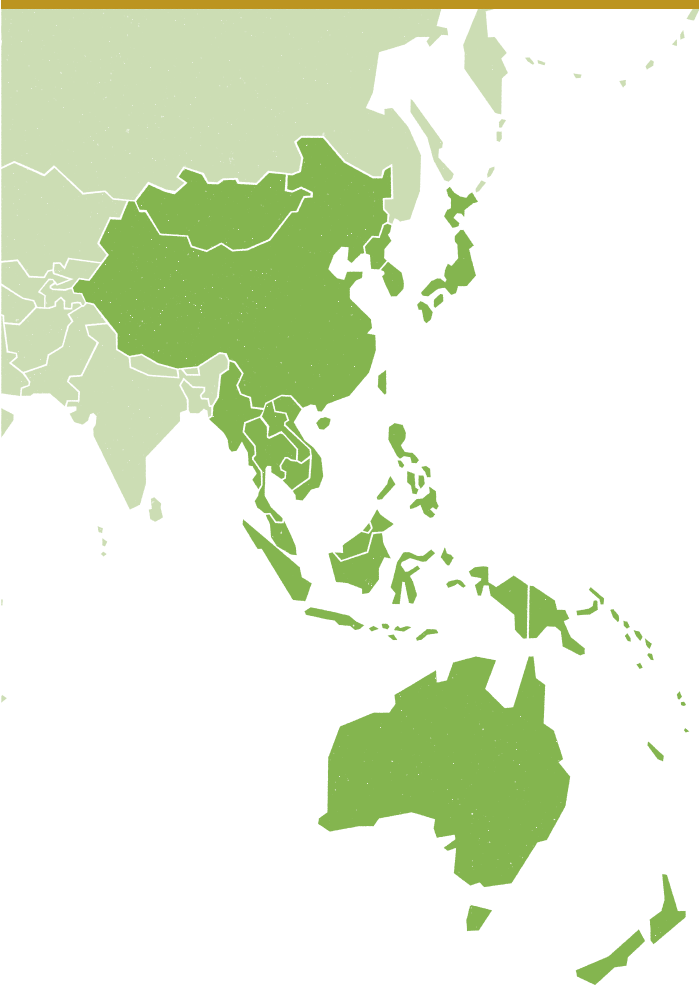
2015, and for the first time, **South Korea joins as one of the top ten highest scoring countries** globally.

Looking at the global rankings, it might be tempting to conclude that **countries with more resources are more likely to do well, given that many of the top ranked countries are high-income OECD members**. But in East Asia and the Pacific region, income level is not always a good indicator of which countries will rank highest. For example, higher middle income countries like Thailand and Malaysia performed worse than lower middle income countries like Indonesia, the Philippines, and Vietnam<sup>1</sup>.

In several countries, political support for open data initiatives is weak, and government funding for staff and resources insufficient. Compounding this is a lack of strong legal frameworks such as data protection and right to information policies that are needed to create an environment where open data practice can flourish. Without the long-term political will, funding and enabling legal environment, it is no wonder that more open datasets have not been published as extensively across the developing countries in the region.

In light of the **UN Sustainable Development Goals**, governments and the development community have recognised the need for better, higher quality and more open data. This is not only critical for establishing a baseline for monitoring global progress but also for using data to both analyse problems and identify solutions that will help achieve the goals.

<sup>1</sup> Income group = **World Bank Country and Lending Groups, 2016**.



» To make the most of open data for development, we do not only need more, but also better quality open data

To make the most of open data for development, we do not only need more, but also better quality open data. Governments can make public services and programmes more relevant to citizens' needs if they have access to better data. Making this data open goes even further to allow civil society organisations to use their expertise to engage with government in policy making and development programming. Journalists and watchdog organisations can use this open data to hold governments to account. And it would be hard for businesses to innovate and create economic opportunity unless the data they rely on is open and high quality. As governments work to publish more open data, they must bear this in mind to ensure the race to open the data does not come at the expense of ensuring the data released is relevant, timely, sustainable and of good quality.



**A World That Counts**  
Mobilizing the  
Data Revolution for  
Sustainable Development  
report

“

*Data are the **lifeblood of decision-making and the raw material for accountability.** Without high-quality data providing the right information on the right things at the right time; designing, monitoring and evaluating effective policies becomes almost impossible.*

# 2

## Key Findings

In this report, the focus is on the emerging trends apparent in the Barometer data in East Asia and the Pacific. Looking at the data, we have identified four key findings.

### 1. South Korea and the Philippines are challenging early open data adopters

#### Open Data Barometer Performance

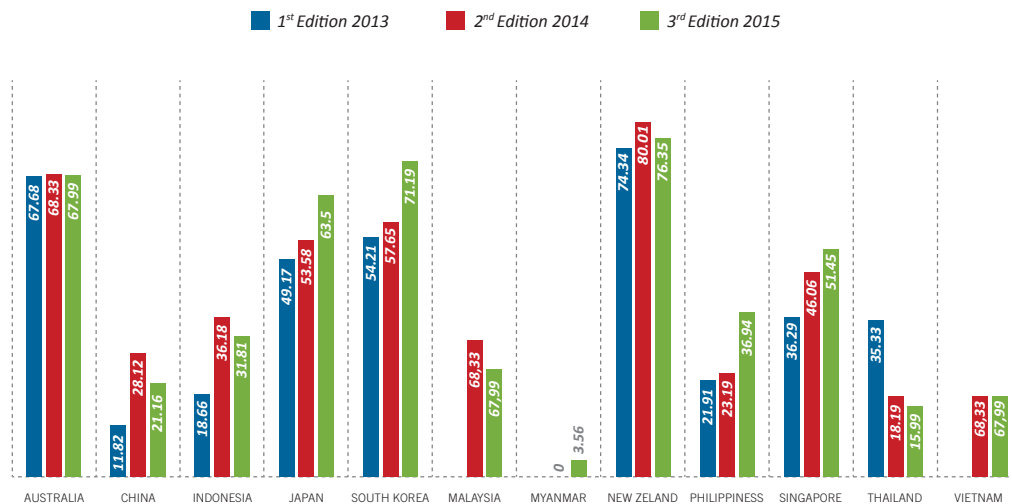


Figure 1. Comparison of country's overall scores for the Open Data Barometer 1st - 3rd editions (East Asia and the Pacific countries).

The region's countries are spread across the entire global Barometer ranking. Australia, New Zealand and South Korea are top performers. Indonesia and the Philippines are in the middle of the ranking, while Myanmar is at the bottom.

Performance over time also varies significantly across the region. Japan, South Korea, the Philippines and Singapore are the only countries that have improved consistently since the 1st Edition of the Barometer in 2013. The performance of New Zealand, Australia and Vietnam has stagnated.

And Malaysia and Thailand have declined, brought about by lower implementation and impact scores.

Korea and the Philippines stand out as the region's stellar performers, jumping nine and 17 notches upward in the Barometer rankings, respectively, and challenging the early adopters of open data. This is the first time that Korea has become part of the top 10 performing countries in the Open Data Barometer (see box 1 on page 7) and that the Philippines has led the lower middle income countries in the Global South.



## From Commitments to Impact: South Korea's Race to the Top 10



Open data is one of the Park Geun-Hye administration's top priorities. As proof, the South Korean government enacted the Open Data Law in 2013, creating an open data implementation mechanism, providing \$20 million for executing open data policies, and releasing more than 3,000 datasets from both national and subnational levels. The volume of high-value datasets released has allowed private sector innovation through the development of applications and portals covering transport, environment and oil price monitoring — all widely used by citizens.

## 2. Open data readiness is not just about government laying the groundwork, but also about the preparedness of the private sector and civil society

Country	Readiness scaled (0-100)	Gov. policies scaled (0-100)	Gov. action scaled (0-100)	Civil society scaled (0-100)	Private sector scaled (0-100)
Australia	84	82	96	81	75
China	45	36	57	38	52
Indonesia	46	54	46	61	31
Japan	77	71	73	88	76
Malaysia	46	55	45	30	58
Myanmar	0	9	0	8	3
New Zealand	87	93	79	96	77
Philippines	55	62	51	57	53
Singapore	72	77	77	41	87
South Korea	95	97	98	92	86
Thailand	30	24	31	30	45
Vietnam	21	33	19	16	28
Median	42.5	43	54	49	55.5

■ best value for each of the data series (rows)
 ■ worst value for each of the data series (rows)

Table 1. Highest and lowest readiness scores for countries in East Asia and the Pacific - 3rd Edition of the Barometer

Table 1 shows that some governments in the region still have weak enabling mechanisms for open data, and some have even lost the initial momentum that propelled government action in publishing open data and ensuring its use. In some cases, however, this has been cushioned by the capacity of civil society organisations and the private sector, who have stepped in to make use of the limited data that is available.

Conversely, when civil society and private sector capacity is limited, a proactive government can become the driving force enabling open data initiatives to thrive and encouraging civil society and the private sector to take advantage of the data. A good example of this is the Philippines, where the national government passed the budget legislation requiring national government agencies to publish government datasets as open data (See Box 2 on page 8).

No matter whether government, civil society or private sector is the lead driver of open data use, progress is limited unless citizens' right to information (and data) is respected. Here, we see a worrying trend across the region. **Only a third of countries in the region have a right to information law**, and for those countries with a legal framework in place, only two-thirds are perceived as having strong implementation mechanisms. In the absence of strong right to information frameworks, civil society organisations play an important role as aggregators and providers of data. Some examples are the **Open Myanmar Initiative**, **Project Sinar's data on ministries and company interests** in Malaysia, and **Shanghai Open Data Watcher** in China. While these initiatives are commendable, they will not be able to realise their full potential impact until citizens' rights are fully guaranteed by government.



### Strengthening the Foundation of Openness in the Philippines

The Philippines' government has made significant progress in policy and regulatory strategies for open data implementation, and has a dedicated budget of 28.9 Mil Pesos (approx. \$633,000) for the open data initiative through its national eGovernment budget. Lacking a Freedom of Information Law and a national open data policy, the Philippine Congress passed the 2015 General Appropriations Act (GAA) mandating agencies to release government data in open and reusable formats. The Philippine Open Data Task Force also issued **Joint Memorandum Circular no. 2015-01**, which contains specific guidelines for agencies on how to implement open data and has embarked on agency readiness assessments. The Government is also directly supporting a culture of innovation with open data through competitions, grants and trainings.

### 3. Despite the growth in open data initiatives at both national and subnational levels, availability of quality datasets remain a significant challenge

#### Progress of Implementation

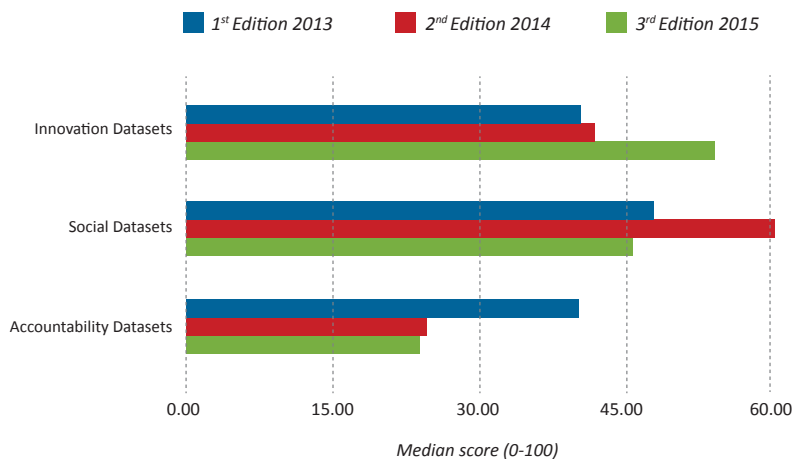


Figure 2. Progress in implementation of open data in the East Asia and the Pacific for each of the groups of datasets included in the survey

In all countries except Myanmar, Thailand and Vietnam, all datasets studied in the Barometer<sup>2</sup> are broadly available online in some form (83% on average), but these are not published as fully open data. Only nine percent of all datasets in the region are published as fully open data according to the **Barometer's assessment criteria**, which is slightly below the 10% global average. The open datasets are primarily concentrated in Australia and Korea, which have between them 12 out of the 16 open datasets in the region.

In 2015, national statistics, companies, legislation and trade data is available for all countries in the region. Interestingly, while the majority of the region's countries publish budget data, only Japan

makes data on government spending accessible, and only Australia and the Philippines publish data on government contracts. Data supporting innovation like maps, public transport, trade and crime statistics, are increasingly being made available in several countries, with Australia, New Zealand, Korea, and Singapore leading in this area. However, free and open access to datasets that are central to holding governments and corporations to account, such as data on land ownership, legislation, elections and company ownership remains a challenge despite the growing number of open data initiatives. For example, **only Australia, among all countries in the region and globally, publishes company register data**, albeit with significant limitations.

The implementation component of the Barometer looks at the extent to which accessible, timely, and open data is published by each country government. According to the evolution of the implementation scores across the different Barometer editions

<sup>2</sup> Datasets studied in the Open Data Barometer include: maps, contracts, budget, spending, legislation, land use, census, company registers, public transport, trade, health, crime, environment, elections, and public contracts





in Figure 2 we can see some improvements on certain groups of datasets related to innovation and accountability. However, there is no evidence to show that the quality of such published data has improved, or that countries have undertaken steps to improve data management systems. In Indonesia, for example, there are **conflicting versions of map and land use data, with civil society organisations stepping up efforts to improve official data inaccuracies**. The same is true in Vietnam, where envi-

ronmental data essential to better water resources management is replete with inaccuracies **because of different collection systems and a lack of standards**. In most cases, data quality is affected by the lack of governmental capacity, like in the case of Myanmar (see box 3 below). Data quality in almost all countries in the region will remain an on-going challenge in the coming years without significant investments in data collection and management.

### A Data Crisis in Myanmar



The Economist **ran a story in 2014** highlighting the fact that Myanmar's first census in three decades showed the country's population to have 9 million fewer people than previously reported. While the article focused on political explanations for this discrepancy, a glaring problem that underpins data problems in Myanmar is the government's lack of capacity to implement sound data management systems. Low levels of ICT skills and infrastructure present a significant challenge to improving data management. In fact, the **Global Innovation Index** ranks the country the fourth lowest globally and lowest in the region across several indicators for ICT use, education and innovation, illustrating the breadth of the problem. To date, datasets on many states and divisions outside Yangon and Mandalay are very hard to find. Without investment in ICT infrastructure and capabilities, the country will struggle to close its data gap.

## 4. The road to impact is long and narrow, but increased investment in readiness and implementation can lead to significant impact

### Implementation vs Impact

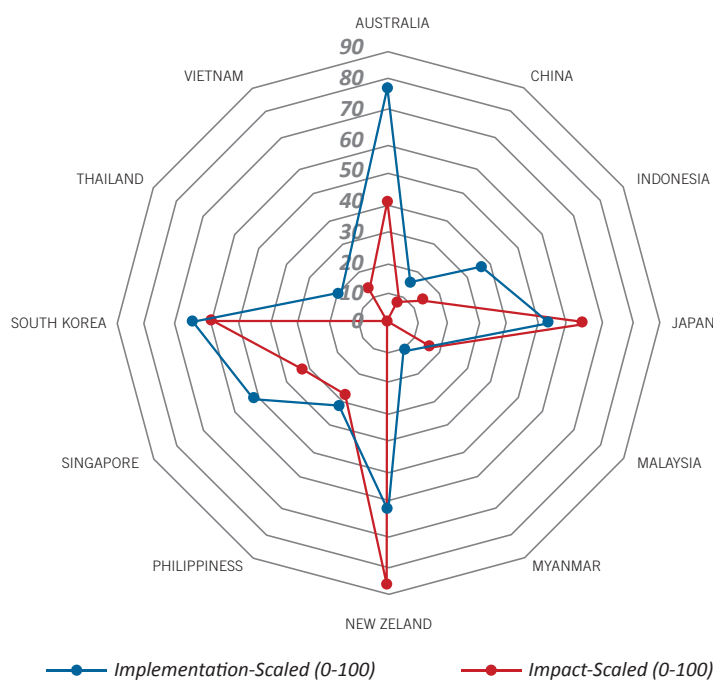


Figure 3: Open data implementation and impact scores for East Asia and the Pacific countries, 2015

As indicated in Figure 3, implementation scores strongly influence impact scores in most countries with a strong positive association between both variables, as datasets must be open in order to reap their full benefits.

However, **the Barometer also shows that strengthening open data readiness still helps to increase impact scores**, even if implementation is stagnant. This is likely because reinforcing the culture of open data in the readiness phase means that open data gradually becomes part of the consciousness and habits of government, civil society and private sector data users, increasing impact incrementally.

In Japan, for example, stable readiness and implementation scores over the three-year period paved the way for open data use by civil society organisations and the private sector. As of March 2015, **Japan reported 31 open data-based companies, open data-based systems benefitting the differently abled and the elderly in using public transport** and several applications within government that help **manage disasters, population, and agriculture** initiatives.





# 3

## Conclusion

**Open data can lead to impact beyond business innovation and should therefore not be seen as an economic resource only.** While datasets to spur innovation in businesses have become increasingly open in the East Asia and the Pacific region since the 1st Edition of the Barometer back in 2013, the opposite is true for data central to holding governments and corporations to account and to support greater inclusion and empowerment — despite the growing number of open data initiatives.

» Open data can lead to impact beyond business innovation and should therefore not be seen as an economic resource only.

In the region, the basic building blocks for successful open data programmes are largely in place in the majority of countries. However, **data quality remains a challenge making it difficult for users to work with the data they are able to access.** The region's Barometer results show that **investments in data practice and policy frameworks seem to pay off, with the Philippines and Korea being the prime examples.** Strategies that emphasise quick wins by releasing a large number of low-quality data are shortsighted. Governments in the region need to go beyond the hype and invest in data management practice and appropriate legal frameworks, including right to information laws, to lay the foundation for an enabling environment that allows for meaningful participation of civil society and the private sector in open data.



**Sir Tim Berners-Lee**  
commenting on the  
findings of the  
3rd Edition of the  
Open Data Barometer

*Inequality and poverty are about more than income — they are also about **information**. Seven years after I first demanded that governments open up their data to all, **open data initiatives** are now in place in more than half of countries we track. Yet their quality is variable, and benefits are concentrated in rich countries. Now is the time to resource and implement open data throughout the world, through projects such as the **International Open Data Charter**.*



# 4

## Recommendations

Building on the four key findings, we've outlined four recommendations on how the East Asia and the Pacific region could come closer to taking advantage of the full potential of open data:

### Strengthen cross-country learning in the region.

At the moment, there is no institutionalised sharing and learning process among open data champions in the region. But countries just beginning their open data journey could benefit from exchanging ideas and experience with those who have made progress already, such as New Zealand, South Korea and the Philippines. Events like the **Asia Pacific Open Data Summit**, hosted by the government of Taiwan, and the **ODAsia2020** have either focused exclusively on governments, or, in the case of ODAsia2020, have so far been a one-off exercise. The **International Open Data Charter**, a joint initiative of governments and civil society, could become the platform of a more institutionalised learning network.

### Increase investment in the capacity of civil society to engage with government on open data.

Where government policies, programmes and capacity on open data are weak, enabling stakeholders outside of government to undertake targeted advocacy and consultation with government can improve overall readiness and data access. Capacity-building could also empower civil society to defend political and civil liberties and advocate for strong freedom of information laws and appropriate implementation mechanisms.

### Open up the datasets that citizens need to hold governments and corporations to account.

From all 12 countries in the region, only Japan makes data on government spending accessible, and only Australia publishes open data on land, companies and trade. For open data to result in political and social impact, data on land ownership, legislation, elections, company ownership and more should be made proactively available to the public online, free of charge, in machine-readable formats and openly licensed.

### Allow for testing and experimenting to find the most suitable approach.

There is no prescribed model for open data to succeed, nor just one single pathway that leads to success. Countries need to find context-appropriate solutions taking into account a country's resources, capacities and realities when investing in open data readiness and implementation. Open data remains a young field that continues to grow. Systematic experimentation, evaluation and learning, especially at the subnational level, to inform policies and practice can enable countries to reap the full benefits of open data. Using pilots at the local level will maximise impact for citizens, and allow successful approaches to be scaled and replicated.

# About the Open Data Barometer

Produced by the [World Wide Web Foundation](#) as a collaborative work of the [Open Data for Development network](#) (OD4D) and with the support of the [Omidyar Network](#), the Open Data Barometer (ODB) aims to uncover the true prevalence and impact of open data initiatives around the world. It analyses global trends, and provides comparative data on countries and regions using an in-depth methodology that combines contextual data, technical assessments and secondary indicators.

This is the third edition of the Barometer. After two successful pilots, this edition marks another step towards becoming a global policy-making tool with a participatory and inclusive process and a strong regional focus. For the first time, this year's ODB includes an assessment of countries against the [International Open Data Charter](#) principles.

You can also read the full [Open Data Barometer Global Report](#), or learn more about the complete Barometer methodology and research process in the [detailed methodology description](#) and the [research Handbook](#).

#### Lead authors:

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**Lead researcher:** Carlos Iglesias - Web Foundation

The Open Data Barometer is only possible thanks to the participation of a wide [network of contributors](#). Our thanks to the [Open data Lab Jakarta](#) as regional partner and all those who participated in the East Asia and the Pacific assessment:

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Regional governments participating in the self-assessment were: Japan, Korea, Malaysia and Thailand.

#### About the Web Foundation



**WORLD WIDE WEB**  
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Established by the inventor of the Web, Sir Tim Berners-Lee, the [World Wide Web Foundation](#) seeks to establish the open Web as a global public good and a basic right, creating a world where everyone, everywhere can use the Web to communicate, collaborate and innovate freely. Represented by more than a dozen nationalities working from hubs in London, Washington DC, Jakarta and Cape Town, the World Wide Web Foundation operates at the confluence of technology and human rights, targeting three key areas: *Access*, *Voice* and *Participation*.

## Open Data Lab Jakarta



The **Open Data Lab Jakarta** is a research and innovation lab focused on harnessing the potential of open data for social impact. We seek to develop, test and evaluate models, and build evidence for the value of openly available government data to tackle practical challenges faced by developing and emerging economies in the Southeast Asia region.

Established and run by the World Wide Web Foundation, we engage with a wide range of partners in the region to build a solid research, innovation and advocacy platform and test our ideas on the ground.

Focusing on the local level, we seek to identify concrete challenges in high-impact sectors across the region, and co-create and tailor workable open data models and solutions together with our partners. We recognise the different states of open data in each country — and city, if needed — to ensure that appropriate and sustainable measures are used in each project, ensuring the best results and impact.

## Open Data Asia 2020

Priorities, opportunities and challenges for securing developmental outcomes from open data vary across geographies. It is important for the agenda for open data research and innovation to be set, owned and driven by local stakeholders.

In February 2015, the Web Foundation in partnership with the **Open Data for Development Network** conducted a regional agenda-setting workshop with representatives from 11 countries to jointly define the region's open data agenda leading to 2020.

The primary result of the workshop is an open data strategy for the region, dubbed as **Open Data Asia 2020**, which articulates what the state of open data should be in the region by 2020 – and how this could be jointly achieved by the different stakeholders involved, which include governments, businesses and civil society organisations.

Building on the outcomes of the workshop, projects were launched in a range of thematic areas with partners across the region to contribute to the realisation of the joint vision through **targeted research and innovation**.





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