Data for Better Lives
World Development Report 2021
Data saves lives

Odisha’s investment in data: from 10,000 fatalities to just 38
Data for development: 3 pathways

- Data production and collection
- Individuals, Civil Society and Academia
- Government and International Organisations
- The Private Sector
- Development
Data for development: 3 pathways

- Demand / create transparency
- Hold data on individuals
- Create / use data in production process

1. Individuals, Civil Society and Academia
2. Government and International Organisations
3. The Private Sector

Development
Data for development: potential benefits

- Greater accountability
- Policy design / evaluation
- Service delivery
- Business opportunities

Individuals, Civil Society and Academia
Government and International Organisations
The Private Sector

Data production and collection
Development
Data for development: potential harms

- Criminal activity
- Dark net
- Corruption
- Surveillance
- Widening inequality
- Market concentration

Data production and collection

Development

Individuals, Civil Society and Academia

Government and International Organisations

The Private Sector
Unlocking potential by reusing data

- Individuals, Civil Society and Academia
  - Reuse
  - Combine
  - Share

- Government and International Organisations
  - Reuse
  - Combine
  - Share

- The Private Sector
  - Reuse
  - Combine
  - Share
Not just another report on data

- A poverty lens on the value of data
- Prioritising poor people and poor countries

The Government of Madagascar provide 80,000 extreme poor households with regular cash transfers, such as here in Betania.

Photo credit: Mohammad Al-Arief / World Bank
Kenya

Road traffic deaths

Combining and repurposing sources

Researchers worked with the National Police Service to create the first digital and geolocated administrative dataset of individual crashes in Nairobi. Combining digitized official paper records with commuter reports on traffic conditions revealed new insights: 5% of roads experienced 50% of road traffic deaths.

Source: Milusheva et al. 2020
Traditional household survey data was previously used to determine deprivation and allocate EU funding, based on regional GDP. This means that resources weren’t reaching poor municipalities in nonpoor regions. Combining the household data with the population census and administrative data revealed large differences in living standards within regions, fuelling proposals for new funding divisions.
Citizens can create data to fill gaps in public and private data, to address the problems they face. HarassMap is a citizen-generated map based on individual reports of sexual harassment.
Data for development: 3 pathways

Individuals, Civil Society and Academia

- Demand / create transparency
- Create / use data in production process
- Hold data on individuals

Government and International Organisations

- Reuse / combine / share

The Private Sector

- Reuse / combine / share

Greater accountability
Criminal activity
Dark net
Policy design / evaluation
Service delivery
Corruption
Surveillance
Business opportunities
Widening inequality
Market concentration

Data production and collection

Development
The social contract for data
Value

Economic and social value comes from sharing, reusing, and combining data sources to generate greater insight.
Data capture, infrastructure, and trade need to include poorer communities and countries equitably
Trust

Personal data and data infrastructure must be protected from misuse to avoid discrimination and cybercrime.
The three elements of a social contract for data: Value, Equity and Trust
Working towards an integrated national data system (INDS)
Data in the INDS must be:

- Produced
- Protected from misuse
- Open
- Quality controlled
- Used and reused
Participants in the INDS create and share data.
Four pillars support the INDS

- Institutions
- Economic policies
- Infrastructure policies
- Laws and regulations
Five foundations sustain the INDS

Data demand

Human capital

Incentives

Trust

Funding
## Data governance: a framework to enforce the social contract

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# Data governance layer 1: Infrastructure policies

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National data infrastructure plays an increasingly critical role
National data infrastructure plays an increasingly critical role

Status of National Data Infrastructure in ECA Region, 2019
## Data governance layer 2: Laws and regulations

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Scores for quality of data regulation environment in ECA Region, 2020

- Georgia: Safeguards 48, Enablers 48
- Tajikistan: Safeguards 46, Enablers 46
- Kazakhstan: Safeguards 44, Enablers 44
- Armenia: Safeguards 42, Enablers 42
- Uzbekistan: Safeguards 40, Enablers 40
- Kyrgyz Republic: Safeguards 38, Enablers 38
- Ukraine: Safeguards 43, Enablers 43
- Russian Federation: Safeguards 41, Enablers 41
- Turkey: Safeguards 39, Enablers 39
- Moldova: Safeguards 37, Enablers 37
- Estonia: Safeguards 35, Enablers 35

Enablers Average = 48
Safeguards Average = 58
Overall, ECA Region does comparatively well on data regulation

Average scores on quality on different dimensions of the regulatory environment for data

- High income
- Upper middle income
- Lower middle income
- Low income
- Europe & Central Asia

- E-commerce/transactions
- Cross border data transactions/flows
- Cybersecurity and cybercrime
- Enabling use of public intent data
- Enabling use of private intent data
- Non-personal data protection
- Personal data protection
# Data governance layer 3: Economic policies

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Leveling the playing field for competition

Source: Alexa (downloaded 2020:Q2).
Trading data across borders securely

[Map showing data transfer across countries with different colors indicating open transfer, conditional transfer, limited transfer, and outside sample.]
Capturing tax revenues from data-driven businesses

Figure 7.6 East Asian countries are losing a substantial volume of tax revenue by failing to apply current VAT rules to digital services


Note: Figure shows the indirect tax potential of business-to-consumer e-commerce. VAT = value added tax.
Example: Croatia

Collecting VAT

Capturing tax revenues from tourism platforms

Croatia collaborated with third country tax authorities to collect information about tax returns needed to enforce VAT collection on small businesses selling tourist accommodation over tourism platforms, raising compliance above 40% baseline.
## Data governance layer 4: Institutions

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Figure 8.7 Features of well-functioning institutions for effective data governance

- **Coordination**: Create incentives to encourage collaborative and user-centric decision-making.
- **Leadership**: Mobilize data champions in positions of power to create a culture of data sharing and use.
- **Multistakeholder governance**: Sustain outcomes through inclusive and legitimate stakeholder engagement.
- **Transparency**: Build trust by promoting participation and accountability in policy making.
- **Functional autonomy**: Promote institutional independence and autonomy for effective performance.
- **Data literacy**: Invest in increasing technical capacity, resources, and data skills for civil servants.

Source: WDR 2021 team.
Mapping key data governance functions to government entities

Figure 8.3 No low-income and few lower-middle-income countries have a separate data governance entity; most embed them in another government institution

![Graph showing share of countries with a data governance entity by country income group.]


Note: Panel a: data are for 198 economies. Data governance entities include both separate agencies and units that are part of another institution. Panel b: data are for 56 countries. Data are only for countries that have a data governance entity established or in process. Low-income countries are not included in the figure because none has a data governance entity.

Figure 8.4 The lower the country income level, the fewer are the countries with data protection authorities

![Graph showing type of data governance entity by country income group.]


Note: Data are for 198 economies.

Figure 8.6 Only about one-quarter of low-income countries have cybersecurity agencies

![Graph showing share of countries with cybersecurity agency by country income group.]


Note: Data are for 198 economies.
Summary of main messages

1. We need a new social contract for data based on value, trust and equity
2. We still have a long way to go on data governance
3. Data governance has important economic implications
4. Data governance is a matter for international cooperation
5. We should aspire to the vision of an Integrated National Data System
Download the report and explore Data Stories at https://wdr2021.worldbank.org/

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