

HIDDEN DIMENSIONS OF POVERTY DATASET (HDD)

OCTOBER 31, 2019
SD DATA TALK



Outline

1. What is HDD?
2. How has HDD been used in the World Bank projects?
3. How can we access HDD?
4. What are other potential uses of HDD?

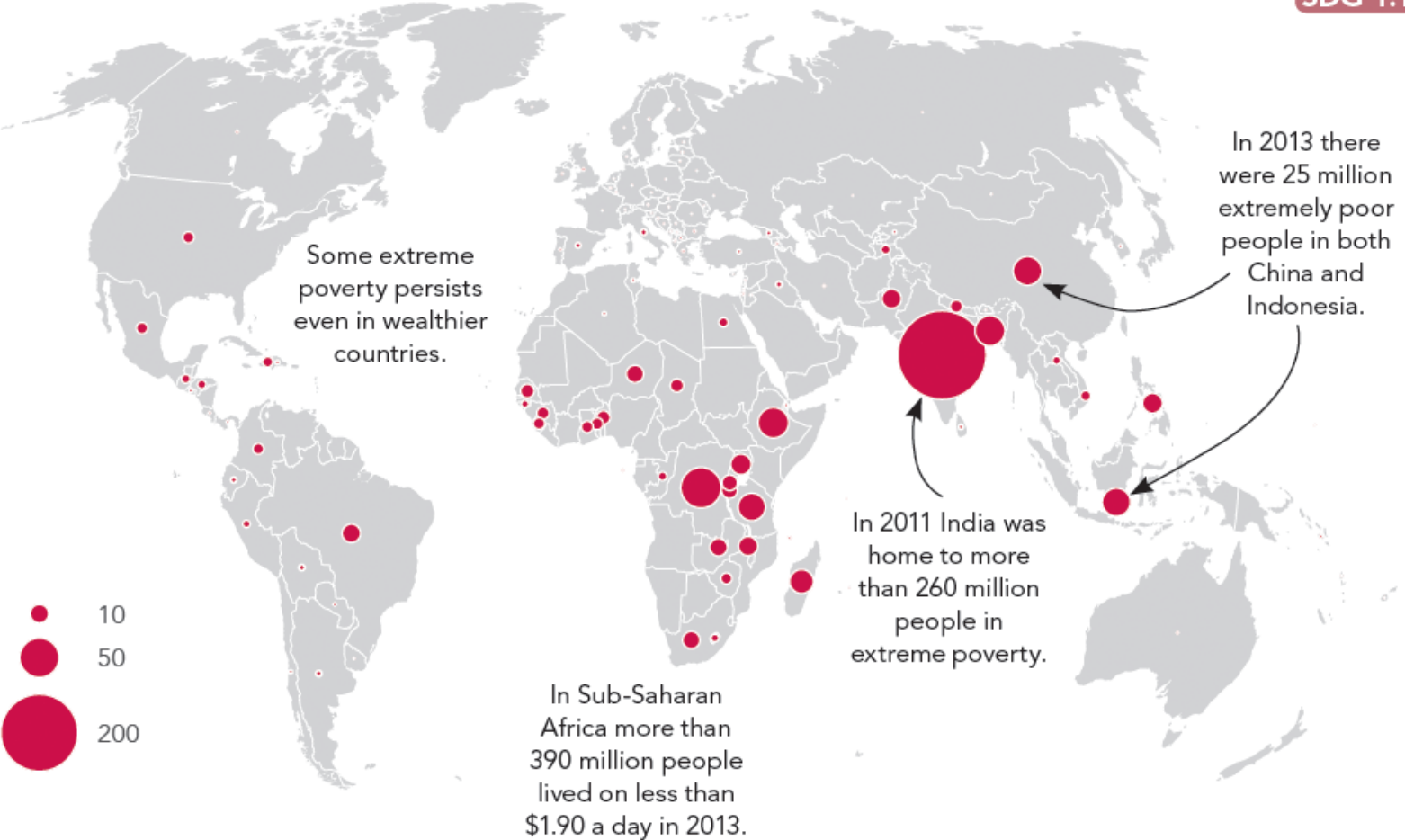
1. What is HDD?

National-level Poverty Data

Populous countries such as China, India, Indonesia, and Bangladesh are home to a significant share of the total number of people living in extreme poverty.

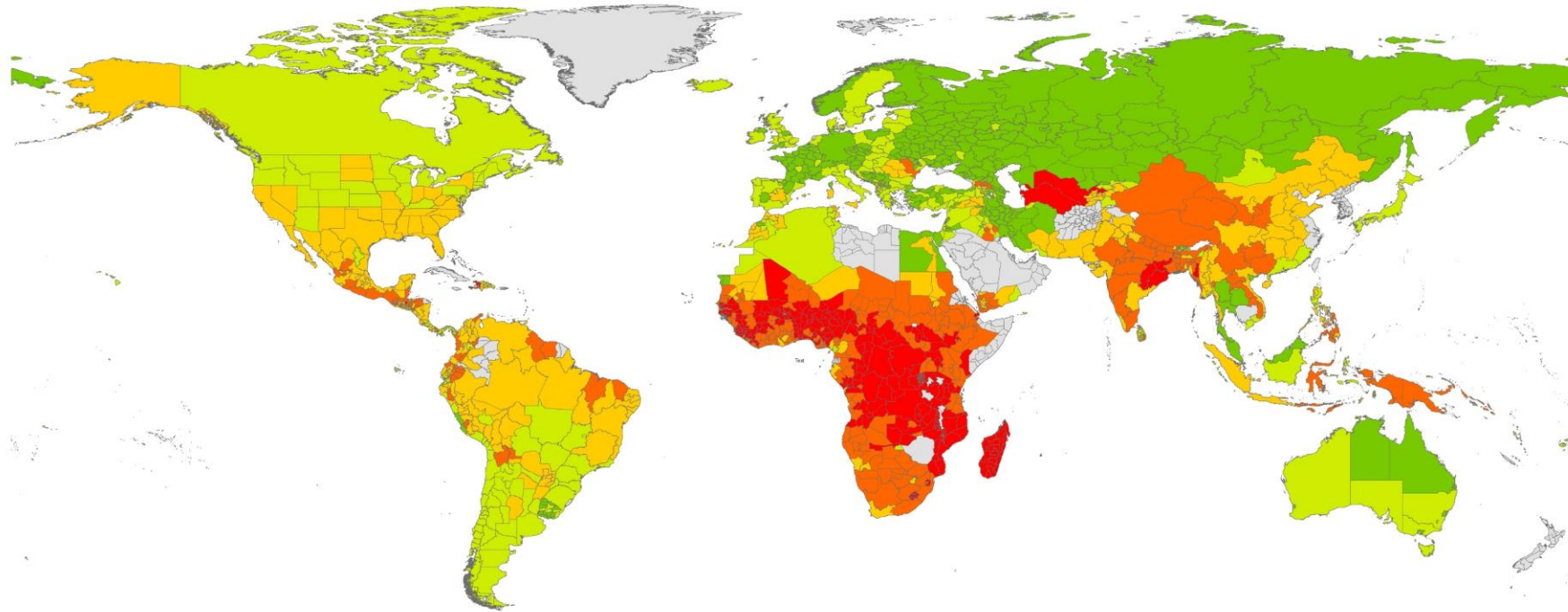
Number of people living on less than \$1.90 a day (2011 PPP), most recent value in 2010–13 (millions)

SDG 1.1



Source: World Bank PovcalNet. World Development Indicators (SI.POV.DDAY; SP.POP.TOTL).

Subnational-level Poverty Data



Poverty Rate at \$1.90/day (2013 PPP)



0 2,450 4,900 9,800 Kilometers



Environmental and Socioeconomic Data

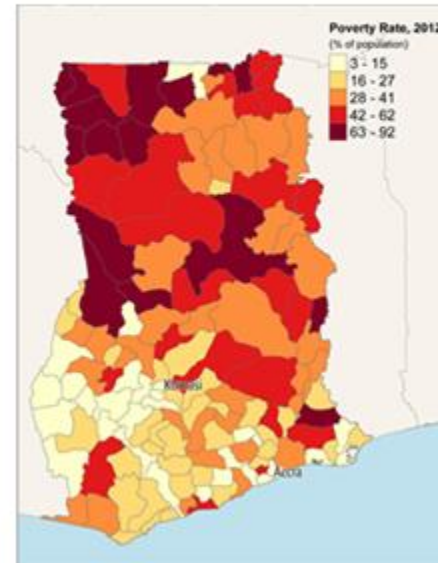
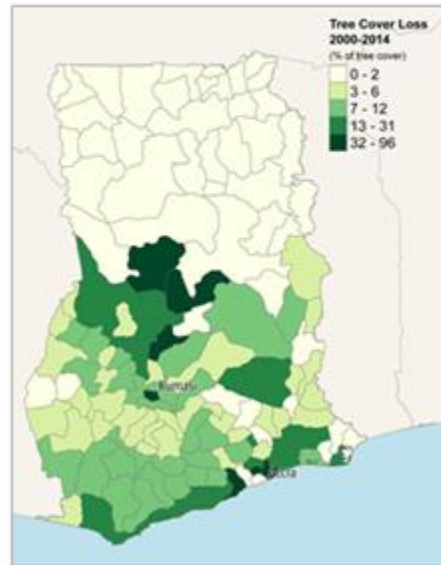
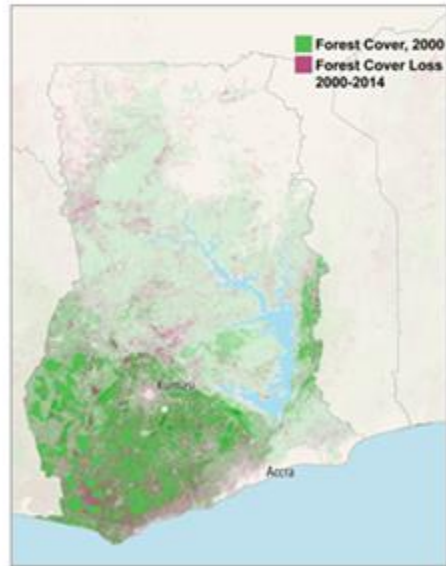
Grid-level environmental data (e.g. forest cover loss)



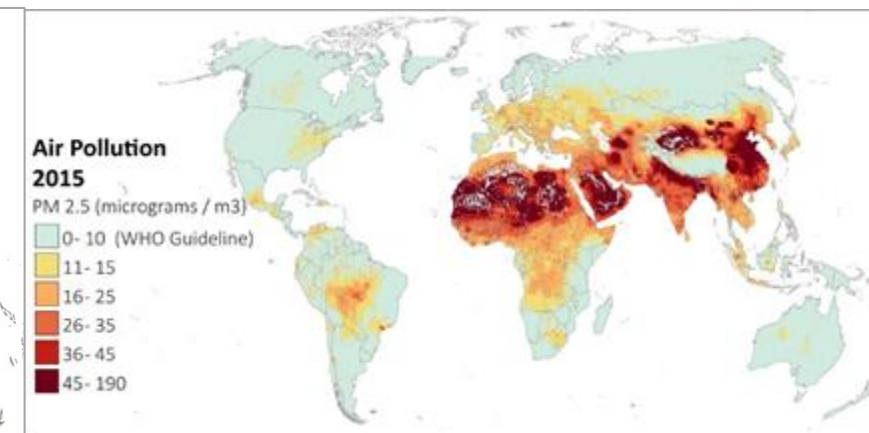
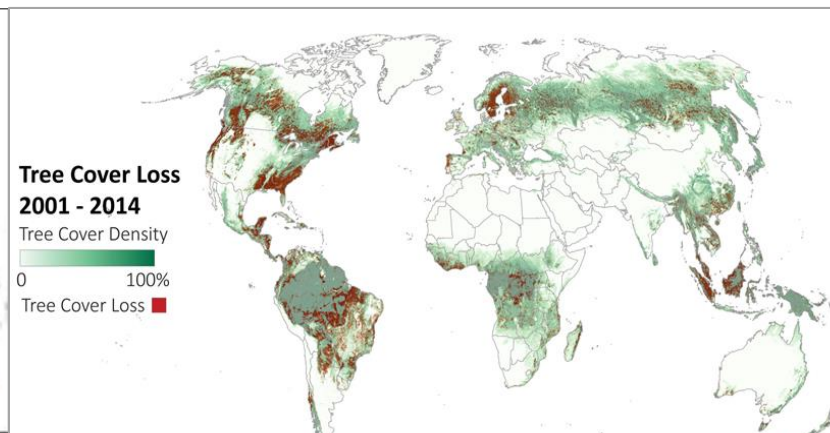
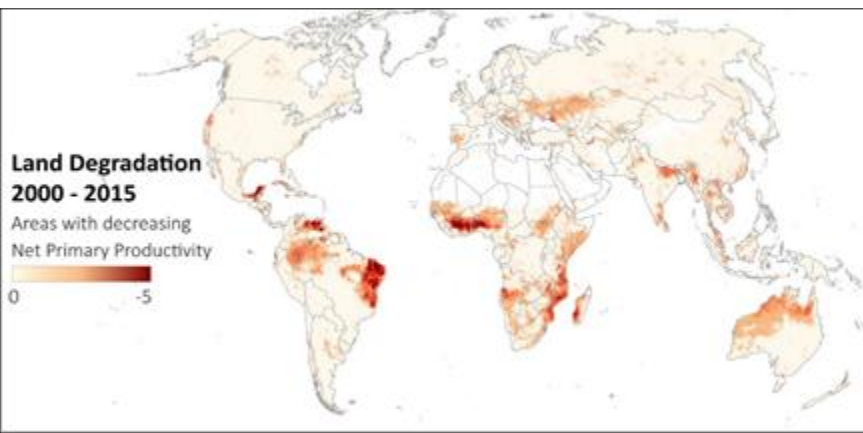
Summarized at the district-level



Administrative or economic data available at district-level



- Over 100 indicators on the themes of poverty, socio-economic data, natural resources, environmental degradation, water stress, and geography
- Global coverage for all environmental indicators
- Cross-comparable economic data for more than 1,300 provinces and 27,000 districts, covering 100+ countries.



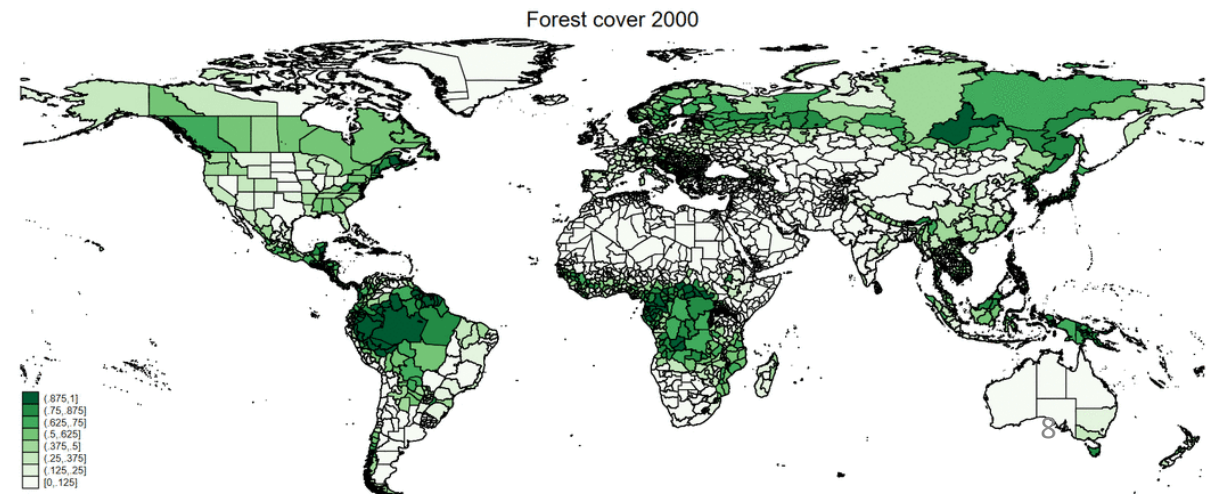
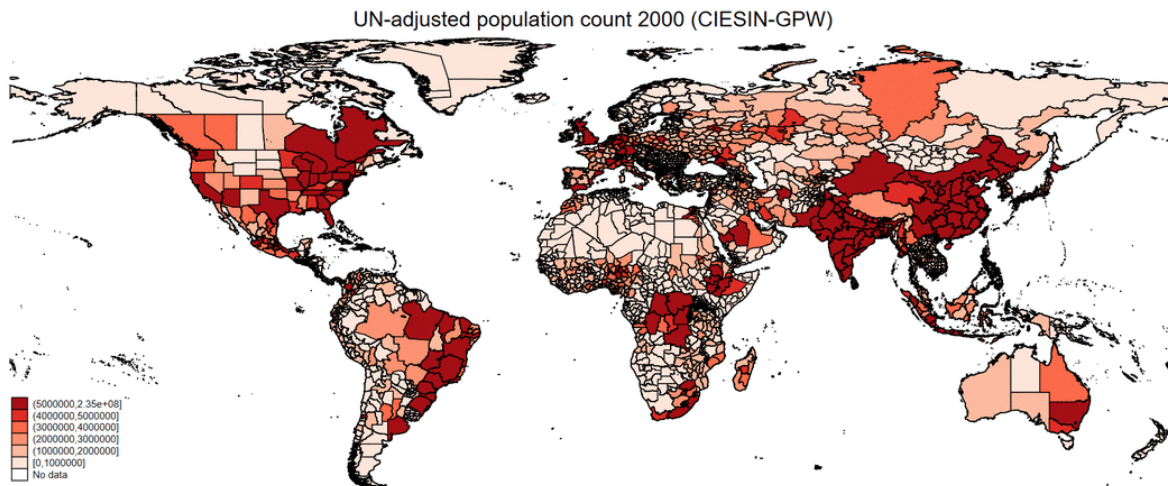
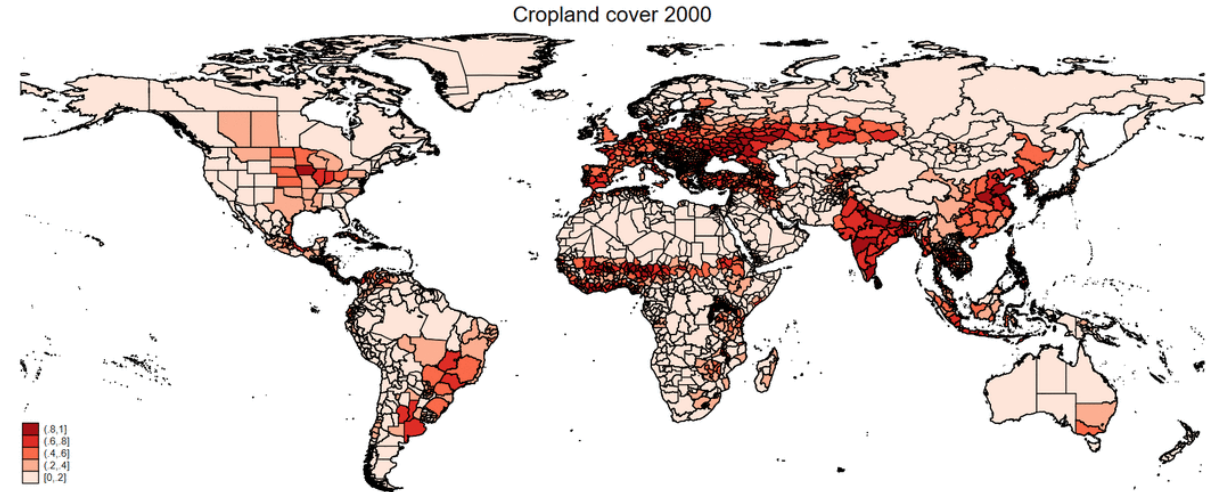
HDD indicators

Green	Brown	Blue	Poverty	Economics & Population	Geography & Climate	Mining & Energy
Forest coverage and loss	PM2.5 air pollution	Mangroves	Monetary Poverty	GDP	Land cover	Diamond deposits
Soil degradation	PM2.5 air pollution (dust- and salt-removed)	Degradation of Marine Ecosystems (COAST)	Multidimensional Poverty (vulnerability, health, education, living standards)	Population	Grid cell ruggedness	Onshore oil and gas
Soil type	PM2.5 air pollution in cities (from monitoring stations)	Water stress		Health	More/Less Favored Agricultural Land	Power plants
Vegetation Index	PM10 air pollution			Standard of Living	Area size	
Net Primary Productivity	Black Carbon			Education	Market Access	
Biodiversity	NO x			Urbanization	Road density	
Bird areas	Mercury			Income group	Built-up area	
Protected areas	Contamination hotspots			Lending category	Temperature	
					Precipitation	

Hidden Dimensions of Poverty Dataset (HDD)

Global dataset of subnational poverty and environmental indicators

Temporal Coverage	1992 – 2017
Periodicity	Annual
Geographical Coverage	World
Granularity	Province and district levels



2. How has HDD been used in the World Bank projects?

Types of analysis

1. **Benchmarking** between and within countries
2. Identifying poverty-environment **correlations and hotspots**
3. Tracking environmental **trends** over time
4. **Customized** analysis

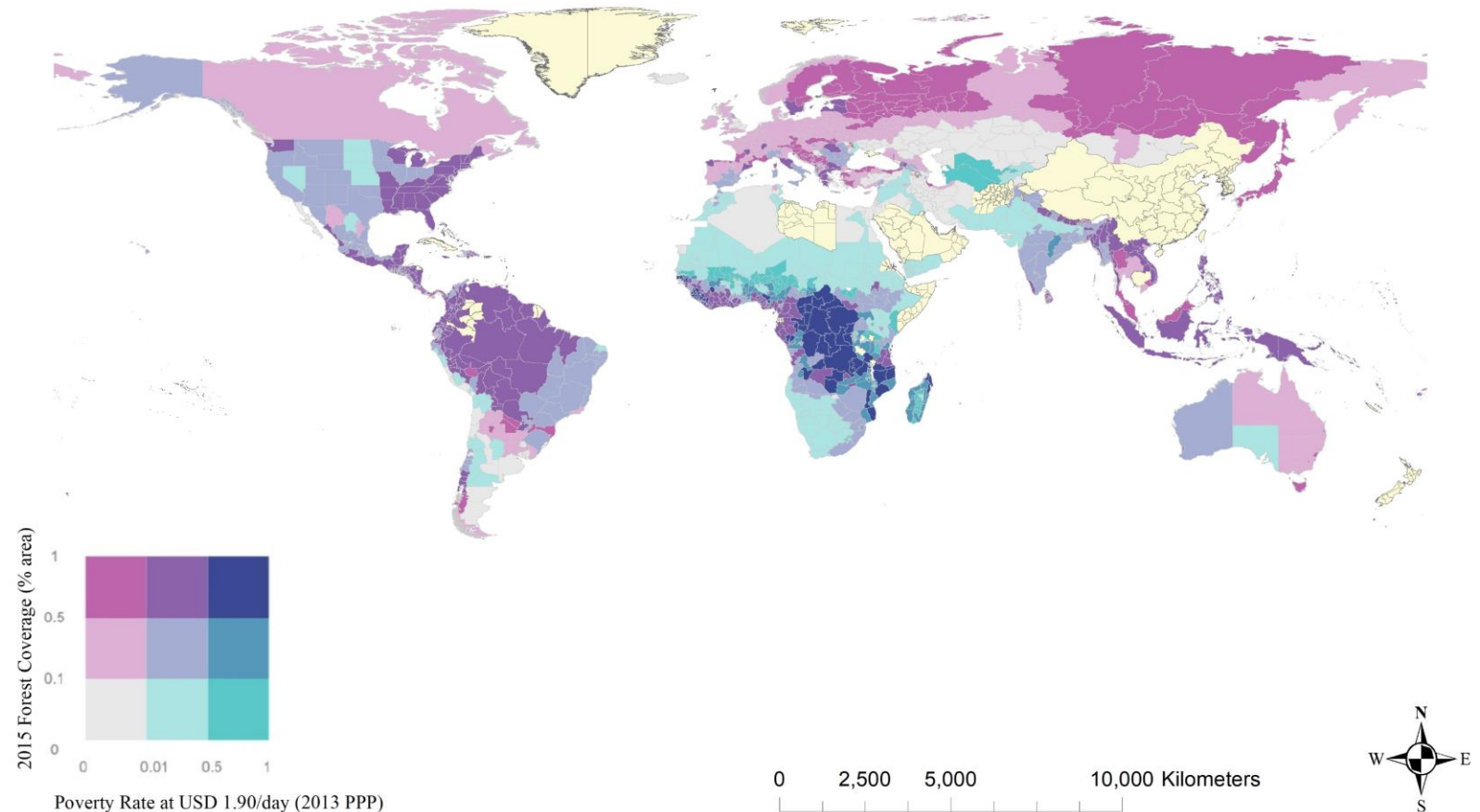
Examples of products/services

1. Flagship reports and projects
2. SCD, CEA etc.

FAO and WB joint publication

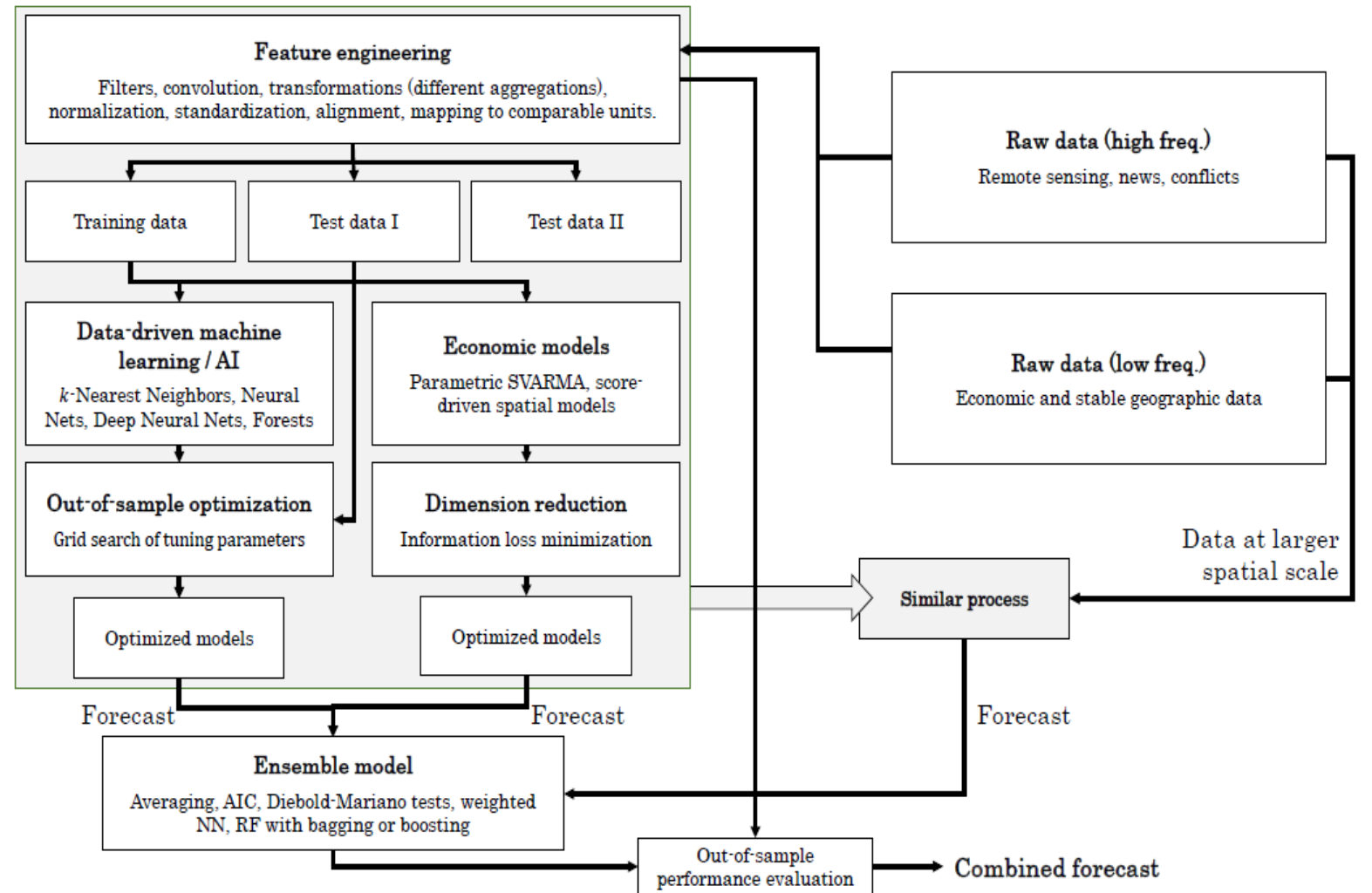
The State of the World's Forests 2020 (forthcoming)

Forest Coverage and Poverty Rate



Hidden Dimensions of Poverty Dataset (HDD)

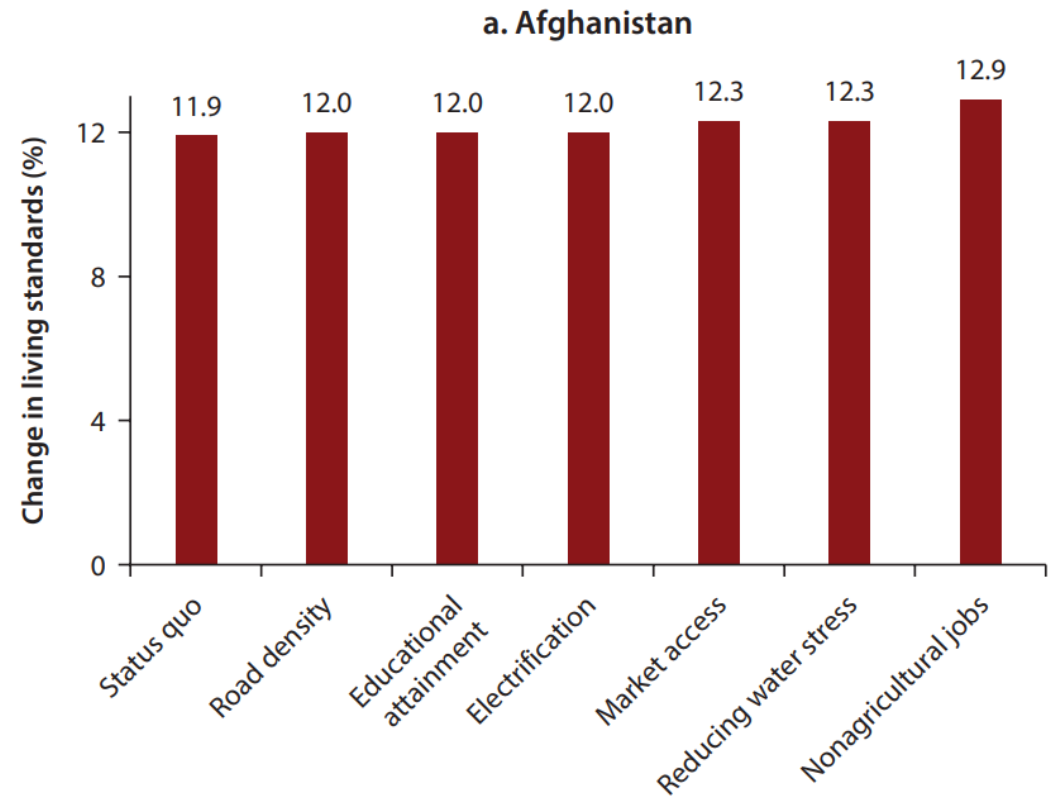
Famine Action Mechanism



South Asia's Hotspots report



FIGURE 5.1 Good Development Outcomes Reduce Hotspots
(Effects of Various Interventions on Living Standards in South Asia under the Carbon-Intensive Scenario, by 2050)



Securing Forest Tenure for Rural Development Program

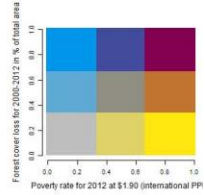
Selection of pilot countries



WORLD BANK GROUP

**SECURING FOREST
TENURE RIGHTS
FOR RURAL
DEVELOPMENT**
AN ANALYTICAL FRAMEWORK

PROFOR

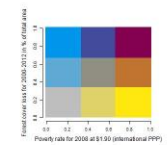


Data source: World Bank, Hidden Dimensions of Poverty Dataset, Natural Resources and The Environment (2019). Retrieved from <https://datacatalog.worldbank.org/dataset/hidden-dimensions-poverty-natural-resources-and-environment>

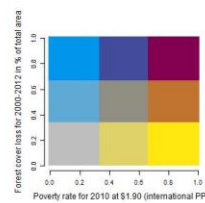
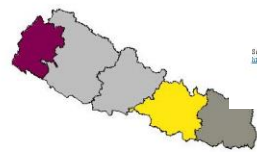


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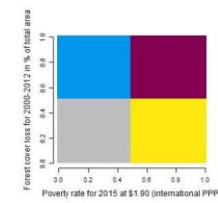
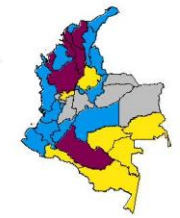
Poverty and forest cover loss in Mozambique



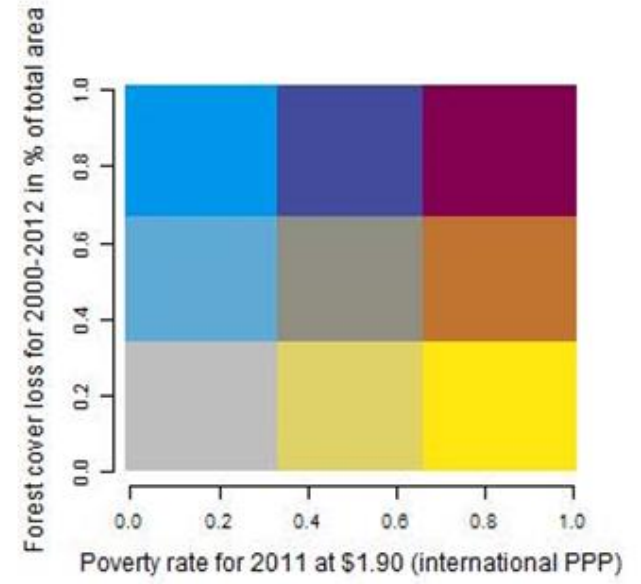
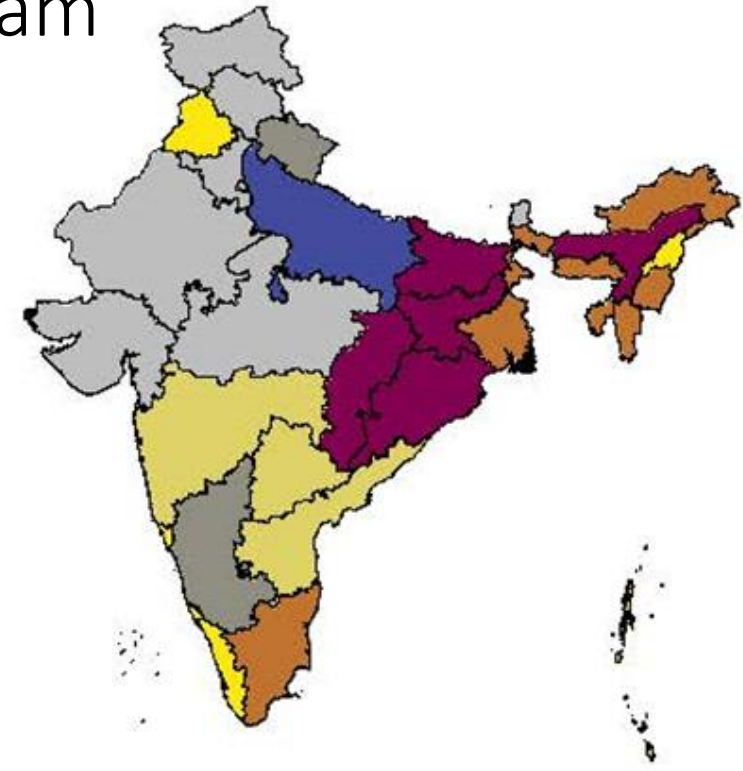
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Zambia Forest-Poverty maps



ZAMBIA

Nearly two-thirds of Zambia is forest-covered, and degradation of these resources is common. Tree cover is most dense in western Zambia, while cropland is more common in the southern and western regions of the country.

Flood and droughts have increased in frequency over the past three decades, and are expected to worsen as temperatures are projected to increase by 3 to 5 degrees Celsius by 2100.

COUNTRY STATISTICS

This table summarizes key indicators with data from 2015, and benchmarks a country to its region and income group using percentile ranks (a value of 70 means that the country has a value higher than 70% of countries in that group).

	Zambia	PERCENTILE RANKS	
		Sub-Saharan Africa	Lower Middle Income
Population (total)	16,591,390	-	-
Urban population (%)	41.4	-	-
Land area (sq. km)	743,390	-	-
Agricultural land (%)	32.1	-	-
Forest area (%)	65.4	-	-
Protected areas (%)	37.9	-	-
GDP per capita, PPP	3,636.1	70	37
GNI per capita, PPP	3,195.6	65	22
Gross savings (% of GNI)	30.3	93	87
Adjusted net savings (% of GNI)	6.6	79	53
Poverty rate (\$1.90, %)	64.4	82	98
GINI Index	55.6	89	100
Access to improved sanitation (%)	43.9	72	29
Mortality rate, under-5 (per 1,000 births)	64	40	80
Tree Cover Loss 2001-2015 (%)	4.3	43	56
CO2 emissions per capita (metric tons)	0.3	47	2
Energy use per cap. (kg oil)	635.3	73	62

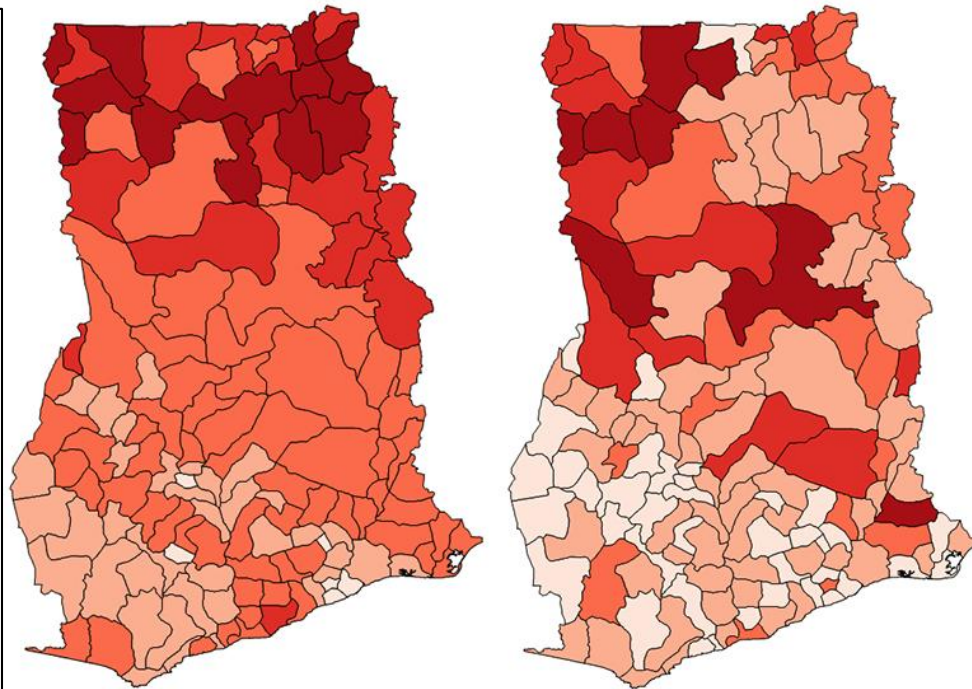


Land Cover data is from the Climate Change Initiative Land Cover Map of Africa (ESA-CCI, 2017). Country-level indicators are from the World Bank's World Development Indicators.

Ghana CEA and SCD

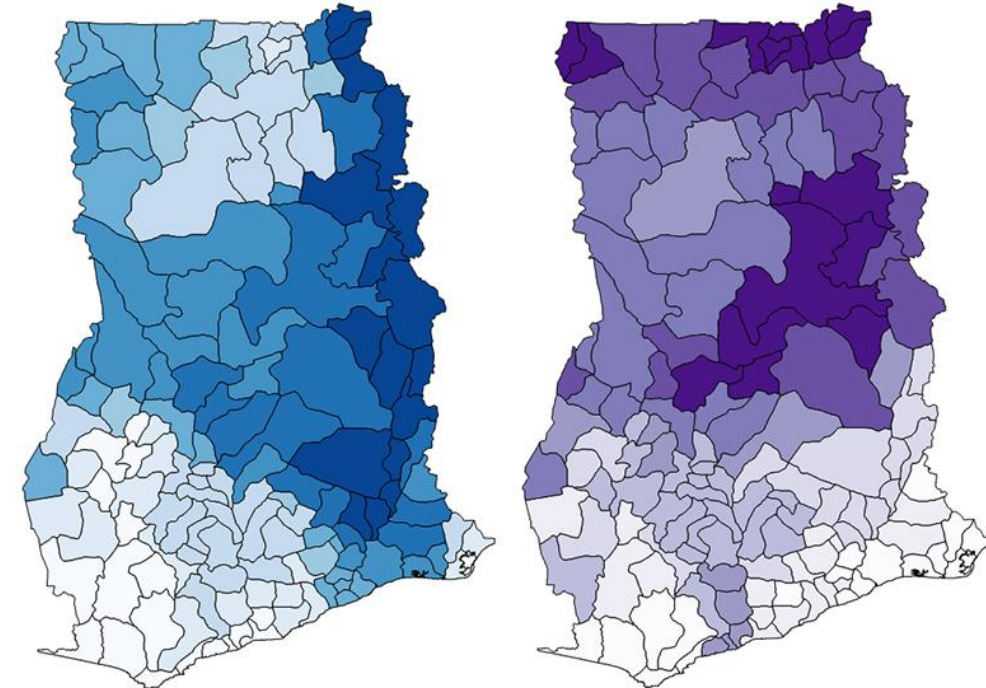
Analysis of the impact of soil degradation and droughts on poverty and employment

Concentration of Poverty across Districts
2000 2010



Sources: (Coulombe 2005) and Ghana Statistical Service (2015).

Number of floods (1985-2011) Drought severity (1901–2008)



Source: Hidden Dimensions of Poverty Dataset (HDD).

Note: The colors correspond to eight quantiles of the distribution of the flood frequency and drought severity.

Public Disclosure Authorized

Document of
The World Bank

Report No. 132010-GH

GHANA
PRIORITIES FOR ENDING POVERTY AND BOOSTING
SHARED PROSPERITY
SYSTEMATIC COUNTRY DIAGNOSTIC

November 14, 2018

Public Disclosure Authorized

International Development Association
Country Department AFCW1
Africa Region

International Finance Corporation
Sub-Saharan Africa Department

Multilateral Investment Guarantee Agency

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3. How can we access HDD?

HDD internal page: <http://hdd>

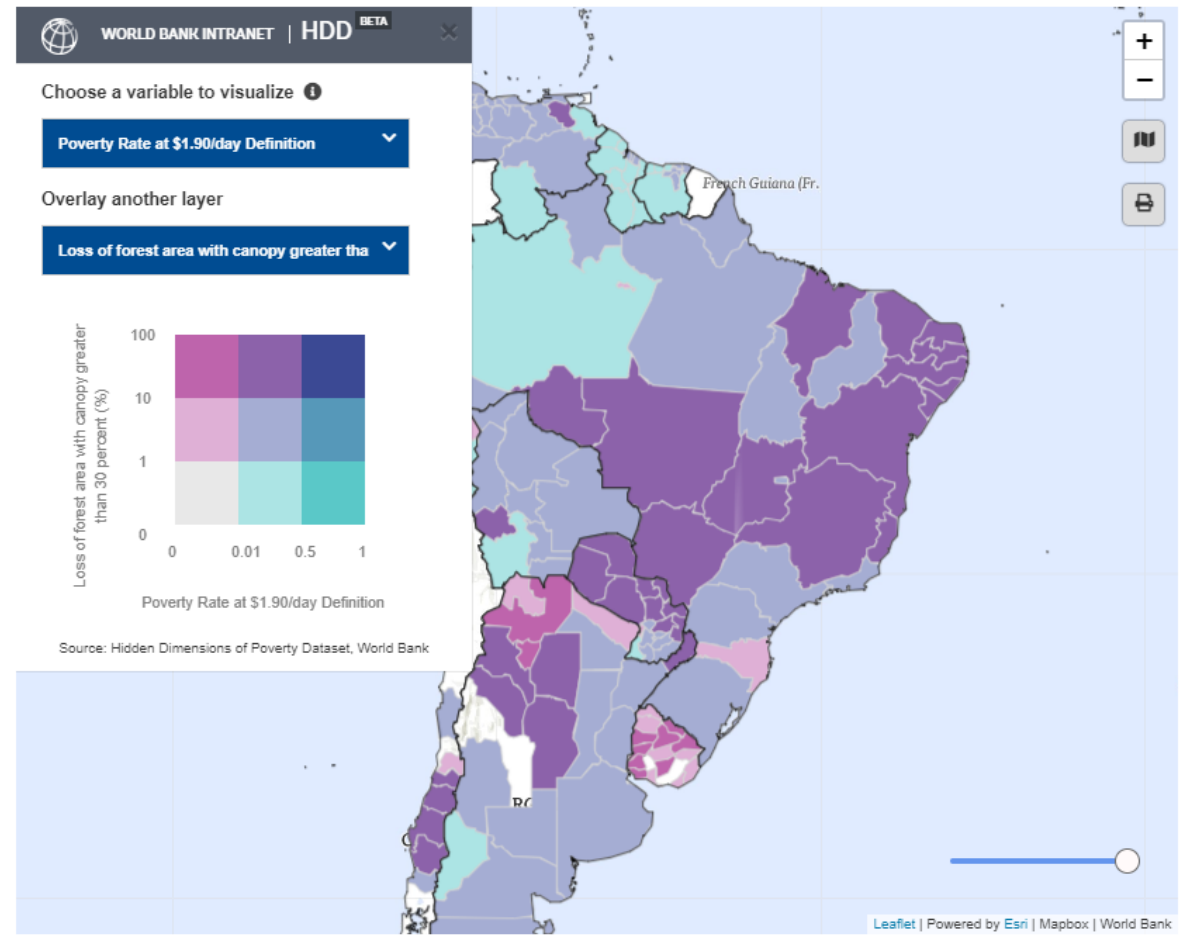
Development Data Hub (<http://ddh/>) pages:

- HDD: <https://datacatalog.worldbank.org/dataset/hidden-dimensions-poverty-dataset-hdd>
- Subnational poverty data: <https://datacatalog.worldbank.org/dataset/international-poverty-line-subnational-poverty>

Environment and Sustainability Data Platform [Home](#) [Available Indicators](#) [Contact](#)

Brazil

Hidden Dimensions Of Poverty Dataset Visualization Tool:



Environment and Sustainability Data Platform

QA version available for comments and feedback:

<http://datatopicsqa.worldbank.org/ENR/home>

4. What are other potential uses of HDD?

- Project preparation and design
- Project targeting
- Integration of environmental data in the existing macroeconomic models and tools
- More systematic and comprehensive hotspot analysis
- More internal use in GPs, Global Themes and Country and Regional Units
- External use by clients, development partners and academics after the public launch

Any questions?

Please send an email to HDD@worldbank.org (or Shun Chonabayashi at schonabayashi@worldbank.org).