

# Transforming our world: the 2030 Agenda for Sustainable Development

## Transforming institutional settings in Asia and the Pacific

**The Future of Economic Statistics  
Agenda item 4 Institutional Setting**

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# Who is ESCAP?

The **United Nations Economic and Social Commission for Asia and the Pacific**

*“...the regional development arm of the United Nations for the Asia-Pacific region”*

One of five Regional Commissions of the United Nations

Works closely with other UN programmes and agencies, the Asian Development Bank, NGOs and civil society

53 Member States (including China) and 9 Associate Members

Two thirds of the world's population is located in the ESCAP region. China is ranked No. 1 by population.



# ESCAP Committee on Statistics

*“ ... by 2030, **national statistical systems** are **enabled and empowered** to lead development of and to deliver innovative, trusted and timely products and services for urgently needed and evolving statistical requirements of Agenda 2030.”*

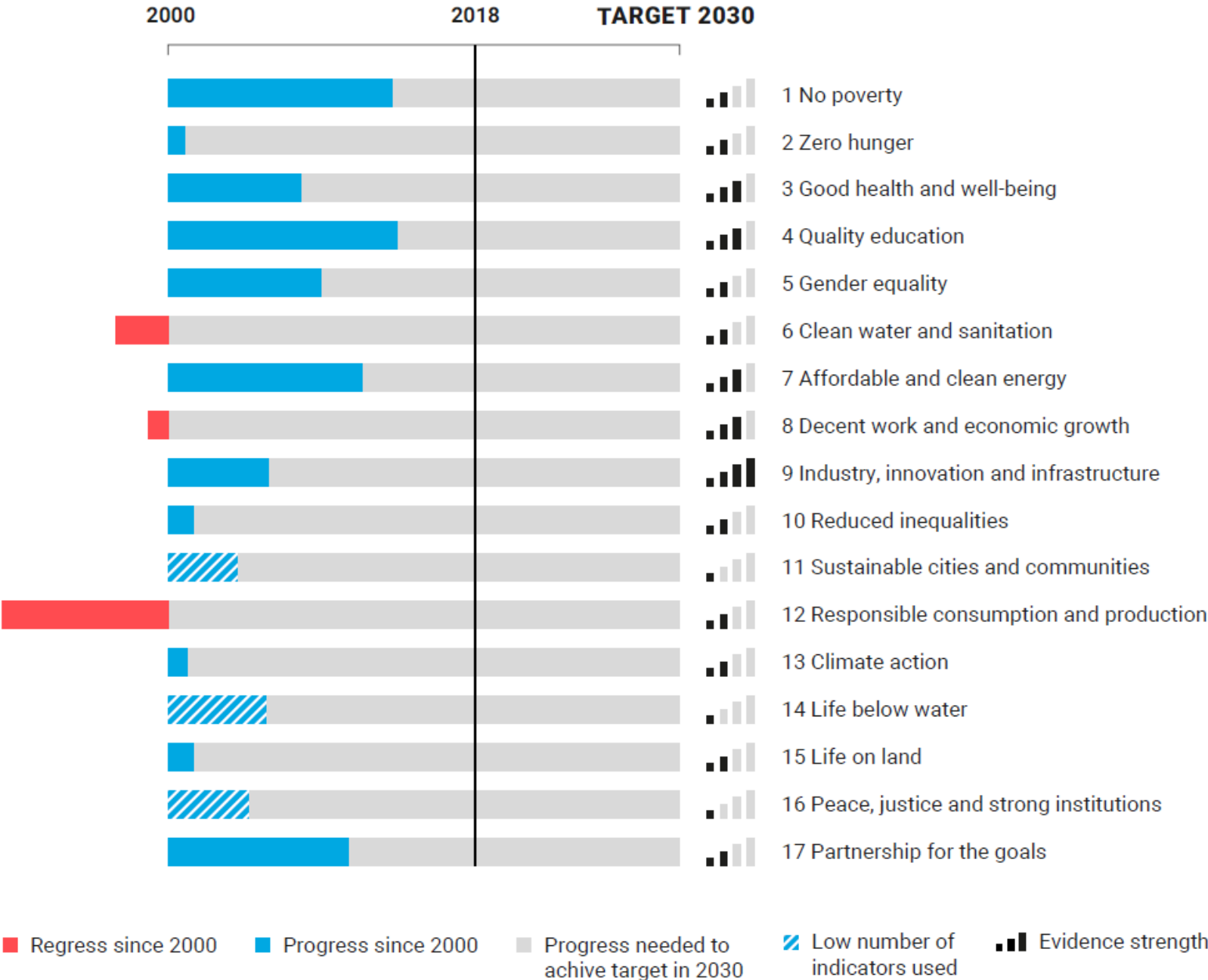


## How is Asia and the Pacific going?

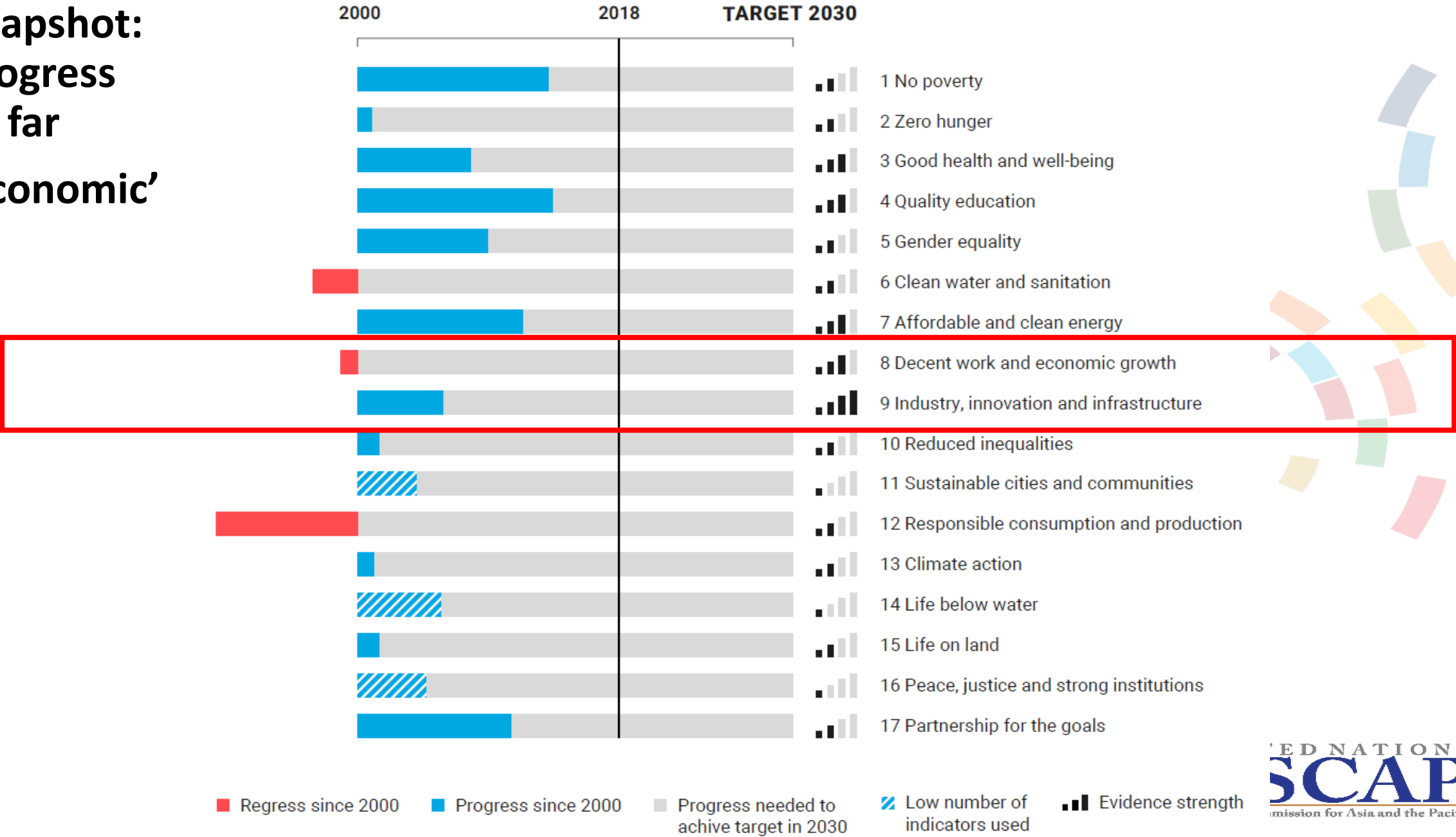
- How much progress has been made since 2000 in regards with each of the 17 SDGs?
- How likely will the targets be achieved by 2030, judging by pace of progress thus far?



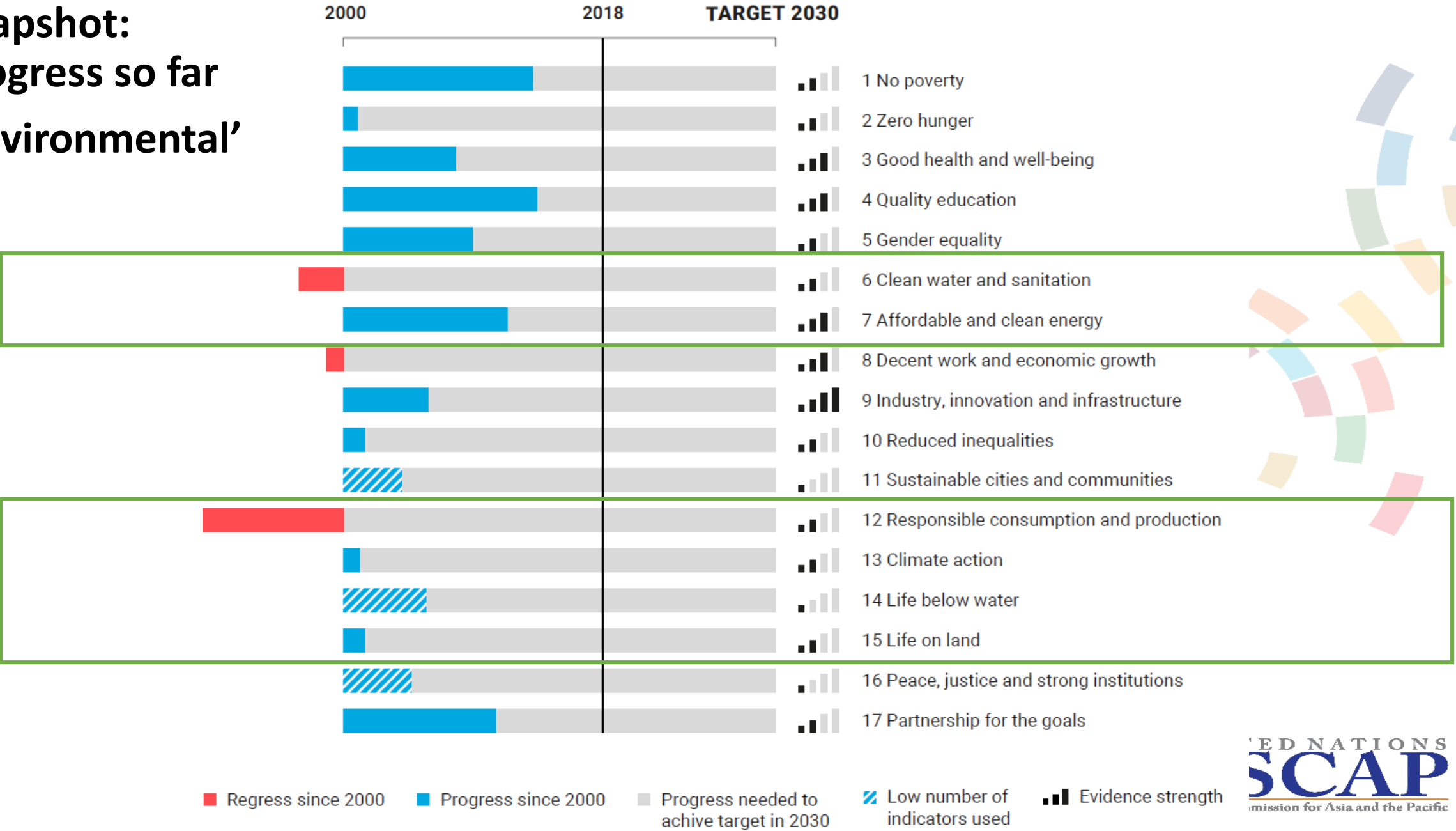
# Snapshot: progress so far



# Snapshot: progress so far 'Economic'



# Snapshot: progress so far 'Environmental'







Insufficient data: 7/20 targets (35%)

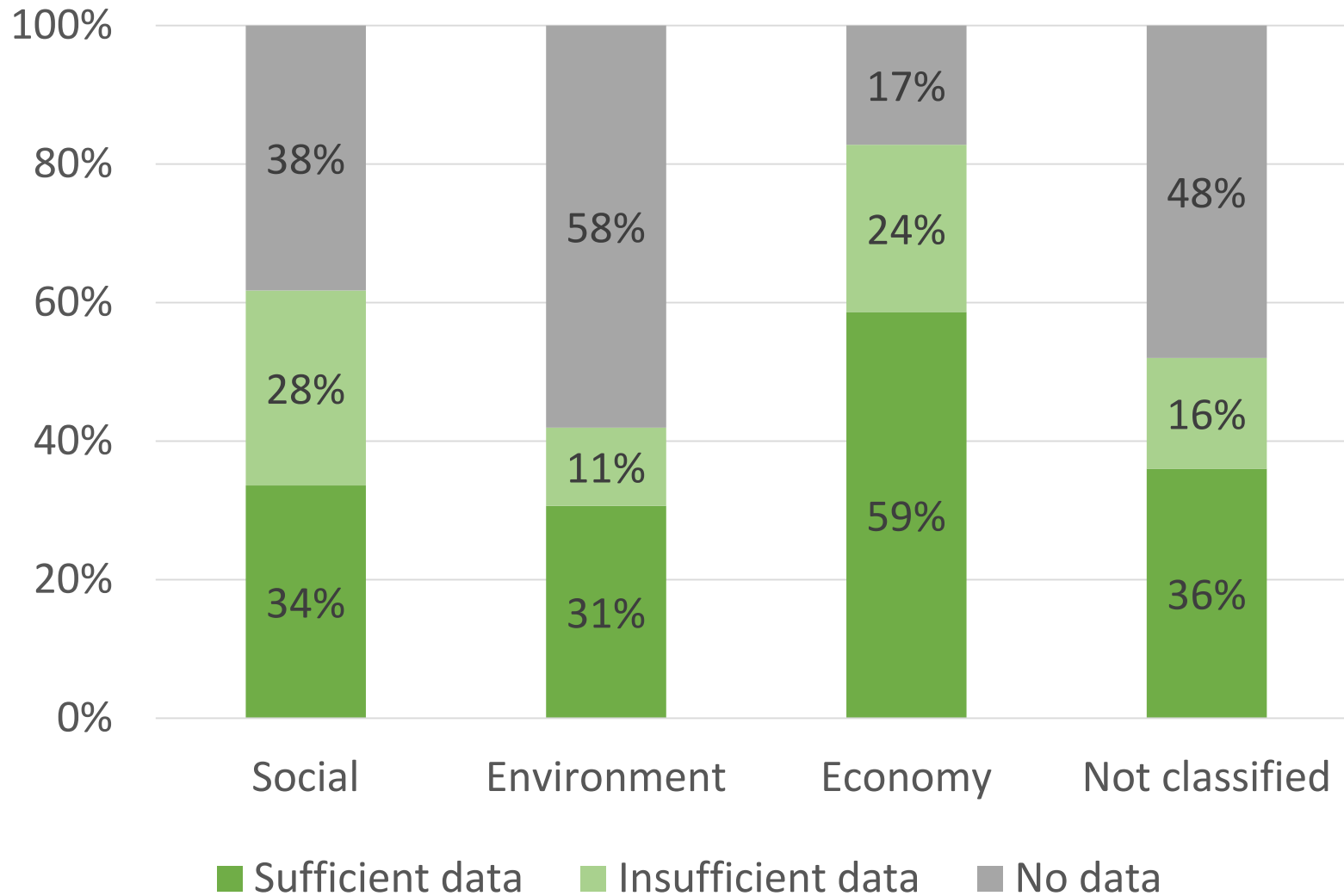
Goal 1	1.1 International poverty	1.2 National poverty	1.a Resources mobilization	1.5 Resilience of vulnerable	1.3 Social protection	1.4 Equal rights	1.b Sound Policy frameworks						
Goal 2	2.1 Food security	2.2 Malnutrition	2.3 Agricultural productivity	2.a Investment in agriculture	2.5 Genetic diversity	2.4 Sustainable food production	2.b Trade restrictions in agriculture	2.c Food commodity markets					
Goal 3	3.1 Maternal mortality	3.2 Neonatal & child mortality	3.b R&D of medicines	3.d Risk management capacity	3.9 Health impact of pollution	3.3 Communicable diseases	3.4 NCD & mental health	3.7 Sexual & reproductive health	3.6 Road traffic accident	3.c Health financing	3.8 Health coverage	3.5 Substance abuse	3.a Tobacco Control
Goal 4	4.c Qualified teachers	4.1 Effective learning outcome	4.6 Adult literacy & numeracy	4.2 Early childhood development	4.3 TVET & tertiary education	4.5 Equal access to education	4.4 Skills for employemnt	4.7 Knowledge & skills on SD	4.a Education facilities	4.b Scholarships available			
Goal 5	5.5 Women in leadership	5.1 Discrimination against women...	5.2 Violence against women & girls	5.3 Early marriage	5.4 Unpaid work	5.6 Reproductive health & rights	5.a Equal economic rights	5.b Use of technology	5.c Gender equality policies				
Goal 6	6.2 Sanitation & hygiene	6.1 Safe drinking water	6.4 Water-use efficiency	6.6 Water-related ecosystems	6.3 Water quality	6.5 Water resources management	6.a International cooperation	6.b Participation of local communities					
Goal 7	7.1 Access to energy services	7.3 Energy efficiency	7.2 Renewable energy	7.a International cooperation	7.b Energy infrastructure								
Goal 8	8.6 Youth NEET	8.8 Labour rights	8.5 Employment & decent work	8.10 Capacity of financial institutions	8.4 Global resource efficiency	8.2 Economic diversification...	8.1 Per capita economic growth	8.3 Development-oriented policies	8.7 Child & forced labour	8.9 Sustainable tourism	8.a Aid for Trade	8.b Global strategy for youth...	
Goal 9	9.c Access to ICT	9.4 Upgrade infrastructure	9.5 Research & tech capabilities	9.1 Infrastructure development	9.b Domestic technology...	9.2 Industrialization	9.3 Access to financial services	9.a Resilient infrastructure					
Goal 10	10.1 Income growth (bottom 40%)	10.c Transaction costs of remittances	10.2 Social, economic & political inclusion	10.4 fiscal & Social protection policies	10.3 Inequalities of outcome	10.5 Global financial markets	10.6 inclusive global governance	10.7 Safe migration & mobility	10.a Differential treatment for...	10.b ODA & financial flows			
Goal 11	11.1 Housing & basic services	11.2 Transport systems	11.6 Air quality & waste management	11.5 Resilience to natural disasters	11.3 Inclusive & sustainable...	11.4 Protect cultural & natural heritage	11.7 Green & public spaces	11.a Urban planning	11.b Disaster risk management policies	11.c Sustainable & resilient buildings			
Goal 12	12.2 Sustainable use of natural resources	12.4 Managing chemicals & wastes	12.1 Sustainable consumption...	12.3 Food waste & losses	12.5 Reducing waste generation	12.6 Sustainability information...	12.7 Public procurement...	12.8 Information on SD	12.a Scientific & technological...	12.b Sustainable tourism	12.c Fossil-fuel subsidies		
Goal 13	13.2 National climate change policies	13.1 Resilience & adaptive capacity	13.3 Climate change awareness	13.a Needs of developing countries	13.b Planning & management...								
Goal 14	14.5 Conservation of coastal areas	14.2 Marine & coastal ecosystem	14.1 Marine pollution	14.3 Ocean acidification	14.4 Destructive fishing	14.6 Fisheries subsidies	14.7 Marine resources in SIDS	14.a Research capacity & marine...	14.b Small-scale artisanal fishers	14.c Implementing international law			
Goal 15	15.2 Forests management	15.4 Mountain ecosystems	15.5 Loss of biodiversity	15.1 Terrestrial & inland freshwater	15.3 Desertification	15.6 Utilization of genetic resource	15.7 Protected species	15.8 Invasive alien species	15.9 National & local planning	15.a Financial resources	15.b Resource mobilization	15.c Trafficking of protected species	
Goal 16	16.1 Reduction violence	16.b Non-discriminatory laws	16.2 Violence against children	16.3 Justice for all	16.4 Illicit financial & arms flows	16.5 Corruption and bribery	16.6 Effective institutions	16.7 Inclusive decision-making	16.8 Inclusive global governance	16.9 Legal identity	16.10 Public access to information	16.a Violence, terrorism & crime	
Goal 17	17.19 Statistical capacity	17.8 Technological capacity-building	17.4 Debt sustainability	17.11 Exports of developing countries	17.10 Multilateral trading	17.9 Capacity building for SDGs	17.6 International cooperation	17.1 Tax & other revenue	17.3 Additional financial resources	17.2 Developed countries...	17.5 Investment promotion for LDCs	17.7 Transfer of technologies	17.12 Duty-free market access
	17.13 Global macroeconomic...	17.14 Policy coherence for SD	17.15 Country's policy space	17.16 Global partnership for SD	17.17 Public, public-private and civil...	17.18 Data availability							

## Dashboard: expected achievements

Insufficient data: 34/51 targets (67%)

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# SDG data availability in Asia-Pacific by development dimension



**Economy, SDGs 8, 9, 29 indicators**

**Social, SDGs 1-5; 10-11; 16, 128 indicators**

**Environment, SDGs 6,7; 12-15, 62 indicators**

**Not classified, SDG 17, 25 indicators**

# Key messages

Lots of data gaps

- Economic statistics are not the worst

Lots of 'technical assistance' required

- How should countries actually produce these indicators?

Lots of 'statistical infrastructure' gaps

- how do we know when a statistic based on a new data source complies with the Fundamental Principles of Official Statistics?
- How do we **enable and empower** NSOs to use new data sources and new data methods?

# Enablement

Enabling NSOs to

- coordinate the NSS
- Fill data gaps
- Use statistical infrastructure
- Use new methods
- Use new data sources



# The Sustainable Development Goals highlight the need for new data and partnerships



# Non traditional data sources





# Australia: Using scanner data for CPI

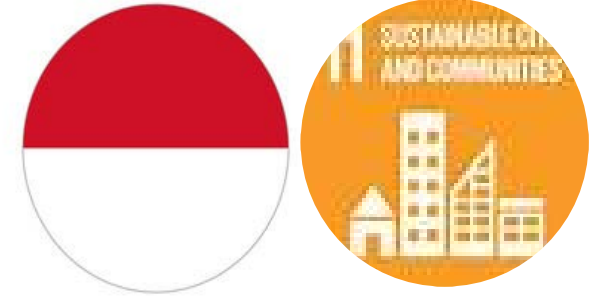


- **Transactions** data used to compile ~ 25% of CPI
  - Initial method directly replaced field collected prices with unit values derived from transactions data
  - Current method applies multilateral methods to make use of price and expenditure information and full range of products
- Increasingly using **webscraped** data (used to compile ~10% of CPI)
- The ABS **consulted widely** with the statistical and user community prior to implementing
- **Quality benefits:**
  - census of products used (no sampling),
  - expenditure data re-weights index each period
- **Cost benefits:**
  - less labour intensive,
  - more frequent and more items can be priced,
  - potential to develop spatial price indexes





# Indonesia: Using mobile phone data



- 350 million active mobile phone numbers
- All numbers need to be registered
- Location based services and call detailed records
- Used for: foreign tourists at cross border posts, domestic visitors, commuter estimation and event based analysis (Asian Games and IMF-WB Annual meeting)

# Afghanistan: Using geospatial data for population estimates



Last census was in 1979

Significant uncertainties in national and subnational estimates

One-third of country covered by a rolling census (SDES), but insecurity preventing additional data collection

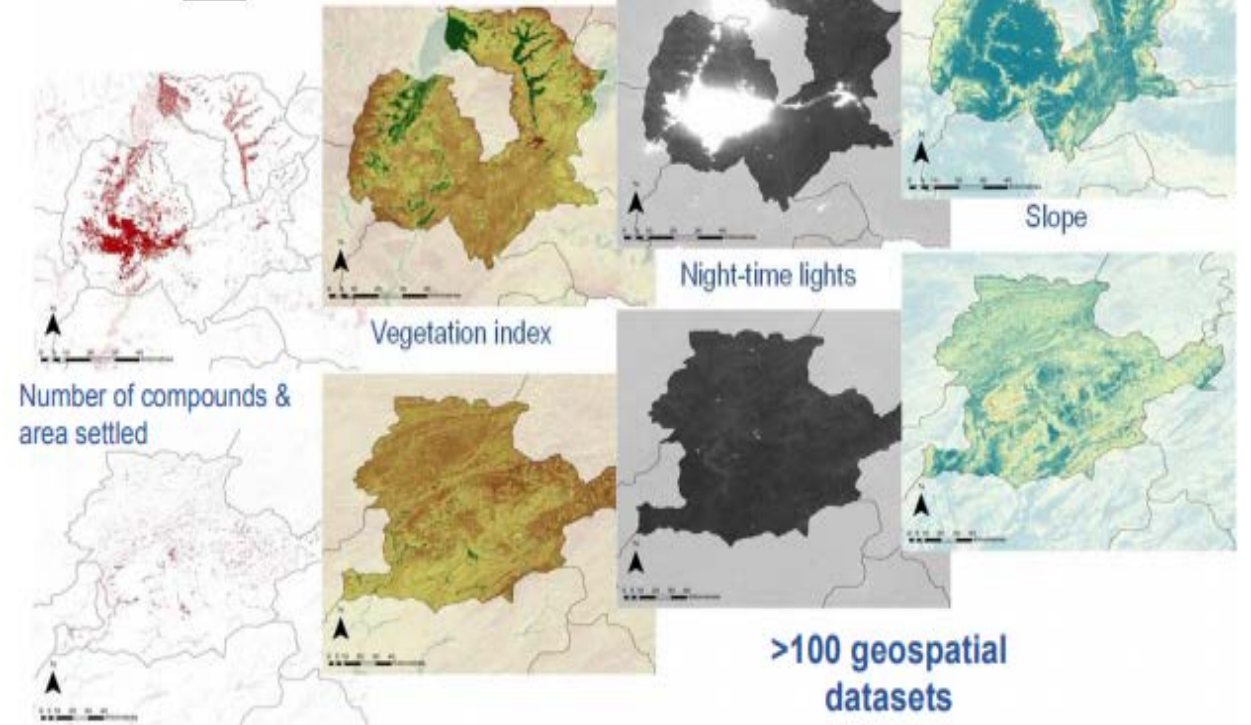
Exploration of new methods for obtaining subnational population numbers

High resolution population mapping

Model based estimates

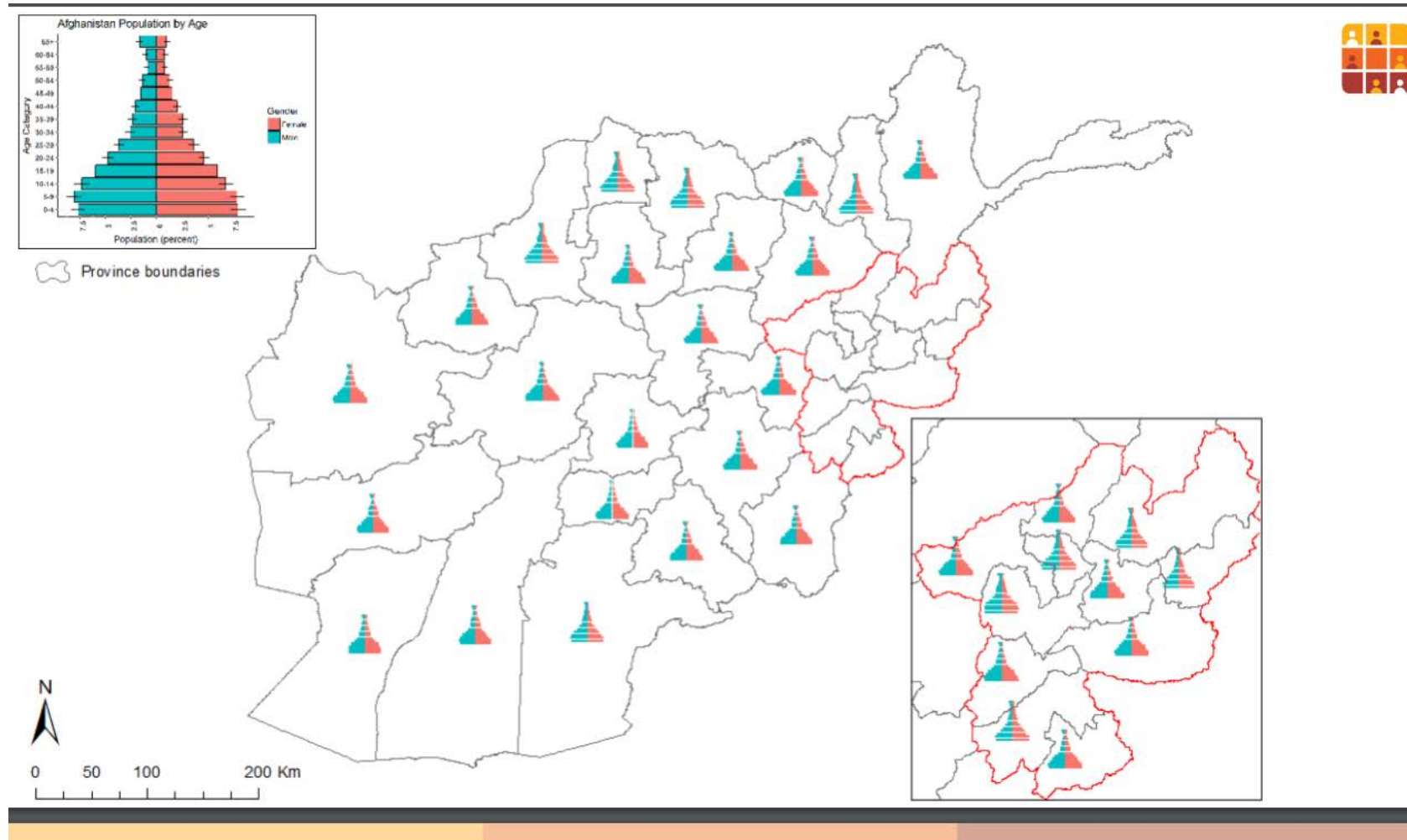
Using bottom-up approaches to derive population estimates

Example geospatial datasets for population prediction



>100 geospatial datasets

# Afghanistan: Using geospatial data for population estimates



[http://ggim.un.org/unwgic/presentations/1.4-Donna\\_Clarke.pdf](http://ggim.un.org/unwgic/presentations/1.4-Donna_Clarke.pdf)

BILL & MELINDA  
GATES foundation



world pop  
FLOWMINDER.ORG



Center for International Earth  
Science Information Network  
EARTH INSTITUTE | COLUMBIA UNIVERSITY

# Non traditional data methods





# Thailand: using GIS for disaggregation

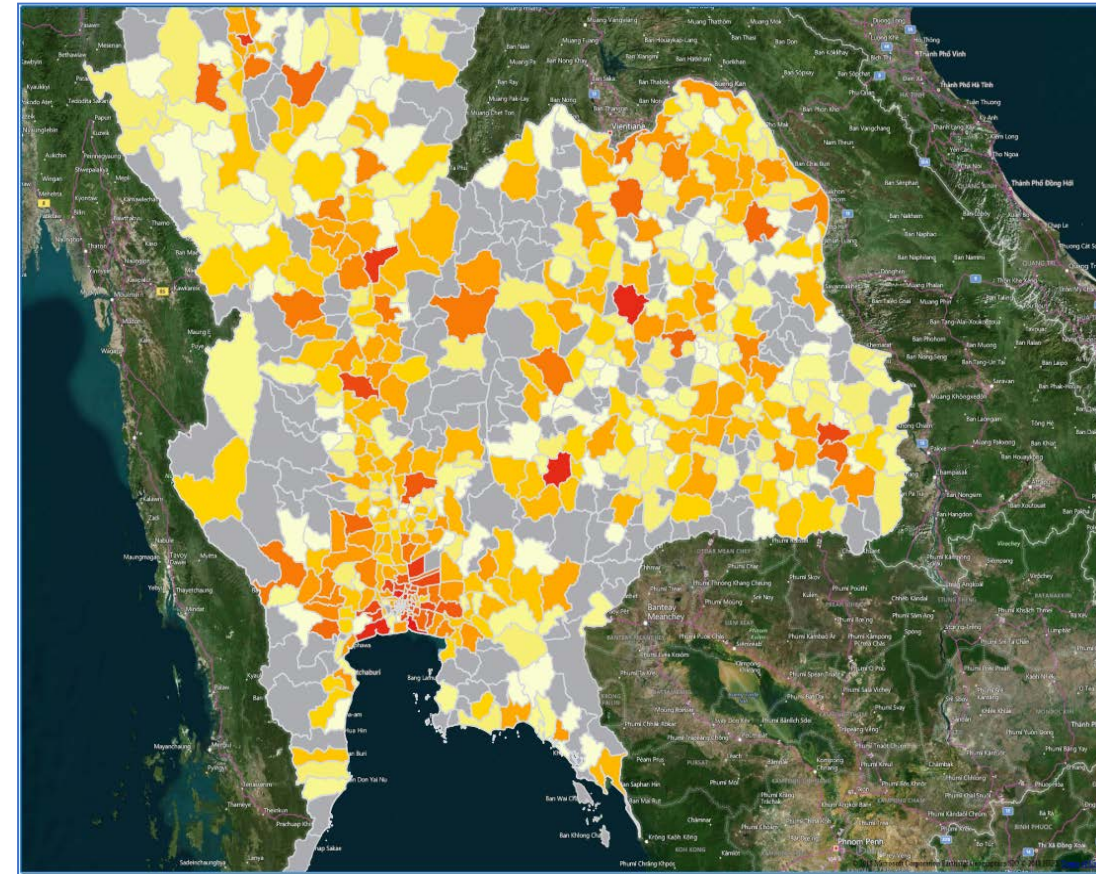


Census data re-allocated to a grid



Flood hazard areas

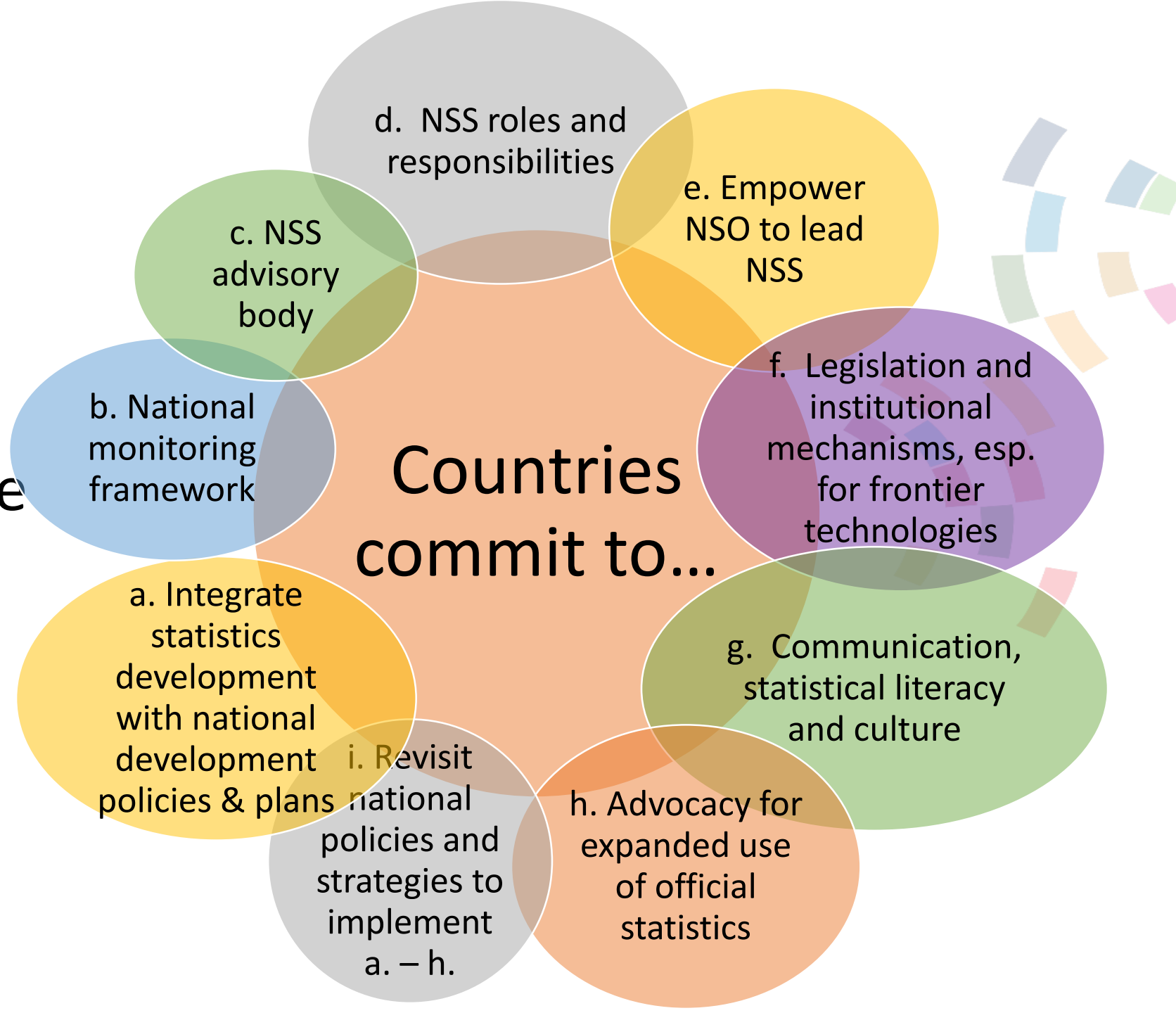
Land-cover data



# Empowerment

Agenda 2030 is a country-led agenda

In Asia-Pacific, countries have made nine commitments including to use frontier technologies, big data, new methods



# UN ESCAP is supporting the enablement of NSOs



## Technical support and capacity building

Using geospatial/earth observation data for official statistics, Bangkok, June 2018

Using mobile phone data for official statistics workshop, Jakarta, June 2019

ISI Symposium on Data Science and Official Statistics, August 2019



## Convening and consensus building

Global Working Group on Big Data for Official Statistics

Task Team on skill, capacity development

ISI Special Topic Session: Big Data and Official Statistics in Asia and the Pacific (STS 358) (China, Thailand, Indonesia, Nepal, Philippines, Australia)



## Research and analysis

Using GIS for disaggregation

Using scanner and web-scraped data for CPI: lessons from Asia-Pacific (forthcoming)

Big data and official statistics: a practical guide (forthcoming)



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The UN 2030 Agenda for Sustainable Development increases the need for **innovation** –including new institutional settings, new data sources, new methods, new partnerships, new conversations

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Everyone in national statistical systems need to **work together** – statisticians, geospatial experts, digital community, line ministries, private sector, civil society, lawyers, planning ministries, politicians

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Keeping in mind the need to produce **official statistics** not just data or statistics

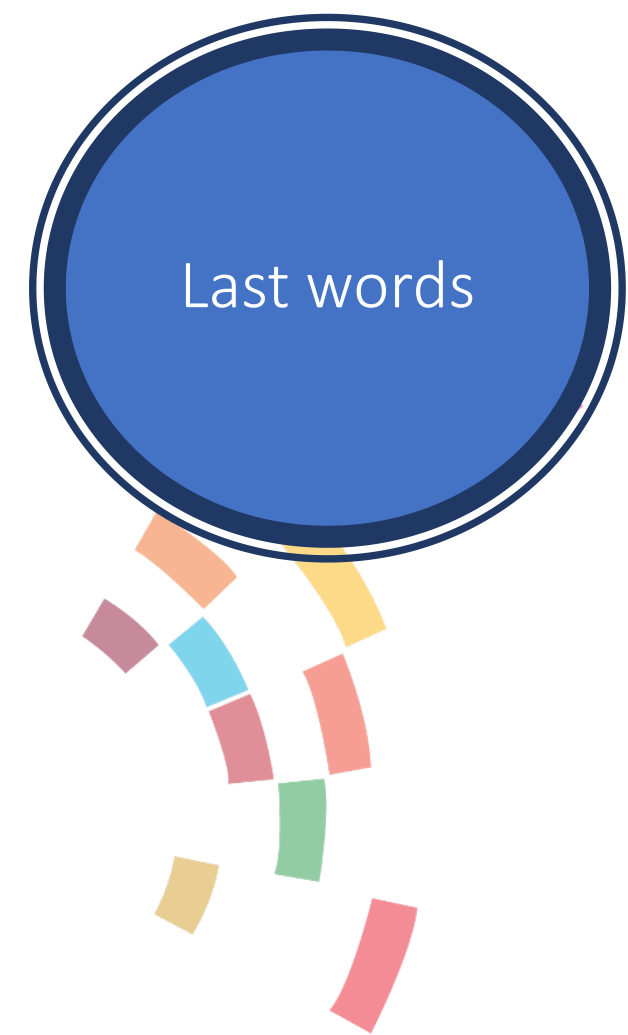
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**Institutional transformation** is as essential as statistical transformation

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UN ESCAP is supporting NSOs to be **enabled and empowered**

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Thanks.... 😊

