



भारत 2023 INDIA

# Digital Public Infrastructure to Boost the Sustainable Development Goals

DIGITAL ECONOMY WORKING GROUP SIDE EVENT

वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY • ONE FUTURE



**Mr. Robert Opp**  
**Chief Digital Officer**  
**United Nations Development Programme**



# Halfway to 2030, but we are not on track

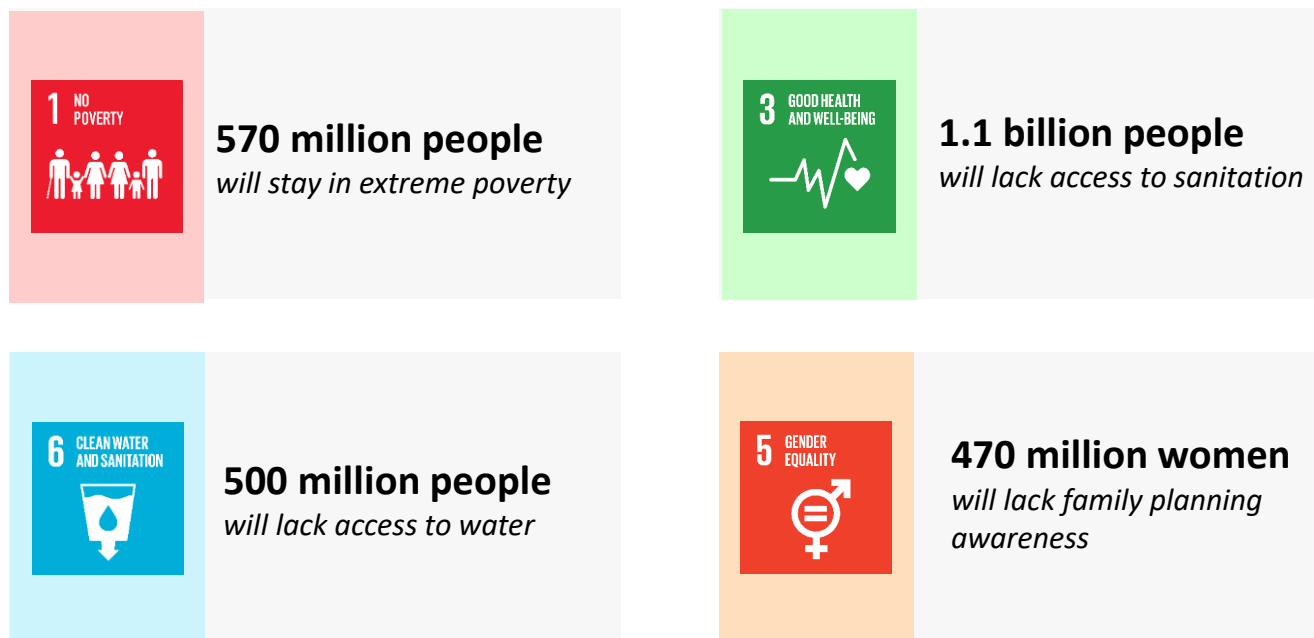
We are currently on track to meet only

## 26 of 169

SDG targets by 2030<sup>1</sup>

Amongst the rest, 64 have insufficient data, 15 are showcasing reverse trends and 64 are progressing

Unless we change course, the SDG shortfalls will lead to immense impact in 2030<sup>2</sup> (Estimated)



# Inclusive, rights-based and sustainable Digital Public Infrastructure can accelerate SDG progress

## Understanding Digital Public Infrastructure

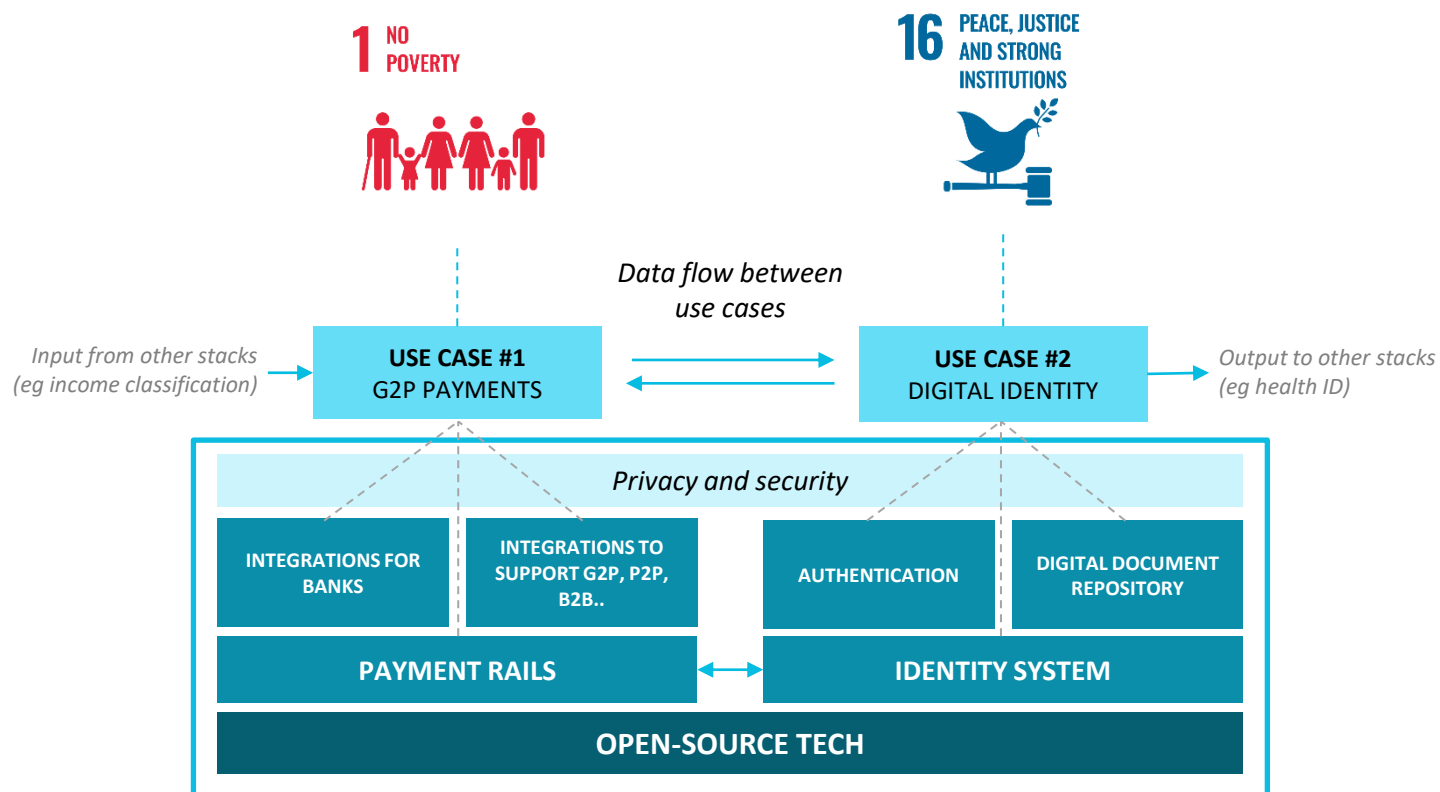
DPI is a set of shared digital solutions that are powered by open and interoperable standards and are working together to provide public services at population scale.

## Benefits

 **Efficient**

 **Inclusive**

 **Resilient**



# Early evidence suggests that there are three archetypes of SDGs, based on DPI maturity

## GROUP 01

Mature DPI that has been developed and scaled



## GROUP 02

DPI that is on the path of maturity



## GROUP 03

Use-cases for DPI exist, but they are still in nascent stages



# DPIs in areas of G2P, ID and health are already accelerating progress towards the SDGs

SDG	Challenges to solve for	Use Cases	Impact Stories
<p><b>1 NO POVERTY</b></p>	<p>Vulnerable communities (e.g., informal workers, women, etc.) are hard to identify and reach</p>	<p>Systems to identify vulnerable populations as well as to rollout public services</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>India's digital identity platform</p> <p><b>49%</b></p> <p>residents used Aadhaar to access selected public service for the first time<sup>1</sup></p> </div> <div style="text-align: center;"> <p>Philippines' digital identity platform</p> <p><b>19mn</b></p> <p>eIDs issued within one year to improve access to social and financial services<sup>2</sup></p> </div> </div>
<p><b>3 GOOD HEALTH AND WELL-BEING</b></p>	<p>Poor management systems prevent mass health campaigns, leads to increased pressure on health infrastructure</p>	<p>Systems that support, enrolling, scheduling, and tracking of doctor visits, medicines, vaccinations, etc</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Sri Lanka's DHIS2 linked COVID-19 platform</p> <p><b>2 days</b></p> <p>to develop and scale the disease tracking module nation-wide<sup>4</sup></p> </div> <div style="text-align: center;"> <p>India's portal for COVID-19 vaccination</p> <p><b>1bn</b></p> <p>doses provided over nine months<sup>3</sup></p> </div> </div>
<p><b>10 REDUCED INEQUALITIES</b></p>	<p>Vulnerable communities (e.g., informal workers, women, etc.) lack financial awareness</p>	<p>Systems to identify vulnerable populations as well as to make efficient, fast, and accessible social transfers</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Brazil's payments platform</p> <p><b>40 mn</b></p> <p>individuals made their first-ever financial transfer using PiX<sup>5</sup></p> </div> <div style="text-align: center;"> <p>Togo's G2P platform</p> <p><b>572,852</b></p> <p>informal workers reached in Phase 1 of the COVID-19 relief program<sup>6</sup></p> </div> </div>

Sources: (1) State of Aadhar Report, 2019. (2) PhilSys, [PSA Prints Over 50 million PhilIDs and ePhilIDs](#), 2023; (3) Exemplars in Global Health, [CoWIN in India](#), 2022; (4) Exemplars in Global Health, [Scaling DHIS2 in Sri Lanka](#); (5) NITI Ayog, [Protecting UPL](#); (6) World Bank, [Prioritizing the Poorest and the Most Vulnerable in West Africa](#), 2021

# Applications of DPI are emerging in areas like climate, justice and education with the potential to scale

## SDG

## Challenges to solve for

## Use Cases

## Impact Stories



**Urgent need for global cooperation on data and other information to support climate action**



*Systems that manage carbon offsets and trading, forest preservation, weather information and monitoring*



*Open platform for real-time deforestation alerts*

**52%**

*decrease in deforestation among empowered communities<sup>1</sup>*

**Carbon Cooperation Platform**

*UNDP supported platform to facilitate green financing*

**27mn tCo2e**

*GHG emissions to be reduced through increased funding of climate projects<sup>2</sup>*



**Lack of access to justice due to limited capacity of local and national systems, high costs of litigation and inefficient procedures**



*Case management systems, online dispute resolutions*

**Mizan**

*Palestinian e-justice platform*

**14%**

*reduction in case backlog in 2019<sup>3</sup>*



*Brazil's alternate dispute resolution platform*

**77%**

*successful resolution of over one million online complaints within a year<sup>4</sup>*



**Need for investment in financial, human, and technical resources to scale educational initiatives**



*Learning management system that supports digital delivery of education, collaboration and access to digital resources*



*India's digital learning platform*

**100,000 +**

*e-learning resources across 30 languages for teachers to access<sup>5</sup>*



*Bangladesh's e-learning platform*

**285,000**

*healthcare professionals were trained during COVID-19<sup>6</sup>*



# There remains immense potential across other SDGs to develop and scale innovative DPIs

## SDG

## Prospective areas for DPI solutions



1

**Modelling energy demand and supply:** Urban energy modeling tools that simulate energy demand, energy supply potentials, system designs and optimization

2

**Decentralised energy grids:** DLT-supported innovations to digitize, automate, and decentralise the operation of the electricity grid

3

**Environmental labelling scheme:** Environmental labelling for data centres and computers to increase transparency and to control energy consumption of the ICT sector



1

**Digital forums and networks:** For connecting women to mentors, professional peer groups, service providers and support groups for issues like GBV and domestic violence

2

**Financial systems for women:** Leveraging insights for budgeting during pregnancy and childbirth, insurance for women during pregnancy or travel, etc.

3

**Confidential case management systems:** Confidential case management, collection of evidence and incident monitoring for gender-based violence



1

**Data collection and coordination:** Redistributing resources between households; establishments with excess supply or by-products and those that have a demand

2

**Systems for monitoring and prediction:** Digital systems that monitor waste generation for better decision-making; prediction of demand to avoid waste

3

**Monitoring, analysis and sharing of data:** Digital systems to make supply chains more efficient



1

**Data collection, image processing, analytics systems:** Monitoring and setting goals for biodiversity levels to catalyse action amongst grassroot workers, climate advocates, policy-makers and implementors

2

**Systems to catalyse green funding:** Digital platforms and protocols to connect funders to last mile workers who are planting trees, replenishing ecosystems, etc.

3

**Systems to predict, avoid and react to poaching and trafficking:** Smart image and audio sensors for automated alerts and AI systems to predict the behaviour of poachers



## Closing the knowledge gap on DPI4SDGs

### ACTION RESEARCH

Identify and showcase how DPI can be harnessed as an accelerator of the SDGs, and support countries in their digital transformation journey towards achieving national development priorities

To **showcase the transformative ability of DPI** in driving sustainable development and supporting countries in their digital transformation journey

To **promote responsible tech, strengthen institutions, and mitigate potential risks** by identifying governing principles, frameworks, and recommendations

To **spotlight technologists, civil society, governments, and other actors** that have driven adoption and share their learnings and experiences



# Meet Our Panel

## SPEAKERS



### **Melisa Tekeli**

Industry and Technology Associate  
Expert at the Ministry of Industry and  
Technology, Republic of Turkey



### **Joshua Bamford**

Head of Tech & Digital, Science,  
Innovation and Technology,  
Government of UK



### **Viraj Tyagi**

Chief Executive Officer,  
eGov Foundation



C.V. Madhukar  
CEO, Co-Develop



### **Dr. Paulin Basinga**

Global Director, Program Advocacy and  
Communications, Global Policy and Advocacy,  
Bill & Melinda Gates Foundation

## MODERATED BY

### **Keyzom Ngodup Massally**

Head of Digital Programmes,  
Chief Digital Office, UNDP

## CONCLUDING REMARKS

### **Mr. Nagaraj Naidu Kakanur,**

Joint Secretary, G20 Secretariat,  
Ministry of External Affairs, Government of India

# Q&A

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## **MODERATED BY**

**Keyzom Ngodup Massally**

Head of Digital Programmes,  
Chief Digital Office, UNDP

# Concluding Remarks

**Mr. Nagaraj Naidu Kakanur,**  
Joint Secretary, G20 Secretariat,  
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