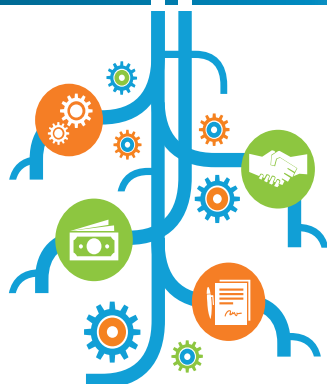




# DIGITAL TECHNOLOGY FOR DEVELOPMENT

Sustainable Development and Climate Change Department



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## ADB Key Facts



Founded 1966, 68 members, 3200 staff from 60 countries

Total capital: \$152 billion, annual commitments: \$32B

Covid-19 Response: \$20 billion

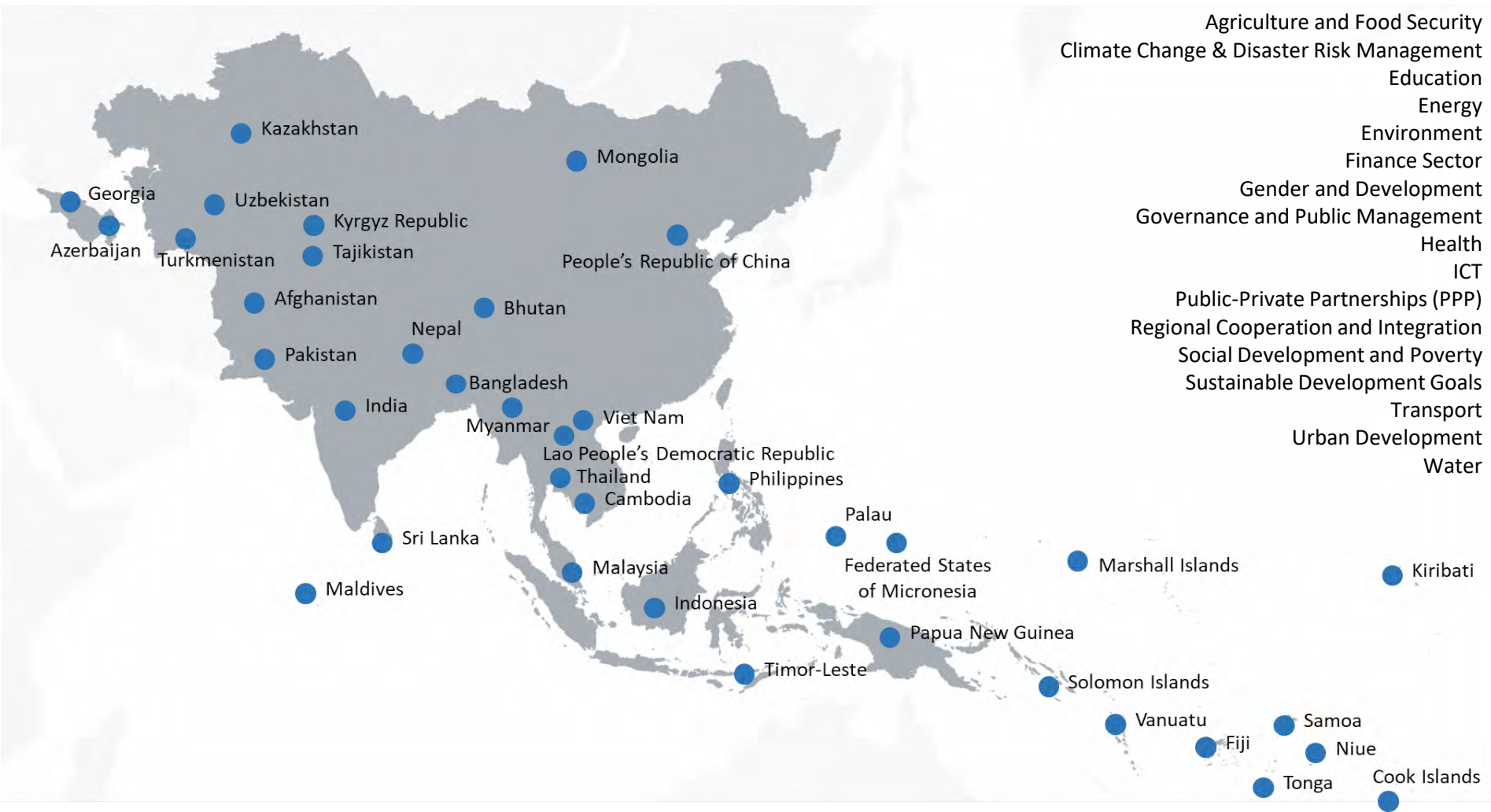




# ADB Developing Member Countries

Wide range of development contexts and challenges

17 Sector and Thematic Areas





# What are the implications of COVID-19?



- Pandemic is accelerating the trend toward digital economy:
  - Remote work solutions to support working from home
  - Use of ecommerce for delivery of food and goods
  - Digital payments for government support programs
  - Use of eLearning for remote education
  - Use of digital healthcare solutions
  - Online gaming and video entertainment
  - Many lockdown-driven activities may revert back to normal, but many will continue
- Connectivity should be recognized as a basic necessity
  - This is particularly true across Asia, where high growth rates make investments more feasible



# Key challenges from our perspective

Our Developing Member States face many barriers:

- Low-density populations
- Low-income populations
- This combination means more infrastructure cost per user and less revenue potential

Development programs are needed to help bridge the gap

- Universal access funds
- Investment support
- Subsidies to low-income households

Infrastructure levels will vary based on density and geography

- Communications technology is evolving rapidly, making it impossible to mandate the same quality of infrastructure and service everywhere



# What can MDB's do on connectivity?



- Invest in infrastructure projects directly (public, private, PPPs)
  - Submarine cables
  - Communications satellites
  - Broadband networks
  - Last mile connectivity of key infrastructure (such as schools)
- Grants and technical assistance
  - Infrastructure support and project support
- Policy actions
  - Support national broadband plans, competition policy, rural access funds, etc.
- Generate demand and urgency through development initiatives
  - transport, energy, education, health, governance, environment, agriculture, etc.
- Example: ADB connectivity projects:
  - Pacific Submarine Cables
  - Kacific Communications Satellite
  - Philippines Shared Connectivity for Government



# ADB Support for Pacific Submarine Cables



- Completed the main cable system in December 2017
- Currently supporting a terrestrial extension of the cable for better access for the local telecom players

North Pacific Regional Connectivity Investment

ADB funding  
**\$25.00 M**

- For approval in March 2018

Improving Internet Connectivity for Micronesia

ADB funding  
**\$15.00 M**

Others  
**\$36.20 M**

- For approval in March 2018
- Kiribati already signed the contract

Improving Internet Connectivity for Kiribati

ADB funding  
**\$21.00 M**

- Cable became operational in February 2018

Samoa Submarine Cable

ADB funding  
**\$19.00 M**

Others  
**\$32.41 M**

- Main FIJ-TON connection became operation in 2014
- Connection to Outer Islands ongoing

Tonga-Fiji Submarine Cable

ADB funding  
**\$9.70 M**

Others  
**\$23.10 M**

- Approved in December 2017
- Bid evaluation in progress

Improving Internet Connectivity for Cook Islands

ADB funding  
**\$15.00 M**

Others  
**\$10.00 M**

## Legend

===== Cable connection funded by ADB

..... Cable connection funded by others

M = million



# ADB Support for Satellite Connectivity

## Kacific1 Satellite

- ADB provided \$50 million in private sector financing to Kacific to deliver low cost, high-speed, easily accessible broadband internet;
- Kacific1 provides access to broadband internet in remote areas, where no or very limited coverage is currently available (since Dec 2019);
- Enables better education and health services, improves access to information, and drives more trade and connectivity between countries.





## ADB Technical Assistance (examples)

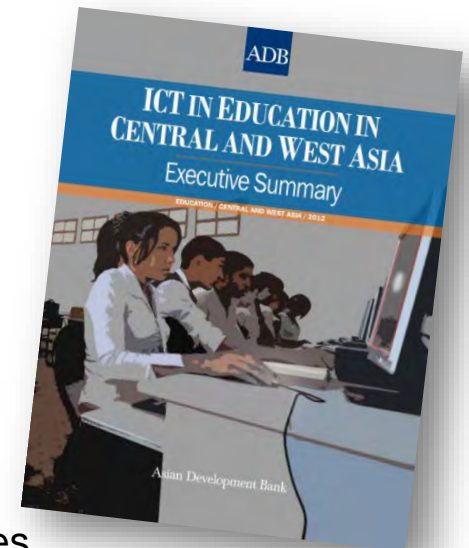


### Advice for Philippines National Broadband Plan

- Research on Network Infrastructure Sharing (now adopted): Studied opportunities, anticipating commercial aspects and other surrounding issues; and providing strategies moving forward.
  - Access fiber/right of way, specifically on the electricity transmission network to provide connectivity for better government services
  - Network expansion & operating costs would reduce
  - Revenue generation for host infrastructure providers through rental revenue and opportunities for private investment
  - Increase competition by providing opportunities for new operators

### Publication: Central & West Asia (2006 – 2012)

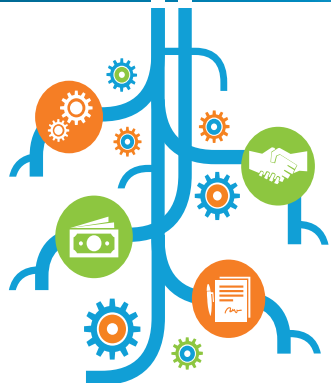
- varying levels of school internet connectivity (in 2012): virtually 100% in Kazakhstan, around 60% in Uzbekistan, 7% in Tajikistan, and 3%–5% in the Kyrgyz Republic
- few countries attempted estimating the total cost of their national ICT for education strategies
- most governments had no clear idea of the costs involved in sustaining effective ICT use in schools.
- little conclusive evidence that ICT significantly improved student performance, even in developed countries with the most substantial ICT-related investments





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