

# #OneSouthAsia Conversations

A World Bank series exploring ideas for regional cooperation in economic connectivity, climate change, and human development



**Top row, from left:** Mamta Murthi, Cecile Fruman, Sania Nishtar  
**Bottom row, from left:** Khondaker Mamun, Anita Gurusurthy, Rabi Karmacharya

Technology and data, when used together, can help dramatically develop South Asia's great human capital potential and reduce poverty. To spur such progress, technology and data can:

- cut the cost of delivering government services;
- reduce waste and misuse of funds that erode confidence in many services, and
- extend more education and health services to marginalized people.

Technology such as machine learning, big data analytics, open-source platforms, and blockchain get plenty of attention. Less publicized – but equally important – is data governance. It sets the rules for how data is used, reused, monetized, and stored.

Both data governance and technology advances are fertile new areas for regional cooperation based on a shared desire to improve education, health care, and skills training for the poor, according to speakers at [Harnessing Technology to Build Human Capital in South Asia](#). The Sept. 16, 2021 public event was the latest in the #OneSouthAsia Conversations series. The conversation with experts from Bangladesh, India, Nepal, and Pakistan followed release of a World Bank research report, [The Converging Technology Revolution and Human Capital: Potential and Implications for South Asia](#). The report identified nine areas in which technology can build, protect, and empower human potential, known also as human capital.

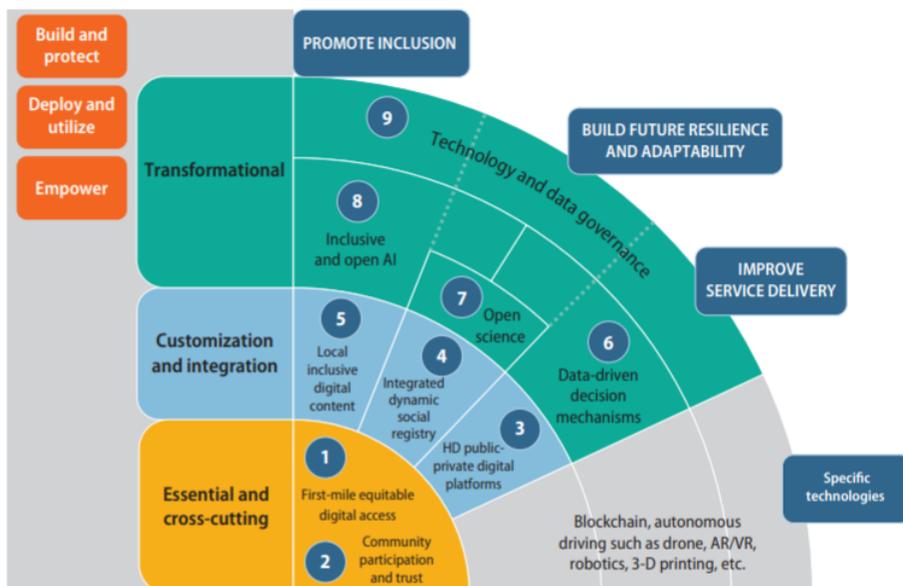
“Regional cooperation for human development has been limited in South Asia but technology opens the door to many possibilities,” said [Cecile Fruman](#), the World Bank’s director of regional integration and engagement in South Asia. “I see opportunities for more knowledge exchanges and data sharing, especially in science and academia, and a strengthened regional voice on digital justice and data governance.”

## Human capital is key to reducing poverty

South Asia has one of the lowest levels of human capital in the world. A human capital index quantifies the contribution of health and education to the productivity of the next generation of workers. The index indicates how much income a country is losing because of human capital gaps. In South Asia, for example, the index shows that a child born in 2019 will achieve less than 50 percent of his or her full potential because of inadequate health care and education.

“That’s the reason why the South Asia team has put together this report. It’s really trying to address this question of how converging technologies can improve human development outcomes,” said [Mamta Murthi](#), the World Bank’s vice president for human development.

**FIGURE 8.1** Nine Action Areas in Which Technology Can Build and Protect, Deploy and Utilize, and Empower Human Capital



Source: World Bank study team.  
Note: AI = artificial intelligence; AR/VR = augmented reality/virtual reality; HD = human development.

Most new technology is driven by the private sector and benefits the most affluent sectors of society. The goals of developing human capital and opportunities for people "can only be realized if the most vulnerable, and the marginalized, have access to these technologies and the benefits that they offer," Murthi said.

Regional cooperation can take many forms. For example, sharing experiences with new technology can shorten the time needed by countries to reach human development goals. By working together, South Asian nations can develop a stronger governance framework with similar rules in each country for greater transparency, protection, and equity.

## Digital-based Ehsaas program

[Sania Nishtar](#), special assistant to Pakistan's prime minister and minister for poverty alleviation, said policy makers must be clear about the outcomes they seek. "Data is an input. Technology is a tool. They are not ends in themselves," she said. "They are meant to make systems work better."

Technology can improve the delivery efficiency of social services. It can also reduce misuse of funds, building citizen trust in government services. Nishtar launched the successful [Ehsaas](#) program that distributed emergency cash to some 17 million poor households in Pakistan soon after the COVID-19 pandemic began. The program has been praised for its data-driven processing of applications and rapid payments to the needy.

Pakistanis applied for emergency payments by texting their national identification number to a four-digit Ehsaas number. Each ID number was automatically processed with data analytics based on Pakistan's national social registry and wealth proxies such as taxes and assets owned. Pakistanis who qualified for Ehsaas payments received an electronic alert to visit a bank office, ATM, or specific location and provide biometric verification to collect US\$75 in cash.

"The systems of public sector delivery that have been plagued by inefficiencies and all kinds of pilferage and rent-seeking should be transformed with evidence-based decision making that is data driven and with technology," Nishtar said. The [World Bank and the Asian Development Bank](#) are supporting Pakistan's efforts to fine tune its social registry with dynamic updates so the database is ready for the next crisis.

## Cross-border cooperation

Panelists urged South Asian countries to share technology experiences to improve social services for the poor.

Nishtar spoke forcefully in favor of cross-border cooperation. "Experience sharing, knowledge sharing across countries would be extremely helpful, because we are all struggling, and we are all at the same stage of the learning curve," she said. Institutions such as the World Bank can help countries create platforms in which effective exchanges and cooperation can happen, she added.



As a first step to promote cooperation, [Anita Gurumurthy](#), executive director of [IT for Change](#), a nonprofit based in India, recommended creating a cross-border community for scholars and university professors: “The least we can do is to actually share knowledge and build an academic community.”

[Rabi Karmacharya](#), executive director of [Open Learning Exchange \(OLE\) Nepal](#), which works to enhance education quality and access through technology, would like to see local agencies collaborating with counterparts throughout the region. “If that can happen,” he said, “we can really move forward.” The World Bank can help Nepal and the entire region “in empowering local institutions” to use technology to deliver services, Karmacharya said.

Bangladesh, for example, has made significant progress in digital health services over the past decade, thanks to strong support at the highest political level. The work has spawned a cadre of enthusiastic e-health proponents, who are focused on using the vast amount of information already amassed in big data analysis, artificial intelligence, and machine learning.

[Khondaker A. Mamun](#), founder of [CMED Health](#), a startup company in Dhaka offering preventive healthcare, wants Bangladesh to extend digital health accounts to everyone. His company uses medical sensors connected to a smartphone to measure patients’ vital signs and securely store the data. Patients get instant feedback about their health, and the stored data helps their doctors give better care. The COVID-19 pandemic has shown that “if we can utilize more technologies, apply and adapt them to solutions that are data-driven, we can very effectively reduce the cost of health care,” Mamun said.

“We need to emphasize more preventative and primary health care to actually reduce the workload and costs and (to improve) quality,” Mamun said. “I envision in the next 10 years that digital health inclusion ... will help us to achieve universal health coverage.”

## Don’t forget governance

Data governance must be a priority when adopting new technology to improve government services.

Governance can set clear rules of the road for how data is collected, ethically used, and safely stored. Governance is particularly important in South Asia. As one of the largest data markets in the world, the region is attractive to technology companies seeking to mine data to develop artificial intelligence and related applications. Safeguards are essential to protect health, education, and other sensitive data.

Gurumurthy of IT for Change said she worries about large technology companies embarking on a kind of “data colonialism” and misusing datasets in developing nations. “The countries that have gotten ahead in the gold rush for data – and their companies -- will control the value chains of the future. And this is bound to create new forms of dependencies,” said Gurumurthy, whose organization works for social justice in technology.

### Learn more

More than four dozen recommendations to accelerate human capital development are included in the new World Bank report, [The Converging Technology Revolution and Human Capital: Potential and Implications for South Asia](#).

Human capital is a priority as countries rebuild economies after the COVID-19 pandemic. The Bank’s policy dialogue and operational support for this agenda can facilitate regional collaboration and consensus around common approaches to strengthen human capital.

Communities throughout South Asia deserve a voice in how new technology is adopted and deployed. “What is the meaning of a technological revolution if it’s not being led by the people,” Gurumurthy said. Programs should be designed to ensure transparency and meaningful access for the poor because technology now “defines the destiny” of people and communities.

A data governance framework can create an oversight and enforcement mechanism, designate certain datasets as a public good, analyze data value chains, and develop standards for accountability and grievance procedures.

So far, only Nepal and Sri Lanka have enacted comprehensive data protection laws with South Asia. The laws created special categories of sensitive data related to ethnicity, political affiliation, biometrics, and genetics that receive extra protection.

With regional cooperation, South Asia could develop a common data governance framework that would have a big impact. A shared approach for data transparency, protection, and equity can balance the benefits of data access with safeguards to block unethical data use.

Such an approach would facilitate cross-border investments in sectors like education and health, according to the World Bank’s Murthi. It could also lead to a regional data exchange to help countries “work together on things like energy trade, on disaster risk management, (and) on pandemic management,” she said.

Murthi said the World Bank is, and will continue, providing support. Out of the bank’s \$15 billion committed to support human development in South Asia, 40 percent is focused on technology. That focus will continue to help the region take advantage of the enormous potential technology has to empower, innovate, and accelerate human development.

## Watch all #OneSouthAsia Conversations

The bimonthly series is sponsored by the World Bank’s South Asia Regional Integration and Engagement team.

Video recordings of past events are available along with related reports and blogs. Access them [here](#).

**Harnessing Technology to Build Human Capital in South Asia**  
(September 2021)

**Breathing Uneasy: Regional Response to Air Pollution**  
(July 2021)

**Turning the Tide on Marine Pollution** (May 2021)

**Connecting to Thrive: Transport Integration** (March 2021)

**Pivoting in a Pandemic: Women Entrepreneurs Tap Regional Opportunities** (January 2021)

**Feeding South Asia in Times of Crisis** (November 2020)

**How Can Regional Cooperation Support COVID-19 Recovery?**  
(September 2020)

## Stay in touch

Use hashtag **#OneSouthAsia** on social media

Read blogs and reports at [#OneSouthAsia website](#)

Subscribe to [#OneSouthAsia newsletter](#)

Email us at [OneSouthAsia@worldbank.org](mailto:OneSouthAsia@worldbank.org)

---

The #OneSouthAsia Conversations series is produced by the World Bank’s South Asia Regional Integration and Engagement team at 1818 H Street NW, Washington, D.C. 20433.

