United Nations
Office for South-South Cooperation

South-South in Action
Citizen-friendly Public Service
Innovation in

Bangladesh

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Foreword

In his first address at the UN General Assembly in 1974, Father of the Nation Bangabandhu Sheikh Mujibur Rahman spoke passionately about the need for countries to come together to build "…a world where human creativity and the great achievement of our age in science and technology will be able to shape a better future…based upon a sharing of technology and resources on a global scale so that people everywhere can begin to enjoy the minimum conditions of a decent life."

Forty odd years later, the meteoric rise of the Global South, both in terms of trade and human development, is now being accompanied by increased calls for countries facing similar underlying development challenges to learn from, and support one another.

Bangladesh is honoured to contribute its story of Socio-economic development on the world stage in this series of UNOSSC publications. In the last eight and half years, Bangladesh has established a new development paradigm through its strategy of domestic demand generation as it confronted the global financial crisis. Behind this strategy lies the goal of poverty eradication in one of the most populous, least developed countries of the world. Especially a country which has emerged from the ruins of a cruel liberation war. The objective paid us rich dividends and we are now determined to end poverty in the country by 2024 well ahead of the SDG target of 2030.

We have earned international acclamations for our credible success in MDGs implementation, particularly in the areas of poverty alleviation, food security, primary school enrolment, gender parity in primary and secondary level education, infant and under-five mortality rate, maternal mortality ratio, immunization coverage, and reduction of communicable diseases.

Most of the SDGs have already been mainstreamed into our national development plans. A high powered, dedicated unit under the guidance of the Honourable Prime Minister has been established to spearhead the process of coordinating the work of all stakeholders and creating synergy. With 'Digital Bangladesh' as a driving national agenda, our goal is to cement our status as a strong middle-income country by 2021 and realize a Bangabandhu's long cherished dream of a 'Golden Bangladesh' by 2041.

Bangladesh wishes to dedicate this publication to the memory of Bangabandhu Sheikh Mujibur Rahman, whose ideals are the eternal inspiration behind our country emerging as a 'development surprise' and a shining example for countries throughout the world as it continues to disrupt traditional, linear development models and innovate a novel, alternative pathway for socioeconomic progress.

Abul Maal A Muhith

Minister of Finance
People's Republic of Bangladesh

Foreword

The United Nations Office for South-South Cooperation presents the second publication in the South-South in Action series with the Government of the People's Republic of Bangladesh. This publication on Bangladesh's experiences in development is special in the context of South-South cooperation. Bangladesh is generally considered one of the smaller countries in South Asia. However, this publication captures the massive gains made by the country despite challenges ranging from pre-independence war, the world's densest population and frequent natural disasters. Bangladesh met most of the Millennium Development Goal targets well ahead of schedule and its economy has grown at an average rate of 6 per cent per annum. Through experimentation and innovation in the areas of poverty reduction, disaster mitigation and economic management, Bangladesh's role in innovation gained momentum and respect from development partners over the years.

In the last decade, Bangladesh borrowed ideas from other countries, adapted them and scaled up implementation to benefit millions of its 161 million citizens in the area of public service innovations. The gains from these innovations are quantifiable in terms of time and resources. The innovations described in this publication show the potency of digitized public service reforms in meeting the Sustainable Development Goals, especially Goals 16 and 17.

This publication illustrates the central tenet of South-South cooperation, which to some is only a politically correct statement, that all countries have something to offer. Bangladesh has plenty to offer and more. The case studies included will enable the reader to easily adapt what was done and to seek technical assistance from the people best qualified to provide it in Bangladesh. Furthermore, the publication shows that sharing knowledge with Bangladesh is a worthwhile investment. In the case of public service reforms, the country borrowed pieces of innovation from many partners to develop a wholesome programme that many developing countries are now adapting.

In the publication, Bangladesh also presents a model or South-South cycle from adaptation to diffusion of experiences akin to the project cycle. I congratulate Bangladesh on this very useful contribution to South-South cooperation and hope that you will find it as interesting as I did.

Jorge Chediek

Envoy of the Secretary-General
on South-South Cooperation

and Director, United Nations Office
for South-South Cooperation

Acknowledgements

Welcoming remarks by Her Excellency Sheikh Hasina, Prime Minister of the Government of Bangladesh, at the High-Level Meeting on South-South and Triangular Cooperation in the Post 2015 Development Agenda: Financing for Development in the South and Technology Transfer on 17 May 2015 in Dhaka, Bangladesh.

Chapter I

Development and South-South Cooperation:
Experiences from Bangladesh

Development and South-South Cooperation: Experiences from Bangladesh

"It was in my heart to help a little because I was helped much." - Kahlil Gibran

Since its independence in 1971, Bangladesh has not only charted its own unique pathway to socioeconomic development but has also often pioneered new development models. The country has made substantial progress in reducing poverty, supported by sustained economic growth. Bangladesh reduced poverty from 40 per cent in 2005 to 24.3 per cent in 2016, and extreme poverty from 25.1 per cent to 12.9 per cent in the same period.[1] The extreme poverty rate is projected to decrease to less than 10 per cent by the end of 2017. The country achieved Millennium Development Goal (MDG) 1 on halving extreme poverty five years ahead of time, with 20.5 million people rising out of poverty during the period 1991-2010. In parallel, the maternal mortality rate fell from nearly 350 per 100,000 live births in 2008 to less than 180 in 2015; life expectancy, literacy rates and per capita food production have increased significantly as well.[2] Progress was underpinned by strong economic growth, with a 6 per cent average growth rate over the last decade – even against the backdrop of a global recession during that period – reaching 7.2 per cent in mid-2017.

Long known as a development laboratory for areas such as poverty alleviation, public health improvement and climate change adaptation, the country has now firmly added public service delivery to its focus areas for innovation. Large-scale innovations in public service delivery include the establishment of over 5,000 one-stop shops throughout the country, the world's largest online government portal, a $10 million Service Innovation Fund to enable whole-of-government and whole-of-society mechanisms to co-create novel solutions to development challenges, and a market-driven state-of-the-art architecture to expand and deepen digital financial inclusion. These innovations generated more than $1.5 billion in citizens' savings in 2016.

These strong results go to the heart of the Sustainable Development Goals (SDGs) adopted by United Nations Member States in 2015. Bangladesh's leadership in embracing new technology and innovative ideas is being recognized internationally. The country received the MDG Award from the United Nations in 2010 for reduction of child mortality, the South-South Visionary Award in 2011 also from the United Nations, an award in 2013 for its special contribution to poverty reduction, World Summit on the Information Society Awards for four consecutive years (2014-2017) and numerous other awards for contributions to innovations in public service delivery.

Development challenges cannot be addressed by government alone, however. With this realization, a vibrant civil society emerged almost immediately after independence and shared the task of rebuilding the country. The private sector also started playing an increasingly prominent role as a development actor to the point that in the current (7th) five-year plan (FY 2016-2020), the civil society and the private sector contribute over two thirds to national development, including in areas such as health, education, employment generation, trade and infrastructure development.

Moreover, the stage of development that Bangladesh has attained in terms of public service innovation could not have been achieved if it had attempted to solve its development challenges on its own, in a vacuum. Countries from the Global South are well-positioned to understand each other's development realities, what works and what does not, and, more importantly, the whys behind the successes and failures. They also recognize the need to experiment on their own turf and avoid repeating mistakes made by other countries. Bangladesh has benefited immensely from the exchange of experiences

with peers facing similar challenges. South-South cooperation has played a key role in Bangladesh's successfully fast-tracking its development rate and emerging as a "development miracle". Bangladesh now realizes that South-South cooperation is an organic process in which a Southern country benefiting from "importing" an innovation from another Southern country reaches a point of maturity to "export" value-added innovations to other Southern countries. This is precisely why this publication features selected public service innovations from Bangladesh that have already been "exported" to other Southern countries or have high potential for "export" to achieve the SDGs.

Bangladesh's Involvement in South-South Cooperation

Over the years, Bangladesh has been part of global efforts to strengthen South-South cooperation through knowledge-sharing, convening discussion forums and participating in multilateral South-South dialogue. As a result, Bangladesh has "imported" and adapted development solutions while at the same time "exporting" ideas that have been well received and utilized by other countries. In this context, Bangladesh is institutionalizing its internal South-South support arrangements and external partnerships through the establishment of a South-South Cooperation Cell (SSCC).

Finance and Development Ministers' Forum of the South

Bangladesh held the Presidency of the United Nations High-level Committee on South-South Cooperation in 2015-2016. During that period, Bangladesh, led by the Economic Relations Division, Ministry of Finance, organized an international conference entitled "South-South and Triangular Cooperation in the Post-2015 Development Agenda: Financing for Development in the South and Technology Transfer" in Dhaka, Bangladesh.

One of the main recommendations from that event was to convene a "Finance and Development Ministers' Forum of the South" with the following objectives: jointly review and evaluate the progress in implementing the SGDs and their targets, share best practices, and discuss how South-South cooperation could facilitate and complement those efforts. The Government of Bangladesh has reached out to Finance and Development Ministers of 127 countries. A number of these countries have welcomed the initiative, reinforcing the need for such a forum and expressing interest in working together to shape the direction towards implementation of the recommendation.

Additionally, in order to provide a legal base for this forum within the United Nations system, Bangladesh is also pursuing the matter in respective intergovernmental bodies with the support of the United Nations Office for South-South Cooperation (UNOSSC).

Policy Dialogue on South-South and Triangular Cooperation for Public Service Innovation

Bangladesh has already begun working with other Southern countries and institutions that are championing the cause of South-South cooperation to exchange knowledge on modernizing public service delivery. The country has convened several policy dialogue forums on "South-South and Triangular

Panel discussion featuring representatives from the Government of Bangladesh, UNDESA, UNDP and USAID on South-South and Triangular Cooperation for Public Service Innovation at the Prime Minister's Office, Dhaka on 27 March 2016.

Cooperation for Public Service Innovation" since 2014. They were attended by delegates from over 40 developed and developing countries.

The forums facilitated the sharing of the insights that Bangladesh has accumulated from years of experimentation on how to adapt ideas, models and tools to meet the unique needs and development realities of the country. They also connected developing countries to proliferate innovative solutions and the knowledge necessary to customize them to local contexts.

Ministerial Conference on South-South and Triangular Cooperation (Digital World, Dhaka 2016)

During Bangladesh's premier event, Digital World 2016, to showcase the country's progress towards building a digital Bangladesh, a "Ministerial Conference on South-South and Triangular Cooperation" was organized with the participation of Government ministers from Bangladesh, Bhutan, the Maldives, Nepal, Saudi Arabia, Suriname, Uganda and Viet Nam as well as representatives from high-technology companies from around the world. It provided a forum to promote the exchange of knowledge on identifying, customizing and scaling up information and communication technology for development (ICT4D) innovations in public service delivery.

A Model for South-South Cooperation: Bangladesh's Experience

Countries facing common challenges and seeking to achieve common goals, such as the SDGs, can make faster progress through shared learning and experiences. South-South cooperation is an important instrument to achieve these goals. The experiences, knowledge and innovations shared among developing countries are often suited to addressing the challenges that countries face; thus, South-South cooperation is a powerful modality for achieving the SDGs.

Bangladesh's gains from South-South and triangular cooperation include specific insights, knowledge, strategies and tools that the country "imported". However, most importantly, the "import" is only a part of the success of South-South cooperation. Over time, an empirical framework has emerged that integrates several necessary steps for a successful South-South cooperation initiative. Based on Bangladesh's experience, the following model is now utilized in the identification, planning, implementation, monitoring and evaluation of South-South initiatives:
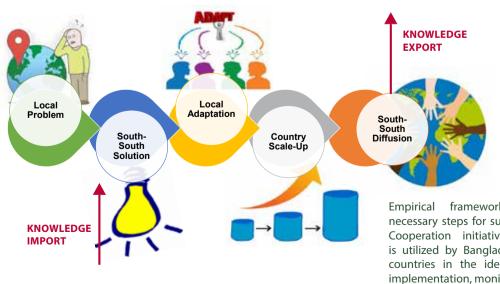
1. **Problem identification:** A local problem is identified along with a "problem owner", that is, an individual, a group or an organization that is committed to solving it and is open to incorporating innovative solutions.

Ministers from eight countries pose for a group photo after a ministerial conference on South-South Cooperation in ICTs on 19 October 2016 in Dhaka.

2. **Solution identification in the Global South:** Relevant solutions are found in similar contexts, potentially in another Southern country or at the regional/ subregional level, ready for "import". That solution could be a pilot for purposes of learning and improving the methodology or a scaled-up solution benefiting thousands or even millions of people. The greater the impact in the "exporting country", the more sustainable it is likely to be in the "importing country".

3. **Adaptation by the importer for piloting:** Adaptation rather than adoption is necessary. The solution is adapted to the new environment, the available resources and the technical capacities of the local population. Much local innovation is necessary to get a successful pilot going, let alone to scale it up. A solution will have a better chance of success and sustainability if it is adapted to the local social, cultural, economic, environmental, political and technological nuances.

4. **Scaling up to solve problems for a larger community:** The success of a South-South cooperation initiative lies not only in its ability to demonstrate a successful pilot but also to solve problems for communities. Often the problem owner may not have

sufficient resources for scaling up. Thus, public and private partners may need to be involved to make the solution viable and sustainable at scale. At this stage, policymakers may have a clear role in providing an enabling environment for mainstreaming the solution.

5. **Diffusion of experiences and insights globally:** After scaling up, the new, customized innovation is generally ready for global diffusion – essentially "export" – to other Southern countries. In this step, the "importing country" becomes the "exporting country", creating a chain of South-South cooperation. The current challenge for development is to achieve the SDGs in a timely manner and leaving no one behind. There is a need for greater awareness of how South-South cooperation can help countries to come together to achieve them, including providing the right incentives for different actors such as civil society and the private sector and more learning from piloting experiences. The sharing of key innovations and successes by countries from the Global South can create the scope for further collaboration. In particular, the compilation of successful case studies of South-South cooperation enables more people to access the solutions globally.

The steps may be summarized in the following way:

Empirical framework integrating five necessary steps for successful South-South Cooperation initiatives. The framework is utilized by Bangladesh and its partner countries in the identification, planning, implementation, monitoring and evaluation of South-South initiatives.

Institutionalizing Bangladesh's South-South Cooperation Framework

The SDGs provide a clear global mandate to build a shared commitment to the 2030 Agenda for Sustainable Development at the country level. As illustrated earlier, Bangladesh is widely regarded as one of the world's best performers in achieving the MDGs. The country is determined to make South-South and triangular cooperation central to the systematic implementation of the national development strategy.

In this regard, the country has established a South-South Cooperation Cell (SSCC). The SSCC is located in the Economic Relations Division (ERD) of the Ministry of Finance and supported by the Prime Minister's Office. It provides the institutional mechanism to apply the above model for successfully importing and exporting useful knowledge and solutions through South-South cooperation. Building on the roles that the country has played as both a knowledge importer and exporter, a builder of citizen-centred public service innovation capacity and an enthusiastic champion of South-South cooperation, the SSCC formalizes an institutional arrangement and functions as the national nodal point. Within this context, the SSCC interacts with development cooperation agencies from other countries, South-South cooperation focal points, the United Nations system and especially the United Nations Office for South-South Cooperation (UNOSSC). UNOSSC is mandated to promote, coordinate and support South-South and triangular cooperation globally and within the United Nations system.

The SSCC acts as the interface for Member States that are interested in engaging with Bangladesh on a bilateral or multilateral basis to explore opportunities to exchange experiences, learning, technologies and innovations. As Bangladesh's regional and global footprint as a thought leader and champion for South-South and global cooperation continues to grow, the work of the SSCC focuses on five key areas: (1) identifying development challenges of Bangladesh that could potentially benefit from South-South cooperation; (2) developing case studies and lessons learned from Bangladesh that could potentially benefit other Southern countries; (3) facilitating the establishment of Bangladesh's South-South cooperation partnerships with interested countries, including necessary institutional arrangements; (4) developing methodologies and contributing to the strengthening of the institutional mechanism for South-South cooperation; and (5) evaluating the effectiveness and efficiency of South-South cooperation for the implementation of development interventions and achieving the SDGs.

The SSCC is now devising a country collaborative mechanism involving all relevant stakeholders including the Ministry of Foreign Affairs for the effective and efficient operation of this cell.

Notes

[1] *Government of the People's Republic of Bangladesh, General Economics Division, Bangladesh Planning Commission (2017). Bangladesh Voluntary National Review (VNR), 2017: Eradicating Poverty and Promoting Prosperity in a Changing World, June.*
http://www.sdg.gov.bd/uploads/pages/5989b62d98b4b_7_Voluntary-National-Review-VNR-2017.pdf.

[2] *Ibid. (2016). Millennium Development Goals: End-period Stocktaking and Final Evaluation Report (2000-2015), September. Available from http://www.plancomm.gov.bd/wp-content/uploads/2016/11/MDG-Report-Final-Layout-07-11-2016.pdf.*

Chapter 2

Learning, Innovating and Diffusing Globally

Learning, Innovating and Diffusing Globally

"Bangladesh … was the original basket case'.…And yet Bangladesh has done better than most countries at improving the basic standard of living of its people."
- The Economist, "Out of the Basket: Lessons from Bangladesh", 2 November 2012

This chapter employs the five-step South-South Cooperation Model to showcase how Bangladesh has both benefited from and contributed to interacting with the Global South. It is important to point out that not all the case studies presented go through all five steps. For instance, there are cases illustrating ideas and knowledge (a) imported by Bangladesh, adapted and scaled up at the national level with no export yet but with the potential for export; (b) imported by Bangladesh, scaled up and exported to the Global South; or (c) innovated or piloted entirely in Bangladesh with no import and with the knowledge generated being accessible to other countries.

It also provides a narrative of how the public-private and non-profit sectors have partnered with one another to promote national development in Bangladesh. Some of the cases discussed here project massive service delivery programmes – both in terms of scale and impact – that have been proven at scale in Bangladesh, garnered international accolades and are being replicated in Africa, Asia, the Pacific region and elsewhere.

Digital Centre Entrepreneur helps a high-school student access her public school exam results online.

"The Digital Centres have saved Bangladeshi citizens more than USD 1.5 billion in 2016 alone"

Decentralizing Access to Public Services through a Sustainable Public-private Entrepreneurship Model

How did those Digital Centres come about and how has this innovation in decentralizing access to public services evolved in Bangladesh?

Back in 2005, a one-stop shop was set up in the office of the Mayor of Alexandria (Egypt), with support from the United Nations Development Programme (UNDP) office in Egypt. Its purpose was to ensure that many vital public services had a home that was familiar to citizens and, importantly, close to where they lived.

However, the innovation was in the way that the one-stop shop leveraged technology to attract people to it.

At the entrance of the one-stop shop was a large board that described in detail the types of government services available. Inside, an operator sat with a desktop computer but this apparent digitization was only on the surface. The service-request processing system did not have a fully automated back end. The operator entered citizens' service requests into the computer, printed them and then filed them. Representatives from different service delivery departments were located in that one-stop

The photo shows Salma, a poor woman with a month-old baby girl living in the remote rural sub-district of Bhurungamari in northern Bangladesh. Her husband had been killed in a tragic road accident a few months before the birth of their daughter. Salma lived with her in-laws who could barely afford to shelter her in a tiny mud-walled room. She worked as a domestic help earning a paltry thousand takas (approximately USD 13) per month.

Obtaining maternity allowance, which was provided by the government as part of its social safety net, could provide crucial financial support in the months after the tragic loss of her husband. The first step to access the allowance required Salma to travel close to 20 km to the sub-district government office just to collect the application form. Over the next few visits, she had to toil for hours in queues not really sure of what the next step was or whom to talk to for getting information. She had to endure all that before confronting overworked, intimidating government employees. By the time she finally completed the application process, Salma had spent a couple of weeks, her entire month's salary in conveyance fares alone, and visited the sub-district office several times. She lost her employment in the process.

Salma's case was representative of the common scenario across Bangladesh resulting from a problem that in principle was symptomatic of the need to decentralize access to government services. Launched in 2010, Bangladesh's 'Digital Centres' have enabled millions of poor, rural, underserved people like Salma to access public services more affordably, conveniently, and reliably. A study over the period of the last seven years reveals that, on average, time to receive services has come down by 85%, cost by 63% and the number of visits by 40%. Translated in monetary terms, the Digital Centres have saved Bangladeshi citizens more than USD 1.5 billion.

shop and acted on the physical file to ensure that the service requests were promptly processed. The Mayor, as the coordinator and the person with ultimate accountability to citizens, made sure that those requests were prioritized and the services delivered on time. So, despite use of very little technology, it was the impression of technology use that was crucial to citizens coming to one-stop shops confident that they would be able to access government services more conveniently, in a timely manner and reliably.

The one-stop service points did not generate any income since the client charges were waived. Though the "front-end-only digitization" had worked as an innovative first step, it was difficult to scale up. There were only so many representatives who could be physically located in these remote one-stop shops and only so many physical files that could be processed manually to meet an ever-growing number of citizens' service requests.

When the Access to Information (a2i) Programme of the Prime Minister's Office started to experiment with the concept of one-stop shops in Bangladesh, with technical assistance from UNDP and the United States Agency for International Development (USAID), these were important issues that not only were dealt with head on but that also were, in fact, at the heart of what would eventually lead to the establishment of over 5,000 one-stop information and service delivery outlets. Known as Digital Centres, these one-stop service points are present at the grass-roots level of local government units in Bangladesh.

The Digital Centres in Bangladesh ensure that the underserved, such as rural women, people with disabilities and the elderly, regardless of their literacy and ICT knowledge, can access vital information and services. A typical digital centre is about 4 km from the average rural citizen's home whereas a government subdistrict office is about 20 km away and a district office over 35 km. These one-stop service centres are micro-enterprises run

by "citizen entrepreneurs", one male and one female, in tandem with elected local government representatives. They leverage modern technology to provide citizens free and fee-based access to both public and private services. Some of the public services include land records, birth registration, telemedicine, and passport and overseas job application as well as application to various other government services. The private services offered by the Digital Centres include mobile financial services, insurance, and various types of computer and vocational training.

One of the most innovative aspects of the Digital Centres is their public-private entrepreneurship model. While private tele-centres in Bangladesh and elsewhere faltered because of the missing "public" element in their operations, the Digital Centres were designed to incorporate the best of both the public and private sectors. These are the mandate and infrastructure of the public sector combined with the entrepreneurial zeal and efficiency of the private sector. Although the centres are run by private entrepreneurs, the Government of Bangladesh has allocated one per cent of the total Annual Development Programme budget to support these enterprises. Everyday expenses such as utility charges, Internet bills and computer maintenance costs are covered by the entrepreneurs, who generate revenues by selling their services.

The Digital Centres represent a novel approach to strengthening local government. By bringing in the private sector in the form of entrepreneurs and numerous agreements with corporate entities, the model adopted a very citizen-centric and bottom-up strategy. Thus, instead of making it relevant to the government alone, market relevance and sensitivity to citizens' demands were embedded into the model. In practice, this meant that if working women and men could make time to come to the centre only after 5 p.m., over the weekend or on public holidays, the entrepreneurs would still serve them. Given that entrepreneurs are not salaried government employees, failing to

offer services would only harm their business. This enabled citizens to receive efficient, customized services and increased foot traffic to the local government offices.

Digital Centres at a Glance

- Over 5,000 Digital Centres; one in every Union Council, municipality and City Corporation

- Over 5 million services delivered to citizens every month

- 301.6 million public services provided since country-wide launch in 2010

- BDT 2.5 billion ($31.25 million) combined income of entrepreneurs since 2010

- Over 200,000 students and youth received training in computer literacy

The a2i Programme's Digital Centres have brought about a paradigm shift in providing "services at citizens' doorsteps" in Bangladesh. The Programme received the World Summit on the Information Society Award from the International Telecommunication Union in 2014. In 2015, at the invitation of the Government of the Maldives, Bangladesh began sharing its knowledge and insights to facilitate the adaptation of the Digital Centres model for the island country. That was followed by similar requests from the Governments of Bhutan and Uganda. Taking advantage of the UNDP global network, in 2017, UNDP Fiji requested its Bangladeshi counterpart to share its knowledge and insights to develop mobile one-stop shops on boats to make it more convenient for its island-dwelling citizens to access vital government information and services. Cooperation is ongoing with Bhutan, Fiji and Uganda.

Senior citizen exits Digital Centre after paying his irrigation pump electricity bill electronically.

" The 5,000+ Digital Centres across the country have brought about a paradigm shift in providing "services at citizens' doorsteps" in Bangladesh "

Making a Deep Sense of Empathy for Citizens' Needs Central to Transforming Public Services

A 55-year-old doctor at a remote, rural public hospital very close to retiring thought outside the box, he says, "for the first time in my life" and designed a health-care system for the people living in extreme poverty in his area. This low-cost mechanism may hold an answer to universal health care in Bangladesh by 2030! What's driving this amazing journey? The answer lies in a ground-breaking empathy-based training methodology.

Cultivating Empathy to Harness a Latent Capacity to Innovate

When public services are not designed with empathy for the people who use them, mothers have to travel long distances with their newborns and wait in long queues to collect government maternity allowances. Citizens lacking knowledge of where to access a service or even how to apply for it have to ping-pong among different agencies, sometimes for months and years. Unscrupulous intermediaries take advantage of this situation and charge exorbitant speed money.

A consultation with Nesta, the innovation organization of the Government of the United Kingdom of Great Britain and Northern Ireland, led to the crucial realization that cultivating empathy in civil servants can make public services more cost-effective and easier for citizens to use. Seeing the world through the lens of citizens is often not enough; it is necessary to walk a few miles in their shoes.

The a2i Programme began a process to adapt the knowledge from Nesta to the reality of Bangladesh. After several years of persistent experimentation, daring to fail but learning continuously, it developed a unique empathy-based training module for civil servants in Bangladesh to help them to embark on a journey of innovating citizen-centric services.

Doctor at a public hospital registers a patient using a mobile app.

> "a2i's Empathy Training Methodology helps government officers analyse service delivery processes from citizen's perspective, eliminate unnecessary age-old steps, and improve overall service quality"

The a2i Empathy Methodology

The unique home-grown training module, popularly known as empathy training, that the a2i Programme developed arranges training for mid-to-senior-level government officers. Those officers are responsible for dispensing services to citizens. The training arranges for them to act as secret shoppers and visit citizens' access points for services outside of their ministries or areas of expertise. For example, as part of this training, a government land officer is asked to review the process of submitting an admission application at a public college. A doctor is asked to go through the process of having his or her passport renewed. A teacher is asked to experience how social safety net disbursements are received by beneficiaries. Such orchestrated situations place them in citizens' shoes since they are forced to navigate public systems without any official or intellectual privileges. Under normal circumstances, their rank shields them from being exposed to the real picture, and knowledge of their own domain makes it difficult to assess the state of affairs objectively.

After the secret shopping exercise, these officers from different departments are brought together to share their experiences. The result in most cases is a powerful, moving situation that creates a deep sense of empathy for citizens and the myriad sufferings that they must endure to obtain the most basic services. This experience helps participants to develop a critical eye that they use to scrutinize their own agency's delivery systems and improve the overall quality of services.

Empathy was what empowered a junior land officer to build a shed for poor and aged clients in his jurisdiction and automate the manual land service, thereby rooting out corruption and becoming a local hero overnight. It was what drove an agricultural extension officer in a remote district of Bangladesh to develop a pictorial database that enables farmers to easily identify crop diseases and get proper solutions without having to travel tens of kilometres to seek expert advice. With encouragement from top bureaucrats, over 2,410 such pilots have been launched since 2015 in a wide range of areas, including health care and education, crops and fisheries, land and human rights.

From its base at the Prime Minister's Office, the a2i Programme works with all ministries, districts and local government institutions in not only triggering and nurturing vital innovations but also facilitating their adaptation and scaling up throughout the country. Recently, the Governments of Bhutan and the Maldives have joined hands with Bangladesh to import insights from this empathy training methodology into their respective countries.

Participants in an interactive discussion at an innovation capacity building workshop organized by the a2i Programme in Bogra, Bangladesh.

Leapfrogging Digital Financial Inclusion

Social safety net payments represent a critical government intervention aimed at preventing citizens from falling into extreme poverty and supporting them so that they can strive for a better life. In the 2016-2017 National Budget, the Government of Bangladesh has allocated over 12 per cent for social safety net programmes. Though electronic payment of conditional cash transfers or other social programme payments is in its very early stages in Bangladesh, government-to-person (G2P) digital payments have grown significantly. Further digitization of G2P payments could save an estimated $146 million annually across six major social safety net programmes, translating into 44 per cent of total operating costs or 3 per cent of the combined annual budget of the six programmes.

The Unique Identification Authority of India (UIDAI) enrolled over one billion people for an Aadhaar (loosely translated as "foundation") number within five years and across a vast and diverse area. It also captured biometric information through fingerprints and iris scans. Biometrics prevent multiple enrolments by the same individual (a problem for many existing government service programmes) while also providing nearly foolproof identity authentication.

It is possible for any person with his or her Aadhaar number to apply for a bank account and validate his or her identity using his or her fingerprints. No proxies are required, no letter from a village elder, no need to seek documentation from multiple government offices. There are already over 100 million Aadhaar-linked bank accounts, which has enabled many subsidies to be transferred. Already one in six consumers of liquid petroleum cooking gas (used widely across India) receives his or her subsidies in this way.

Recognizing the potential that a system such as Aadhaar offers, the a2i Programme sent a mission to India to learn from UIDAI. It then started making the case for digital payments to the Government of Bangladesh. At first,

it commissioned research to explain the rationale for digitizing payments both from the government and citizens' perspectives.

The research showed that beneficiaries would save 58 per cent in time, 32 per cent in cost and 80 per cent in the number of visits if social safety net payments were digitized. The Government would also save a significant amount in terms of processing costs and time.

Next, a diagnostic of the digital payments ecosystem was conducted to outline specific policy measures that could underpin the digitization of payments. Key recommendations from the study included leveraging Bangladesh's (biometric-based) national identification (NID) system for electronic know-your-customer (e-KYC) and transaction authentication purposes as well as reforms to improve regulation and make it easier for all forms of digital payments to move across different channels and platforms.

Electronic payment of conditional cash transfers or other social programme payments touch millions of the most financially excluded and vulnerable populations through social benefit payments. Since the Government can dictate how it pays recipients, digitizing such payment streams has high potential to accelerate financial inclusion in the short to medium term by laying the foundation, in terms of policies, infrastructure and people's attitude, for enabling more comprehensive efforts by the private sector.

Thus, an architecture was developed that identified the appropriate design principles, infrastructure and organizational requirements, technical specifications and business models to facilitate the transition to digital government payments. By linking each unique NID number with the beneficiary's own electronic banking account, the architecture not only offers greater choice, convenience and security to the beneficiaries but it also enables them to receive their allowances in real time as soon as disbursements are made directly from the Government treasury account.

The implementation of this new architecture will enable all government ministries that make G2C transfers to adopt an integrated framework that ensures standardization, reduces leakage and inefficiencies, and creates synergy. In addition, it will improve end-user experience significantly through enhanced convenience and choice. Over time, it can also help to increase transparency and accountability in G2C programmes and reduce the scope for corruption.

Queen Máxima, UNSGSA for Inclusive Finance for Development, was amazed at the extent of digital financial services at a Digital Centre during her November 2015 Bangladesh visit.

> " The Government of Bangladesh is digitizing social safety net payment streams (12 per cent of the national budget) to accelerate financial inclusion by laying the foundation – in terms of policies, infrastructure, provider's readiness and recipient's digital financial literacy – for enabling more comprehensive digital financial services by both public and private sectors "

Empowering Teachers and Improving the Quality of Education with a 21st-century Online Learning Platform

Improving the quality of education is a top priority in Bangladesh and other developing countries. Enhancing the capacity of teachers is a key challenge. Nearly 1 million Digital Centres at more than 140,000 schools and colleges receive formal training in education pedagogy along with pre- and post-training resources. Given the expensive nature of the traditional face-to-face training method, however, teachers must wait for years on end to receive refresher training to update their knowledge and skills. Moreover, there is no single platform where teachers can share resources and opinions for further professional development during and after training programmes.

Teachers' Portal

The a2i Programme developed the Teachers' Portal (http://a2i.pmo.gov.bd/teachers-portal/) for school and college teachers. This online social platform, which is in Bangla, provides a modern, far-reaching supplementary tool to traditional teacher training methods. The specific goals of the Teachers' Portal are to:

- Establish an online training and professional development platform for school and college teachers;

- Develop an online repository where quality multimedia educational content can be stored, accessed and shared freely;

- Provide an idea-generation and problem-solving platform that facilitates teachers' sharing their experiences and suggestions; and

- Develop a peer-learning environment and bridge the rural-urban knowledge gap.

The most exciting and ambitious part of developing the Teachers' Portal was crowd-sourcing quality digital educational content.

Establishing an online peer-training platform made teachers throughout Bangladesh more independent in developing their own multimedia teaching-learning materials.

The Teachers' Portal has replaced the traditional notion of training, monitoring and mentoring. Teachers logged into this online platform can have access to their mentors seven days a week. This is in sharp contrast to the traditional

Teachers' Portal at a Glance

- 222,695+ teachers are members

- 125,140+ items of multimedia content ready for classroom use

- 160,000+ teachers trained in operating multimedia classrooms

- 58,777+ blogs posted by teachers

- Nearly 2.2 million monthly page views

- 138,400+ monthly active users

- 35,000+ multimedia classrooms

- 1,000+ multimedia "model contents" vetted by the curriculum authority

- 1,500 master trainers across the country

- Best teachers of the week: three best content developers are highlighted every week

- Batayan Mag: an e-magazine run by the teachers

trainers whose support is available only during organized training sessions. The mentors provide useful feedback by uploading new content and continuously developing the skills and learning materials of users.

There are over 125,000 items of content available on the Teachers' Portal but the need for "model" or verified content posed a

Best teachers from the Teachers' Portal receive awards from Minister of Primary and Mass Education and Minister of Education at the Annual Teachers' Summit.

" The Teachers' Portal uses gamification techniques to create virtual incentives for the teachers to create a more engaging teaching-learning environment in classrooms there by improving education quality **"**

challenge. As a result, in 2015, with 45 of the best teachers along with experts from the National Curriculum and Textbook Board and Teachers' Training College, the a2i Programme and the Ministry of Education jointly developed over 1,000 items of customizable model content covering the core subjects. Any teacher can modify any part of the model content to suit the needs of his or her pupils or style of teaching. Moreover, an offline version of this content has also been prepared and distributed throughout the country, especially in remote schools where Internet connectivity is weak or unavailable.

The platform uses elements of gamification to create virtual incentives for the teachers to participate more actively. Every week, three teachers are selected as the best content developers. Of the 345 winners to date, 117 have been women. This recognition also acts as an inspiration for new users to join the platform.

Since its launch in 2013, more than 222,695 teachers from all over Bangladesh have registered on the Teachers' Portal and can access more than 100,000 items of content developed and uploaded by registered teachers. The target is to register 350,000 teachers by 2018 and all of the country's 1 million teachers by 2021.

Multimedia Classrooms

Historically, there have been challenges in the traditional teaching method using blackboards as the only available teaching-learning aid, especially in a larger class environment. Teachers and students are also let down by the predominantly black and white textbooks with few pictures or illustrations. In response, the a2i Programme established multimedia classrooms (MMCs) in primary and secondary schools to utilize the outputs of the Teachers' Portal, which enhanced the capacity of teachers to create interesting digital content on topics difficult to grasp.

Since establishing full-fledged computer labs in schools was prohibitively expensive, MMCs consisting of just one laptop with Internet connectivity and a multimedia projector were piloted in seven schools. The MMCs allowed teachers to present complex ideas through audiovisual content available on the Teachers' Portal and elsewhere. This enabled students to take greater interest and grasp ideas that they had previously found difficult to understand.

The MMC concept was fine-tuned and scaled up in Bangladesh. There are now over 23,331 MMCs in secondary schools and 14,000 at the primary level, with more in the pipeline.

These twenty-first-century learning platforms – the Teachers' Portal and the MMCs – received the World Summit on the Information Society Award from the International Telecommunication Union in 2016 in recognition of their innovative use of ICT applications to empower teachers and promote e-learning. The Governments of Bhutan, the Maldives and Uganda as well as the UNDP Pacific Office in Fiji have shown a keen interest in importing these innovations.

Students engage in an interactive discussion following a multimedia presentation by their teacher.

Challenging the Frontiers of Poverty Reduction

In 1990, 47 per cent of the total population of developing countries lived on less than $1.25 a day. While the MDG target to halve that percentage was achieved five years ahead of schedule in Bangladesh, the proportion of the population of sub-Saharan Africa living in extreme poverty remained stubbornly over 40 per cent and one third of the world's ultra-poor lived in South Asia.

In many countries, self-financing, market-based microfinance is not reaching the poorest, and safety net schemes such as food-for-work during lean periods do not lead to any kind of sustained development. Research at the Bangladesh Rural Advancement Committee (BRAC), which pioneered an approach now used by ultra-poor programmes around the world, shows that just $150 a year for two years can empower most households to graduate from extreme poverty and benefit from mainstream development interventions.

The Bangladesh Voluntary National Review 2017 shows that over 21 million Bangladeshis escaped from poverty between 1991 and 2010. The poverty rate dropped from 44.2 per cent in 1991 to 18.5 per cent in 2010. How was Bangladesh able to achieve this?

Let's start with the basics. Since 2000, the economy has been growing steadily at 6 per cent on average and this has lifted millions of people out of poverty. Bangladesh invested in reducing fertility and infant mortality rates as well as increasing children's immunization rates and schooling. It also invested in improving access to safe drinking water and sanitation. The country has prioritized building infrastructure such as bridges, energy plants and roads. As the UNDP Human Development Report over the years has indicated, no country can truly develop if women are not allowed to participate fully in economic activities. Between 2003 and 2013, women's employment more than doubled, from 7

million to 17 million. Some 4 million women, mostly from rural areas, now work in the ready-made-garment sector.

There existed, however, a substratum of deeply ingrained poverty that remained unreached. Many at that level were women who had been abandoned, widowed, or divorced and left to fend for themselves, their children and sometimes their elderly parents. Studies demonstrated that, while government- and NGO-led development programmes had been able to assist millions of poor Bangladeshis out of poverty through a combination of organization, education, better health and microfinance, many of the ultra-poor were being left out.

There were two key reasons for this. First, the very poorest people were sometimes being screened out. Development workers might screen for those more likely to succeed than others, avoiding bad credit risks. The second reason was self-exclusion. Many women were fearful of programmes based on borrowing. They were so poor and already had such unbearable debt that they could not imagine joining a programme based on microfinance. Others stayed away for religious or social considerations.

Therefore, making a radical departure from conventional poverty-reduction interventions in Bangladesh, BRAC developed a model that integrated and reoriented its sectoral programmes in education, health, human and legal rights, and microfinance, specifically targeting the ultra-poor. It started at ground zero with people who had little standing in their local community and no social capital. Special groups were organized to help to build self-esteem as well as knowledge and awareness. They worked on legal issues such as child marriage, the dowry system and the domestic abuse of women. It was a 24-month immersion programme that went beyond formal training. BRAC even developed a travelling theatre group that staged plays aimed at educating an entire village through entertainment.

> **"** BRAC developed a model that integrated and reoriented its sectoral programmes in education, health, human and legal rights, and microfinance, specifically targeting the ultra-poor **"**

Malnutrition, dangerous pregnancies and child mortality were among the greatest barriers to advancement among the ultra-poor. The Ultra-Poor Programme customized the BRAC health services to ensure that health information would be understandable to illiterate people. It installed tube wells for safe drinking water and built latrines for most participating households. BRAC arranged for participants to have better access to government clinics where they existed, and it built and staffed its own in remote, hard-to-reach areas.

The third aspect of the programme dealt with income generation. BRAC worked closely with participants, developing specially tailored investment opportunities and the skills that they would require in poultry, vegetable farming and fish production. Moreover, they were given a cash stipend for one year so that they would be freed from whatever menial work they were doing in order to participate meaningfully in economic activities. Some of the stipends were set aside in savings accounts that were redeemable at the end of the programme. Crucially, BRAC also transferred some form of income-generating assets such as a cow, goats or poultry to each participant.

The Ultra-Poor Programme was launched in 2001 with a total budget of $53 million over five years, of which $47.7 million were provided by donors and the rest by BRAC. By the end of the five years, the programme had been studied extensively by both internal and external evaluators, who concluded that BRAC targeting had been accurate, health conditions of the participants had improved along with confidence, and there had also been marked improvements in terms of social capital: the women were no longer regarded as social outcasts in their village. All graduates had been able to join the mainstream development groups of BRAC though not all had stayed and only 60 per cent had taken loans to augment what they had already received under the intervention. However, between 75 per cent and 80 per cent of the enterprises that had been introduced were successful.

Cost-effectiveness is central to the scaling up of any model. The evaluations found that while costs were higher than those of standard microfinance models, given that traditional microfinance programmes bypassed the ultra-poor, it was still good value for money at a cost of $291 per participant. In fact, the donors were so encouraged by the results that they increased the number of participants that BRAC could target during the first five years from 70,000 to 100,000 and came up with an additional $204 million to expand the programme over the next five years.

The success of the Ultra-Poor Programme model in Bangladesh encouraged the Consultative Group to Assist the Poor and the Ford Foundation to replicate the approach in cooperation with other social development organizations in several countries including Ethiopia, Ghana, Haiti, Honduras, India, Peru and Yemen. To date, six pilots have graduated somewhere between 75 per cent and 98 per cent of initial participants. Some organizations and governments now aim to scale up to levels similar to that of Bangladesh. The Indian microfinance organization Bandhan is using an innovative business strategy to adapt and scale up the model through financing from profits of its microfinance bank along with 75 per cent equity from a large commercial bank.

Building a Disaster-resilient, Prosperous Nation

Bangladesh, one of the most disaster-prone countries in the world, has made an incredible improvement in disaster risk reduction utilizing local capacity. Over the last few decades, many of the worst disasters such as cyclones and floods have devastated settlements, destroyed lives and severely affected livelihoods of the people of Bangladesh, especially in the coastal belt and on off-shore islands. For example, in 1970 and 1991, devastating cyclones killed 500,000 and 150,000 people, respectively. The Cyclone Preparedness Programme (CPP) has shown significant impact in reducing disaster risks and dramatically reduced cyclone-related death tolls.

CPP is a volunteer cyclone preparedness programme comprising more than 55,000 volunteers, both male and female, from coastal districts in Bangladesh. This is a joint programme of the Government of Bangladesh supported by other national and international organizations such as UNDP, the Bangladesh Red Crescent Society, and the International Federation of the Red Cross and Red Crescent Societies. The main objective of CPP is to strengthen the disaster preparedness, increase the response capacity and ensure the effective response of 11 million people living in coastal communities vulnerable to cyclones.
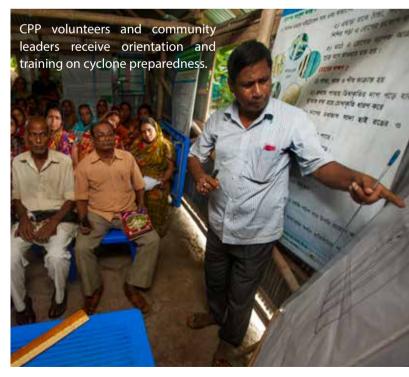
The programme is organized in 13 districts consisting of 32 subdistricts and 274 village unions with a total of 2,845 teams of volunteers. Each team of 15 volunteers has at least 5 female members and covers 2,000 to 3,000 people. All volunteers are trained in basic search, rescue and first aid.

The responsibilities of CPP volunteers are to:

- Disseminate cyclone warning signals issued by the Bangladesh Meteorological Department;

- Help people to evacuate and take shelter at safer places;

- Rescue people affected by cyclones;

- Provide first aid to the injured;

- Assist in relief and rehabilitation operations;

- Assist in participatory community capacity-building activities; and

- Assist in the coordination of disaster management and development activities.

CPP has dramatically reduced cyclone-related deaths from hundreds of thousands in the 1970s and 1990s to a few hundred in recent years. For example, owing to effective implementation of preparedness programmes, in May 2017, the strong cyclone Mora resulted in only six fatalities, a sign of significant improvement in disaster risk reduction. The success of the programme can be attributed to ownership by participating communities, a gender-inclusive strategy, the grass-roots orientation of dedicated volunteers, and the effective partnership between national and local governments and non-governmental organizations (NGOs).

CPP volunteers and community leaders receive orientation and training on cyclone preparedness.

Ensuring Unique Digital Identity for All to Enable Universal Suffrage and Service Delivery
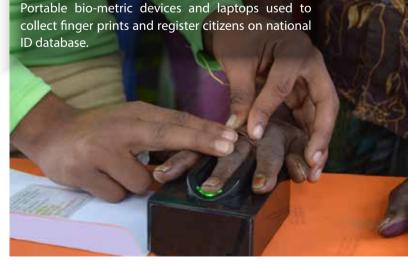
Promoting the social, economic and political inclusion of all citizens is a prerequisite for establishing democratic institutions. The introduction of the National Identity Card (NID) is an important step towards this goal.

In Bangladesh, every citizen who is eligible to vote under the Electoral Rolls Act, 2009 has the right to obtain a National Identity Card (NID). Beyond the objective of elections, the NID platform may be used for a citizen's identity verification for numerous service deliveries. The Bangladesh Election Commission has established the NID Wing to issue a secure national identity card; to establish ICT infrastructure for data collection, verification and management; and to create public awareness of the requirements for voter registration and a national identity card.

"Never before, in any other country, have so many people been electronically registered in such a short time. The people of Bangladesh can feel proud that their 2008 voter list is world-class quality. It compares favourably not only with other developing countries but also with many developed nations." Ms. Renata Dessallien, United Nations Resident Coordinator and UNDP Resident Representative, 2008.

The software solution for the National Identify Card (NID) project came from the private sector, with guidance from the Election Commission. Tiger IT, a company in Bangladesh, developed the software for the national ID and voter registration project for the general election of Bangladesh in 2008. The project was undertaken by the Bangladesh Election Commission in collaboration with the Bangladesh Army. The 2008 election marked a new milestone in the history of Bangladesh's

democracy, with a turnout of over 80 per cent of voters. It was the first time that the citizens of Bangladesh used NIDs with photographs. Over 80 million people and 320 million fingerprints were enrolled in 11 months. In effect, this project has eliminated 12.7 million fake voters. It involved more than 20,000 personnel, 500 ID management servers, and over 8,000 laptop computers equipped with the enrolment software. In October 2016, the Bangladesh Election Commission, under its National Identity Wing, introduced Smart NID, an upgraded version of the NID that has a machine-readable microchip.

The Bangladesh Election Commission and Tiger IT deployed the Voter Registration System, including a Data Center and a Disaster Recovery System, and consolidated the dispersed and scattered databases to industrial strength. Tiger IT built a reliable Oracle database capable of retaining 100 million voter records with their bio data, photo, four fingerprints and signature. It has integrated the Automated Fingerprint Identification System with the voter database to deduplicate biometric records. This ensures the integrity of the voter database by eliminating duplicate/fake registrations. Recently, new biometric features such as the iris have been added to strengthen the security system and to allow for cases where fingerprints are not viable, such as for persons with disabilities

Portable bio-metric devices and laptops used to collect finger prints and register citizens on national ID database.

or labourers whose fingerprints have faded to the point of non-detection. Currently, the national voter database of Bangladesh is one of the most future-ready in the developing world, capable of retaining a wide array of biometric information including digital photo, 10-fingerprint and iris records and issuing highly secure smart ID cards.

The system was deployed as an integrated online solution connecting 600 remote locations to the central system. Careful considerations were given to adopt a system architecture allowing high availability, reliability and future scalability. The software solution has a modular, service-oriented architecture that enables future growth by adding new service modules. The architecture also allows easy integration and interoperability with internal and external systems.

The NID system has made it possible to provide identity verification services to different government and non-governmental organizations. Public institutions currently using identity verification services provided by this system include a wide variety of agencies responsible for revenue collection, law enforcement, passport authority and transport management. For instance, the National Board of Revenue, Rapid Action Battalion, the Department of Immigration and Passports, and the Bangladesh Road Transport Authority

make extensive use of the NID verification services for the delivery of vital public services. In the private sector, the system is being interfaced by many commercial banks and all mobile operators for identity verification purposes. The system is robust and scalable enough to allow verification of 130 million mobile SIM cards in a matter of 4 months. The national payments architecture supporting all social safety net payments (12 per cent of the national budget) directly to bank and mobile accounts of each of tens of millions of beneficiaries is being built on top of the NID system. This system is now forming the basis of a unique civil registration in Bangladesh that is integrating all citizens' IDs ranging from birth registration to student ID, health ID, labour ID and a few others.

In 2013, Tiger IT exported its technology and insights from the NID project, implementing Nepal Voter Registration System Software Development and Services. The Tiger IT project in Nepal involved the supply and installation of all required software and hardware for the Nepal national voter registry, comprising central and local government-level applications. Once deployed, the system will retain the records of approximately 11 million voters in Nepal and most likely will provide an important foundation for public service delivery just as it has done in Bangladesh.

Portable bio-metric devices and laptops are used to collect finger-prints and register citizens on national ID database increasingly being used for a spectrum of service delivery across public agencies and private companies.

Investing in Bangladesh's Next Generation of Learners

Bangladesh has made remarkable gains over the past two decades in terms of ensuring access to education, especially for girls. The country's net enrolment rate at the primary-school level increased from 80 per cent in 2000 to 98 per cent in 2015, and secondary school enrolment rose from 45 per cent to 54 per cent during the same period. An even more impressive statistic is the percentage of children completing primary school, which is now close to 80 per cent.

Bangladesh has achieved gender parity as well as a dramatic decrease in disparities between the rich and the poor in access to education at both the primary and secondary levels. This happened in a country where government spending on education as a share of the gross domestic product is around 2 per cent, the second lowest in South Asia and lower than in most other countries at similar levels of development.

Back in 1984, 4 out of 10 primary-school-age children in Bangladesh were not in school. If girls did get into school, only 2 per cent would remain until class 5.

Many students were kept at home to help their families. In a majority agrarian society, school interfered with seasonal harvesting, the main source of livelihood for most families. Even when it was not harvesting season, the long list of other tasks that were assigned to girls, such as fetching water and taking care of younger siblings, did not stop. Parents weighed the value of that work against what they perceived that girls received from school. In those days, school offered little: classes of 50 to 60 students, teachers who showed up only occasionally and scant materials.

An additional challenge for girls was that most villages did not have a school; children had to walk to other villages, and many parents did not consider that to be safe. Parents were also often wary of male teachers.

Children who needed any sort of special care – children with disabilities, children who did not speak Bengali as a first language – were kept at home simply because schools did not have the resources to educate them.

BRAC initiated an experiment to develop a unique non-formal education model for these children to equip them with basic reading, writing and numeracy along with life skills and social studies. The Government contributed about $30 per student per year, so BRAC took on the challenge of developing a complementary model that not only delivered better results but was also cheaper to enable scaling up across the country. The model was designed specifically to give children who had not fit within the formal education system a second chance at learning. Teachers had almost complete autonomy, only small classrooms were used, various ages were combined into one class, and the focus was on joyful learning. Little attention was paid to standardized tests and soft skills were emphasized.

The one-teacher schools were operated by the same teacher for the same cohort of children for a period of four years, and she delivered lessons in all subjects. The school hours were flexible according to the needs of the community. Children did not pay any fees and there were no long holidays. BRAC developed textbooks and other materials up to class 3 and government textbooks were used in classes 4 and 5. Students were given little or no homework since their parents were often not capable of assisting them at home. They were taught about social values and their rights and responsibilities, coupled with basic financial education.

A typical BRAC teacher was a woman from the local community with 10 years of schooling experience. She underwent an initial 12-day training course in order to repeat basic information on teaching and learning, and then took monthly, subject-based refresher courses and a yearly orientation prior to advancing to the next class.

"BRAC's education system currently serves 1.1 million students across eight countries in Africa and Asia through some 48,000 schools"

The education system reached communities where the government system did not, both geographically and socially. Children with special needs were sought out and their parents encouraged to enrol them. They underwent corrective surgery and received devices such as wheelchairs, hearing aids, glasses and ramps. Children belonging to ethnic communities attended class lectures and received course materials in their own languages up to class 2 so that they could overcome language barriers and culture gaps. Boat schools were introduced in hard-to-reach areas, which literally brought education to their doorsteps. All graduates were tracked to ensure that they continued their education through secondary school.

The Government allowed BRAC students to attend the primary-level board examination at the end of class 5. The results quickly showed that the graduates of these non-formal schools were well ahead of the country average when it came to passing grades. BRAC students were much more likely to complete class 5: in 2004, 94 per cent did, as opposed to 67 per cent of public school students. The BRAC number has since risen to about 99 per cent. BRAC students performed approximately 10 per cent better than public school students on government standardized tests — impressive, given that their population is the most marginalized.

BRAC currently serves 1.1 million students across eight countries in Africa and Asia through some 48,000 schools. It has afforded an entire generation of children the chance to grow up with opportunities that never would have been possible otherwise.

Enhancing Transparency in Public Procurement through Digital Engagement

Bangladesh spends more than $10 billion annually on public procurement in a process fraught with inefficiency, opacity and corruption. Contractors must apply for tenders in person. Politically connected companies can often force out competitors. Citizens end up having to pay high prices, suffer long delays and settle for substandard services.

When the country's Planning Commission introduced an e-procurement programme called e-GP, costs were cut by more than 10 per cent, saving taxpayer funds. Studies project that if scaled up across the government, digital procurement could result in savings of over $500 million a year.

The entire public procurement process – associated rules, processes, policies, laws – is governed by the Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division of the Ministry of Planning. CPTU, with the support of the local software firm Dohatec New Media, embarked on a very ambitious project to digitize the public procurement to increase efficiency and transparency in the system. The result was the Bangladesh e-government procurement (e-GP) system (www.eprocure. gov.bd), which is an online platform to carry out all procurement activities by using a dedicated, secure web-based dashboard through a single web portal. It is the country's first central, electronic, government procurement portal, with an online performance measurement mechanism. This online platform has transformed the traditional procurement practices of Bangladesh to international standards by digitization of the system. It offers transparency in public procurement activities, where corruption is widely seen as the single most important source of leakage of public funds.

Through this e-GP solution, a tender can be submitted from anywhere in the world. The tender document can be downloaded free of charge and the system is available 24 hours a day, 7 days a week. The accountable and transparent system results in citizen trust and efficiency in terms of the time and resources used by both citizens and government agencies.
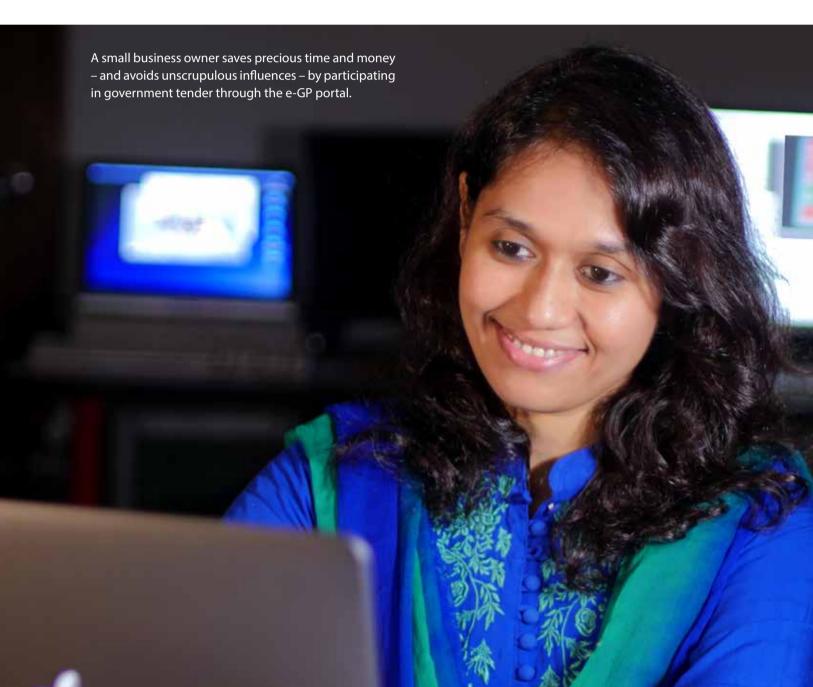
In the context of efficiency and transparency, since its operation, the e-GP system has achieved 100 per cent tender notice publication; 99.5 per cent contract award decision, made within initial tender validity; 90 per cent average number of responsive tenders; and 100 per cent contract award publication. As of 31 July 2017, e-GP has 53 government ministries, 1,126 government organizations and 34,487 registered bidders participating in the system.

The average number of bids went up from 4 in 2007 to 7 in 2016. This means that the participation by the private-sector bidders increased by 75 per cent, leading to increased competition, lower prices to the exchequer and reduced corruption. This is without taking into account the huge increase in public spending that has grown as a result of the 208 per cent increase in the Bangladesh budget over the last five years. The e-GP system improved the efficiency and transparency of public spending in development projects. The time needed from tender opening to award decreased from 51 days in 2012 to 29 days in 2015, leading to a reduction in the cost of doing business in Bangladesh.

A 2017 World Bank Report refers to Bangladesh's e-GP system as one of the world's most advanced and comprehensive: e-GP digitizes the entire contracting process, from advertisement to award. Starting with procurement planning up to the final payment including contract management and performance measurement, it has been embraced by the public sector and the bidding community. With rapid progress, e-GP is

contributing to enhancing not only economy, efficiency and transparency but also savings in transaction costs.

The e-GP system received an award from the Swiss Interactive Media and Software Association (SIMSA) in the Web Solutions Category in 2005 for its functionality, user interface, efficiency, support and innovation, and it meets international standards. It has also received acclaim across the developing world for on-the-ground achievements and the versatile system with monitoring. In fact, the website has never gone down for 14 years!

This cutting-edge state-of-the-art technology, which has proven successful in Bangladesh, has been exported to other countries. In 2016, Dohatec exported the e-GP solution to the Royal Government of Bhutan. This single, uniform, national web system was later launched as the Bhutan e-GP system by the Honourable Prime Minister Tshering Tobgay in June 2017.

A small business owner saves precious time and money – and avoids unscrupulous influences – by participating in government tender through the e-GP portal.

Empowering Women to Defeat Diarrhoea

Diarrhoea is one of the biggest killers of children in the developing world. According to the Demographic and Health Survey 2011, diarrhoea caused 2 per cent of the deaths of children under age five from 2007 to 2011, compared to almost 20 per cent in the period 1988-1993. In fact, in 2013, reducing death from diarrhoea helped Bangladesh to become one of only eight countries to have reduced mortality rates of children under five by at least two thirds since 1990, meeting an important target of the Millennium Development Goals (MDGs).

How was Bangladesh able to reduce death from diarrhoea? Has this knowledge been replicated elsewhere in the world? Answers to these questions will lead us to an interesting account of how an NGO-run initiative, the BRAC Oral Therapy Extension Programme (OTEP), leveraged peer learning by rural women in spreading the knowledge of an affordable solution.

The genesis of OTEP can be traced back to the oral rehydration solution (ORS), a simple but life-saving mixture of water, salt and sugar developed in 1968 at the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B) based in Dhaka. Until then, intravenous treatment was the only option available to effectively cure diarrhoea by replacing both fluids and electrolytes in patients. The problem with intravenous treatment was that it was expensive and required both trained professionals and a clinical setting, neither of which were in plentiful supply back then in a country such as Bangladesh.

Even then, intravenous treatment in Dhaka hospitals could not lower the mortality rate from diarrhoea to less than 30 per cent. Once the mix of ingredients was discovered, mortality rates fell to only 1 per cent. In 1978,

the international medical journal Lancet wrote about ORS: "potentially the most important medical discovery of the twentieth century". The United Nations Children's Fund (UNICEF) also credited it with saving the lives of 2.8 million children between 1980 and 2000.

Soon, small packets of ORS salts were available throughout the developing world and needed only to be mixed with the right amount of clean water. No medical expertise was required: "Just add water and stir." Since 1981, UNICEF has been distributing 500 million packets of ORS to 60 countries annually, while the World Health Organization has been encouraging local production around the world.

There were problems, however. First, the potential demand was high: an estimated 200 million packets per annum in Bangladesh alone. Second, even at $0.08 a packet, it was too expensive for those who needed it the most, and the overall cost of free distribution was beyond the reach of the Government. There were additional problems. The packets had to be delivered, which meant the creation of a complex supply chain from the factory to more than 75,000 villages. Another problem was that the user had to have enough knowledge to mix the solution, not just with clean water but in the correct quantity because mistakes could be fatal. Printed instructions had limited utility for mothers in a country where the female literacy rate in 1974 was only 16.4 per cent; in the countryside, it was less than 8 per cent. Trying to equip each household with bottles and measuring spoons was no more realistic than shipping out 200 million packets of ORS a year.

In 1980, BRAC innovated a simple but ingenious system and launched OTEP to teach mothers in very poor, rural communities to make ORS at home: a three-finger pinch of salt, two four-finger scoops of commonly available homemade molasses (gur), and a half-seer of water (a measure commonly understood, equivalent to about half a litre). This was despite the World Health Organization's expressing

serious reservations about promoting a homemade solution. BRAC, however, went ahead since there simply were not enough doctors or other trained personnel to reach millions of households in rural Bangladesh. In the next decade, BRAC trained more than 12 million women in Bangladesh to make ORS and saved countless lives.

BRAC community health worker shows illustration chart on how to prepare formula for oral rehydration therapy to a group of rural illiterate women.

How did BRAC overcome this daunting challenge? How was it able to ensure that the mothers whom it trained could retain the knowledge and actually administered ORS to their children? In the conservative Bangladeshi society of the 1980s, how did BRAC manage to hire, train, organize and pay thousands of trainers most of whom were women?

In 1979, BRAC created a simple message for mothers. The verbal guidelines included the dangerous symptoms of diarrhoea, when to administer ORS and how to make it. It conducted a small experiment in one district over a period of three months. Two young women were recruited and trained to go from house to house in two villages of approximately 100 households each giving

mothers a face-to-face training session. Over time, the message was refined, and mothers who had received training were revisited later and asked to prepare the solution. Samples were sent back to the ICDDR,B for electrolyte analysis.

In another critical step, monitors returned to villages days or weeks after the initial instruction to quiz the mothers. Health workers were paid according to how many questions their subjects answered correctly, thus incentivizing quality instruction and not just the number of lessons. The trial found that verbally trained illiterate and semi-literate rural mothers could make properly formulated ORS that passed laboratory tests.

Between 1980 and 1983, OTEP covered five districts. Between 1983 and 1986, it covered eight more, and, by the end of 1990, it had covered another seven. Over time, the programme was refined in several ways. Teaching aids were introduced in the form of posters and flip charts. It was decided to include men as trainees because their exclusion had led to skepticism about the message that was being promoted. There was resistance in some areas because villagers feared the trainers were actually family planning workers in disguise, fallout from the overemphasis placed by government and donors on family planning methods. The programme was taken to primary and secondary schools, and the OTEP message was broadcast on radio and television. Because the cost of sending samples to the cholera lab for testing would have been prohibitive as the programme grew, BRAC set up its own field laboratories under ICDDR,B supervision.

BRAC switched completely from individual training to working with groups of four or five mothers at a time. In groups, there was better cohesion and greater confidence. Mothers could reinforce one another, and the trainer could spend more time with them. It was significantly more cost-effective, and, most importantly, usage rates increased by as much as 50 per cent.

Throughout the journey, BRAC was not shy in asking for support whenever it was needed. The ICDDR,B was a key player, providing technical and moral support throughout. Government support was also essential, both centrally in terms of technical clearance and at local levels for credibility and support for the BRAC trainers. Funding, of course, was critical. It was an international NGO that provided seed money, and when the experiments were ready for scaling up, larger donors stepped in.

When OTEP ended in November 1990, BRAC had successfully trained 12 million households in nearly all of Bangladesh's 75,000 villages. Its staff had distributed three quarters of a million posters and had visited more than 35,000 primary and secondary schools. The monitors had visited 447,857 mothers for follow-up interviews, and more than 300,000 samples had been analysed for electrolytes.

Bangladesh today has the highest use of ORS in the world. BRAC is working on replicating OTEP in parts of sub-Saharan Africa where use is still very low.

BRAC community worker shows a mother how to measure a three-finger pinch of salt, two four-finger scoops of commonly available homemade molasses, and half a litre of water to prepare ORS at home.

"BRAC innovated a simple but ingenious system to teach mothers in very poor, rural communities to make oral rehydration saline at home – a system scaled up nationwide and now expanding globally"

Modernizing a Sustainable Approach to Microfinance

The microfinance industry has scored major successes in addressing many development problems such as extreme poverty, high mortality rates, unsafe water supplies and low educational attainment. However, its institutions operate in an environment of high costs, prohibitive interest rates and rampant inefficiencies. In order to address these challenges, microfinance institutions have had to explore the potential of client-focused automation in their operational processes.

In the 1970s in Bangladesh, some institutions began to provide credit to the underprivileged, who had little access to formal banking services. Bangladesh is now one of the most advanced countries and a leader in the field of microfinance. Microfinance services in Bangladesh can be categorized into six broad groups: (a) general microcredit for small-scale self-employment-based activities; (b) microenterprise loans; (c) loans for the ultra-poor; (d) agricultural loans; (e) seasonal loans; and (f) loans for disaster management.

Microfinance programmes in Bangladesh are implemented by NGOs, State-owned and private commercial banks, and specialized programmes of government ministries. In 2006, the Government enacted the Microcredit Regulatory Authority Act to ensure transparency and accountability of microfinance institutions (MFIs) as well to foster sustainable growth of this sector. As of June 2014, the number of MFI clients had reached 33.73 million. The total loan outstanding and savings were around $5.03 billion (BDT 403) and $2.96 billion (BDT 237), respectively. Each client is usually provided a loan of up to $620 (BDT 50,000).

Despite these achievements, the challenges remained as to how the MFIs could reach more people and improve their efficiency while operating in an environment of growing operational costs and high interest rates. Many inititaives have been piloted to address these challenges. One of the most successful solutions was the introduction of client-focused technology, which has improved MFI outreach and performance. This technology has brought a revolutionary change in MFI daily operations and has reduced transaction costs by 70 per cent.

Microfin360, a web-based microfinance management solution, was developed by DataSoft Systems Bangladesh Limited in 2008. It solves the biggest problem of the MFIs, which is the capability to use proper information technology (IT) support to serve clients, particularly in the rural areas. Microfin360 enables MFIs to focus on their core business, which helps to increase their efficiency and simplifies the financial structure. The Microfin360 user-friendly interface also makes it easy for new users to start working with very little training required.

The Mirofin Android- and iOS-based mobile application was a major innovation that puts all the business information at a manager's fingertips instantly. Since the application is optimized for low bandwidth connections, it is accessible from remote villages. The user has real-time access to information on clients, accounts, problems and opportunities. This allows more interactive work processes to lower costs. The software has a unique feature that provides the microcredit authorities with a smart, hassle-free operation that immediately yields a transparent view of the business status with just one click.

After its successful implementation in Bangladesh, Microfin360 has been introduced in many countries in Southeast Asia and Africa. Although microfinance practices differ from country to country based on infrastructure and policy, Microfin360 has proved to be an effective universal tool to improve operational efficiency in the industry. To date, Microfin360 has been implemented in more than 4,500 MFI branches all over Bangladesh and has also been adapted in Kenya (SILK Women's Groups), Nigeria (ZEEZZPLANET) and India (Digamber Capfin Limited).

In Bangladesh, the introduction of technology has reduced the operational costs of microfinance institutions by as much as 70 per cent making possible the financial inclusion of many more people

Promoting International Peace and Security

Since 1988, Bangladesh has become a brand name in United Nations peacekeeping and has achieved international acclaim for its commitment to the cause of international peace and security. Bangladesh's role in peacekeeping across the globe is applauded by the United Nations as well as its Member States. The country is one of the leading troop contributors and has participated in more than 54 peacekeeping missions in 40 countries. It has earned international recognition for maintaining high standards and playing an active role in different parts of the world.

About 96,000 peacekeepers from 124 countries are deployed under various United Nations missions. Among them, nearly 7,000 men and women from Bangladesh are now serving in 11 United Nations missions around the world, especially in Asia and Africa. This makes Bangladesh one of the top contributors to the United Nations global peacekeeping missions. Bangladeshi peacekeepers are serving in the Central African Republic, Cyprus, the Democratic Republic of the Congo, Haiti, Lebanon, Liberia, Mali, Somalia, South Sudan, Sudan and Western Sahara. Bangladeshi troops are also contributing to wide-ranging peace and nation-building activities.

A close look at the United Nations missions where Bangladesh has contributed to peace operations reveals several success factors. Four such factors are global commitment, professionalism, proactive diplomacy and adaptability.

Bangladesh has reiterated its commitment to the maintenance of international peace and security at various national, regional and international forums. United Nations peacekeeping missions have offered a direct opportunity to Bangladesh to realize this global commitment. Bangladeshi peacekeepers have earned a global reputation through their professionalism especially in high-risk areas,

Bangladeshi peacekeepers, deployed by the United Nations, played a vital role in restoring peace in Sierra Leone, a country that suffered from internal conflicts between 1991 and 2002. Peacekeepers, especially those from Bangladesh, contributed significantly in containing the conflict and restoring peace in Sierra Leone and won the hearts of its people. In recognition of the outstanding contribution made by the Bangladeshi peacekeepers, Sierra Leone has declared Bangla (the national Language of Bangladesh) an official language of the country. A street in Monrovia, Liberia, has been named after Bangladesh. Elsewhere in Africa, some countries have established Bangladesh Friendship Schools.

expertise in handling military and equipment, and conflict management.

Bangladesh has long been at the forefront of UN efforts to plan and execute humanitarian military interventions for the protection and rehabilitation of unarmed civilians in war-torn regions.

Bangladesh has long been at the forefront of the diplomatic efforts of the United Nations to plan and execute humanitarian military interventions for the protection of unarmed civilians. Such a proactive diplomatic stance permeates to the Bangladeshi military forces, police commanders and other stakeholders on the ground in various peacekeeping missions. Bangladeshi peacekeepers can adapt to any social and political context and geographical terrain. This adaptability has grown over the years from institutionalized training as well as the knowledge and experiences from various tasks at home and abroad. Various training and exchange programmes at the Bangladesh Institute of Peace Support Operation Training (BIPSOT), and lessons learned from long-standing participation in United Nations peacekeeping missions have nurtured this adaptability.

Bangladeshi personnel provide first aid as part of the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic.

Leading the Fight against Hepatitis B

An estimated 350 million people in the world are infected with hepatitis B. Nearly one million of them die each year due to cirrhosis of the liver and primary liver cancer. In Bangladesh, about 10 per cent of the country's 160 million people are thought to be hepatitis B positive, with a yearly death toll from this liver disease of 20,000. Although there are some drugs available, there is no specific treatment for acute hepatitis B virus (HBV) infection. Moreover, while chronic hepatitis-B infection can be treated with medications, the latter can only slow the progression of cirrhosis and reduce the incidence of liver cancer.
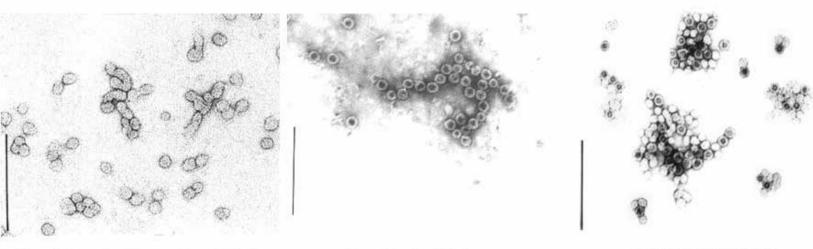
The potency of the threat posed by hepatitis B is reflected in the fact that a dedicated SDG target has been set for the elimination of hepatitis B and the reduction of hepatitis B-related deaths by 30-40 per cent by 2030 from present day levels. This can be achieved only by new, more effective therapeutic approaches, including vaccines and drugs .

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). It is a major global health problem. It can cause chronic infection and puts people at a high risk of death from cirrhosis and liver cancer.

Hepatitis B: Key Facts

- Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic disease.

- The virus is transmitted through contact with the blood or other body fluids of an infected person.

- An estimated 257 million people are living with hepatitis B virus infection (defined as hepatitis B surface antigen positive).

- In 2015, hepatitis B resulted in 887,000 deaths, mostly from complications (including cirrhosis and hepatocellular carcinoma).

- Hepatitis B is an important occupational hazard for health workers.

NASVAC, a new therapeutic vaccine for HBV developed through cooperation between Bangladesh and Japan, can reduce the incidence of cirrhosis of the liver and primary liver cancer. It uses a unique technique that

P. pastoris-derived recombinant HBsAg   E. coli-derived HBcAg   Aggregates of 20-30 nm

Elcetrone microscopic image of NASVAC

raises host immunity, which in turn controls the virus and its complications.

SDG 3.3 calls for combating hepatitis B and other diseases, and SDG 3.8 includes access to safe and affordable vaccines for all. NASVAC has the potential to help to achieve both. Unprecedented collaboration between the Department of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, and the Department of Medical Sciences, Toshiba General Hospital, Tokyo, Japan, played an instrumental role in inventing the vaccine, with the former initiating the concept and the latter conducting clinical trials in Bangladesh.

The clinical trials demonstrate that NASVAC is safer than other treatments in the list of current therapies for chronic hepatitis B. The therapeutic vaccine has been registered in Cuba as HeberNasvac. Clinical trials of NASVAC are ongoing in several countries, including Japan and the Russian Federation, for its expanded use.

The Government of Bangladesh Directorate General of Drug Administration has initiated the process of registering NASVAC. A technical committee and an expert committee comprising hepatologists have already given their positive opinion in this regard. When NASVAC obtains registration in Bangladesh, it will be the first-ever therapeutic vaccine to be developed and registered in the country and also possibly the first such example in the region.

HeberNasvac

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

Chapter 3

A Vision towards Meeting the Sustainable Development Goals: South-South Collaboration in Public Service Innovation

A Vision towards Meeting the Sustainable Development Goals: South-South Collaboration in Public Service Innovation

"If you want to go fast, go alone. If you want to go far, go together."

- Old African proverb

"If you want to go far and fast, innovate together."

- Bangladesh's commitment to achieving the 2030 Agenda

The old African proverb packs in wisdom of the ages. However, today's world is able to improve upon conventional wisdom. Individuals, communities, organizations, cities and nations have demonstrated that it is possible to leapfrog and carve out unprecedented development trajectories that combine speed and scope. In fact, that is exactly what developing nations must do to achieve the 2030 goals – together, fast and sustainably!

Bangladesh is building a launching pad to achieve the SDGs as it continues its march towards attaining its Vision 2021 goal of becoming a strong middle-income country. In doing so, the country intends to focus on extensive partnerships – across the public- and private-sector organizations and across countries with a special emphasis on South-South cooperation – to achieve the SDGs. The collaborative network of Southern countries on public service innovation proposed in the side event of the United Nations General Assembly in 2016 by the Honourable Prime Minister of Bangladesh and supported by other Heads of State, ministers and heads of United Nations agencies present will focus on partnerships to achieve targets under SDG 16 ("Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable institutions at all levels") and SDG 17 ("Strengthen the means of implementation and revitalize the global partnership for sustainable development"). Furthermore, it places emphasis on the critical role of South-South and triangular cooperation for countries facing similar underlying development challenges so as to come together, learn and support one another in identifying vital innovations, adapting them to their own contexts and scaling up novel solutions to public service challenges. Bangladesh is committed to making South-South Cooperation a central pillar of its strategy to achieve the SDGs.

Trends in Developing Countries' Response to Public Service Challenges

Governments around the world – in both developing and developed countries – are going through tremendous changes to respond to rapidly rising expectations of their citizens, accelerating technological transformations and strong competitive pressure from private-sector service providers. Traditional public service delivery is known for being unresponsive to citizens' demands, driven by rules and procedures many of which find their roots in a bygone era. Governments are embracing approaches and tools to become more citizen-centric, responsive and participatory. In particular, the following trends are seen:

1. New digital technologies provide governments with the means to improve the delivery of public services, thereby bringing increased accountability, transparency and effectiveness leading to greater public trust. Globally, research shows that digitization has tangible benefits for a country's overall competitiveness, business environment and the quality of life of its people. Studies also confirm that most citizens would prefer using digital tools to have more convenient, reliable and affordable access to public services.

Female staff digitizing millions of land records at a district level government office in Bangladesh to lower citizens' time, cost and visit of acquiring these vital records of rights.

" Governments around the world are embracing approaches, tools and technology to become more citizen-friendly, responsive and participatory "

However, the challenge often lies in developing citizen-centric rather than technology-centric approaches and the adoption and promotion of digitization by governments and service providers alike.

2. This difference in perspectives between service providers and service seekers prevents the former from understanding the problems faced by the latter, leading to a service delivery paradigm and practice that are considered unresponsive and "red-tapish" by the average citizen. Unscrupulous practices by vested interest groups further complicate matters and frustrate the citizen. To fully understand the perspectives of citizens, especially the underserved, many governments are employing methodologies such as "design thinking" and "behavioural insights".

However, sometimes these methodologies are quite difficult to adopt and adapt to the needs of a particular country and its context.

3. Typically, civil service is designed to be risk-averse to maintain order and the status quo. Yet many governments are dabbling in various experiments, sometimes using the approaches mentioned above. Many governments have partnered with NGOs, for-profit companies and academia for these experiments in new forms of service delivery. Many "innovation labs" have sprouted around the world, some of which are supported by United Nations organizations, international development partners and philanthropies. The experiments have produced fascinating innovations and evidence that inform policy formulation.

However, the scaling up of these innovations may not always have reached its full potential.

The three aforementioned trends – digitization of service delivery, user-centric methodologies and experimentation in civil service – are resulting in a culture of citizen-centric innovation within the practising governments, breaking operational silos and helping governments to move towards "whole-of-government" planning and execution. However, achievements in countries vary considerably, some falling far below expectations. Reasons include replication without proper understanding of the context

Her Excellency Sheikh Hasina, Prime Minister of the Government of Bangladesh, chairs a high-level meeting on South-South and Triangular Cooperation for scaling up innovations in public service delivery convened on the sidelines of the 71st session of the United Nations General Assembly in New York on 20 September 2016.

and lack of commensurate efforts in human and institutional capacity development. These result in the wastage of scarce resources and frustration among service providers and seekers.

South-South cooperation has increasingly demonstrated its contribution to development results through a variety of flexible modalities, including knowledge exchanges, technology transfers, financing, peer support, community initiatives, common development agendas and collective solutions. Yet the potential of South-South cooperation to contribute towards sustainable development has not been fully leveraged. Bangladesh has a vision for an initiative driven by South-South cooperation for innovations in public service delivery.

Towards a South-South Cooperation Network for Scaling Up Innovations in Public Service Delivery

A high-level meeting on South-South and triangular cooperation for scaling up innovations in public service delivery was convened on the sidelines of the seventy-first session of the United Nations General Assembly in New York in September 2016. The event was co-organized by the Permanent Mission of the People's Republic of Bangladesh to the United Nations in New York and the United Nations Office for South-South Cooperation (UNOSSC). Heads of State and Government and permanent representatives, officials from missions to the United Nations and United Nations staff members participated in the meeting and highlighted cases of innovations that could be adapted in other countries. The Prime Minister of Bangladesh proposed the need for a collaborative network to share those good practices and find ways to adopt them in other countries. The proposal was enthusiastically supported by the Deputy Prime Minister of Sweden and senior representatives from UNDP, the International Telecommunication Union, the United Nations Capital Development Fund, the Mexican Agency for International Development Cooperation and UNOSSC.

The discussion at the meeting highlighted that most of the SDGs depend on the existence or the development of institutions that foster innovations in public services. Especially relevant to the discussion was SDG 16, with its central emphasis on "building effective, accountable and inclusive institutions at all levels". Targets that focus particularly on this concept include:

• "16.5 Substantially reduce corruption and bribery in all their forms

• 16.6 Develop effective, accountable and transparent institutions at all levels

• 16.7 Ensure responsive, inclusive, participatory and representative decision making at all levels …

• 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements".

Also relevant is SDG 17 with its focus on exploring alternative sources of development financing, use of technology to accelerate SDG achievements, institutional capacity development at all levels including for South-South and triangular cooperation, and use of data for monitoring and accountability. Targets that are of paramount importance are:

• "17.3 Mobilize additional financial resources for developing countries from multiple sources"

• "17.5 Adopt and implement investment promotion regimes for least developed countries"

• "17.6 Enhance North-South, South-South and triangular regional and international cooperation

on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism"

• "17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed"

• "17.8 Fully operationalize the technology bank and science, technology and innovation capacity- building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology"

• "17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation"

• "17.16 Enhance the global partnership for sustainable development, complemented by multi- stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries"

• "17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships"

• "17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts"

• "17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity- building in developing countries".

The network will attempt to address some of the following questions that the global discourse and practice of innovation in public

service delivery currently leave unanswered:

- What kinds of innovations are meeting citizens' expectations of improved public service delivery?

- Why are certain public service innovations scaled up and others are not?

- What is the tolerance for experimentation in public service delivery?

- How does one tackle issues of accountability and responsibility to the service user, including the handling of public data?

- What comprises the effective provisioning of digital platforms that enable more citizen-friendly public services, open marketplaces and collaborative communities?

- How does one gather and provide access to data while protecting people's privacy and the responsibility to share data that belong to the public?

- What kind of traditional and new data strategy must governments, along with the non-government stakeholders, have in order to effectively track SDG progress? What is the most effective way to measure progress against preset targets for achieving SDGs? How can one correlate interrelated SDG targets to understand the nuances of interrelationships across multiple SDGs so that whole-of-government action can be taken instead of silo initiatives?

- How can public-private partnerships for innovations in service delivery be facilitated and managed?

- What is an effective South-South cooperation framework that enables finding and sharing meaningful answers to the above-mentioned questions?

In attempting to address these questions, the network will focus on:

1. Research to identify innovative practices and design comprehensive and actionable knowledge products.

2. Development of innovation toolkits on specific themes that may arise out of the three trends in the response of developing countries to public service challenges.

3. Hosting of peer-to-peer learning exchanges in the form of events, study visits and video/web conferencing.

4. Facilitation of the transfer of active technical assistance by experts/practitioners from one country to another.

5. Building of appropriate capacity in the "importing country" to ensure optimal use of technology, mechanisms and insights from the "exporting country".

6. Nurturing of a sustainable culture of innovation through human and institutional capacity development and an incentive system.

7. Creation of mechanisms that scale up successful innovations and bring about necessary policy change.

Given that the collaborative network would primarily benefit countries of the Global South, those countries would be its natural leaders. However, many countries of the North have successfully adopted the three trends (digitization, user-centric methodologies and experimentation) and have created enormous efficiency gains in their service delivery, with demonstrable benefits to citizens. Thus, they are in a position to share the knowledge with developing countries so that the latter do not have to reinvent the wheel. As such, developed countries willing to share their innovation insights could participate.

In addition, the network will welcome the input of multilateral, intergovernmental and other institutions that can support its activities. In particular, the network will partner with centres of excellence, NGOs and academic institutions that are already functioning with similar concepts.