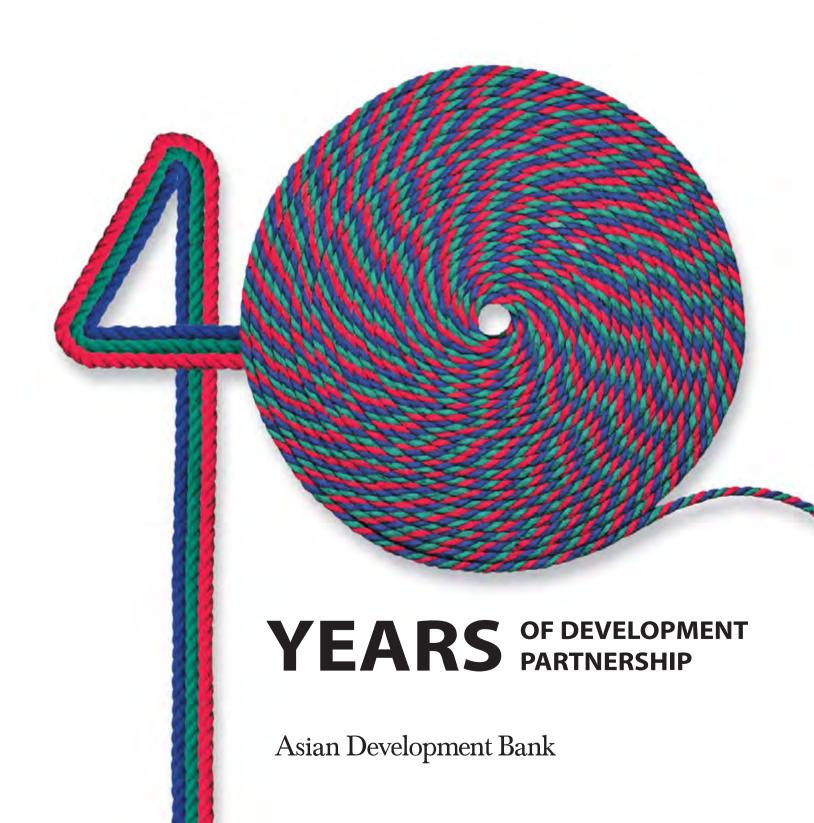


BANGLADESH-ADB





Bangladesh-ADB:

40 years of development partnership

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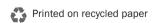
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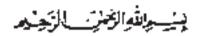
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Prime Minister

Government of the People's Republic of Bangladesh



Message

I am happy to learn that Asian Development Bank (ADB) is producing a publication on 40 years of Bangladesh-ADB partnership. On behalf of the people and the Government of Bangladesh, I would like to thank ADB for being a true friend in our development endeavor in the last 40 years.

The Bangladesh-ADB partnership started in 1973 when the country was reconstructing the infrastructure damaged during the War of Liberation, and when the country was boosting the economy under the leadership of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman.

I understand ADB assistance to Bangladesh has been effective in many areas including energy, transport, education, health, agriculture, irrigation, fisheries, livestock, urban services, government, and finance, among others. ADB assistance for megaprojects like the Bangabandhu Bridge deserves special mention. I also appreciate ADB's emergency assistance, including those for food security, and mitigating flood and cyclone impacts.

ADB has been a unique development partner for its rich local knowledge and empathetic understanding of the local context and needs. I hope ADB can further increase its relevance and effectiveness by helping Bangladesh mitigate climate change impacts and boost regional cooperation.

I believe ADB and all other development partners will continue to support Bangladesh in achieving our goals of sustainable development and rapid poverty reduction.

Joi Bangla, Joi Bangabandhu May Bangladesh Live Forever.

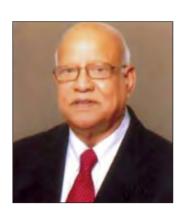
Sheikh Hasina

Prime Minister, Government of the People's Republic of Bangladesh



MinisterMinistry of Finance

Government of the People's Republic of Bangladesh



Message

I am pleased to congratulate the Asian Development Bank (ADB) for completing 40 years of development partnership with Bangladesh. ADB has been an effective and key development partner supporting Bangladesh in our socioeconomic progress. I am particularly appreciative of ADB for its homegrown development solutions and ability to work very closely with the grassroots.

The Government of Bangladesh appreciates ADB's support to practically all sectors of the economy. The wide range of areas supported by ADB include infrastructure development, poverty alleviation, promotion of inclusive development, ensuring access to education, health, safe drinking water and proper sanitation, and improved governance. Our greatest challenge continues to be poverty as around 26% of the people are still below the poverty line. We are working hard to win the current fight against poverty. But it should not be forgotten that people's welfare by and large is much below a comfortable level. In order to tackle this problem we need large investments in transformational projects as well as investments in selected industries. Additionally we need to advance substantially in agro-processing, pharmaceuticals, information technology, and consumer durables. We need substantial infusion of foreign assistance as well as foreign direct investments. We are committed to meet this challenge and ADB is an important partner in building the Golden Bengal that we dream.

As we celebrate the successful 40 years of Bangladesh-ADB partnership, I feel the need for greater partnership between Bangladesh and ADB because there is a lot to be done together. I am proud that Bangladesh emerged as one of the largest borrowers of ADB's concessionary Asian Development Fund resources, which is allocated to ADB's developing member countries against their performance and efficiency in utilizing assistance.

I am confident the collaboration between Bangladesh and ADB will widen and deepen in the years ahead. We look forward to working together with ADB even more closely to create a brighter future for our people.

Joi Bangla, Joi Bangabandhu May Bangladesh Live Forever.

Abul Maal Abdul Muhith
Minister for Finance
Government of the People's Republic of Bangladesh



PresidentAsian Development Bank



Message

I would like to congratulate the people and government of Bangladesh on the significant gains made over the past 40 years since Bangladesh became a member of ADB in 1973. Despite formidable challenges, Bangladesh's phenomenal development has drawn the international community's attention. Researchers often reflect on how the country has made so much of progress, braving natural disasters, political upheavals, and governance challenges.

Bangladesh has emerged as a global top garments exporting country. The overseas workers' remittances constituted 11% of GDP in fiscal year 2012. The population living below the national poverty line fell from 59% in 1990 to 31.5% in 2010. During 1991–2005 the population living below the poverty line declined at an average rate of 1.2% per annum, compared with 0.3% during 1983–1990. This trend further accelerated to 1.7% per annum since 2005, one of the fastest rates of decline recorded worldwide. The country is also on track to achieve most of the Millennium Development Goals. Child health and mortality indicators improved (46 per 1,000 live births in 2011) with greater access (81%) to clean drinking water and sanitation. Gender parity in primary and secondary education has been achieved and fertility rate has sharply declined (70 births per 1,000 women). These are very encouraging socio-economic developments. I hope this development trend will accelerate and Bangladesh will be a middle income country soon.

I am glad that ADB has been a trusted partner assisting Bangladesh in its development. We remain committed to support Bangladesh in building infrastructure, and improving social services and governance for faster economic growth and poverty reduction.

ADB looks forward to continuing and deepening partnership to help Bangladesh unlock its full potential and create a brighter future.

Takehiko NakaoPresident
Asian Development Bank



Economic Relations Division

Ministry of Finance

Government of the People's Republic of Bangladesh



Message

It gives me great pleasure to felicitate the Asian Development Bank (ADB) for completing 40 years of development partnership with Bangladesh. This occasion enables us to celebrate the socioeconomic success of many people who have freed themselves from poverty because of development interventions assisted by ADB.

Over the last 40 years, the Bangladesh-ADB partnership has strengthened as ADB's support to the country's development grew over time. ADB has assisted Bangladesh in a wide range of areas including infrastructure, education, urban services, agriculture, finance, public sector management, and environment and disaster management.

As we accelerate implementation of development projects, the government is sharpening focus on development results and effectiveness through quality assurance of development works. To this end, the government is committed to further improve capacity of line agencies to implement projects and programs. We hope improved utilization of ADB's assistance will help us further eradicate poverty and usher in a new era of prosperity.

I am glad that ADB has aligned its Country Partnership Strategy for Bangladesh (2011–2015) with the Sixth Five-Year Plan priorities of the government. This is a great leap forward for achieving even better results and making our daily operations smoother.

I am confident ADB assistance will increase in depth and quality in the future, and hope that the Bangladesh-ADB partnership will help us quickly eradicate poverty and boost development.

Md. Abul Kalam Azad
Secretary
Economic Relations Division
Ministry of Finance

Government of the People's Republic of Bangladesh



Director General South Asia Department Asian Development Bank



Message

It gives me great pleasure to join in commemorating the 40th anniversary of Bangladesh-ADB development partnership. ADB takes pride in being a partner of Bangladesh.

Over the last 4 decades, ADB has responded to Bangladesh's changing development needs, and always aligned our programs of assistance with national priorities. The government has targeted assistance on areas where we have a long-standing track record and expertise.

ADB assistance helped Bangladesh improve energy security, energy efficiency, and even energy trade. We have also helped to expand and rehabilitate road and rail networks, and the efficiency of the agencies responsible for both services. In education, we have been part of a success story that has improved quality and access. By the same token, we have made a difference on water management, flood control, and rural connectivity. Urban development and urban health also bear strong and successful features of our joint work.

More recently, we entered the capital markets sector and facilitated financing to small and medium-sized enterprises. We have also been playing a significant role in the leasing industry. ADB has experience and a keen interest in climate-resilient infrastructure, gender equality, and women's empowerment. The same applies to legal and institutional reforms, and project-level and overall governance. Finally, we are proud of our partnership in regional cooperation, an endeavor expanded via investments in physical connectivity, trade facilitation, regional tourism, and energy trade.

On joint business, the plan for the future looks balanced and promising. We will continue to work in the infrastructure and energy space, in the education sector, on skills, on water management, and flood controls. We also hope to make further inroads into the public-private partnership agenda, private sector development, and private sector financing. Climate change-related investments are necessary and relevant, and we will assist in this area. The same applies to the provision of basic urban services such as water and sanitation.

I would like to thank the Government of the People's Republic of Bangladesh for treating us as a true and welcomed partner. We are proud of the 40-year partnership with Bangladesh, and look forward to many more years of such a pleasant, productive and effective collaboration. We are optimistic that our joint work will improve the quality of life and welfare of all citizens.

Juan Miranda

Director General, South Asia Department Asian Development Bank



Country Director Bangladesh Resident Mission Asian Development Bank



Message

I feel privileged to be with ADB's Bangladesh Resident Mission as we celebrate the 40th year of a successful development partnership between Bangladesh and ADB. We are very happy to see Bangladesh progressing quickly despite daunting internal and external challenges. ADB takes pride in being a partner in this development process and stand by the people of Bangladesh in times of need.

ADB assistance to Bangladesh focused on sectors critical to attaining and sustaining socioeconomic development including physical and social infrastructure, urban and rural development, capacity enhancement and policy advice, and partnerships to enhance development effectiveness. The assistance covered many sectors but focused more on energy, transport, agriculture and natural resources, education, finance, and urban development. From June 1973 until the end of 2012, ADB provided 234 loans totaling \$14.1 billion and 389 technical assistance projects to support project design and capacity enhancement totaling \$221.7 million.

Soon after Bangladesh became an ADB member in 1973, ADB came forward to help reconstruct infrastructure damaged during the liberation war, and boost agriculture and the rural economy. ADB quickly stepped forward to provide emergency support to help Bangladesh recover from the devastation caused by recurring natural disasters, such as the cyclone of 1991 and floods in 1988, 1998, 2000, and 2004. Following the global food crisis in 2008 and the global financial and economic crisis in 2009, ADB helped Bangladesh boost food security, and enabled the government to continue with social protection programs.

Since the mid-1980s, ADB support focused on policy and institutional reforms in sectors such as industry, finance, energy, and transport. Assistance during the late 1990s focused on physical infrastructure with power and transport, together accounting for 55% of total allocation. After 2000, ADB expanded its support in primary education and health, urban and rural infrastructure and small and medium enterprise development. We have added our efforts to those of the government, other development partners and civil society to create development opportunities for the poor—especially women—and to promote the education of girls and boys. ADB also continued efforts to strengthen governance at project, sector, and corporate levels through dialogues, capacity building efforts, and reforms.

Under the Country Partnership Strategy for 2011–2015, ADB expects to provide over \$900 million in average annual assistance to Bangladesh. Aligning with the government's policies and strategies, ADB will help Bangladesh address growth constraints during this period while promoting environmental sustainability, minimizing disaster risks, and responding to climate change and disaster challenges.

On this occasion marking the 40th anniversary of Bangladesh-ADB partnership, I sincerely thank everyone for their dedication and commitment to development results. I would also like to thank the government and other stakeholders for their support and cooperation. We remain committed to help Bangladesh further unlock its potentials.

M. Teresa Kho

Country Director, Bangladesh Resident Mission Asian Development Bank

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ABBREVIATIONS

ADB - Asian Development Bank

BIMSTEC - Bay of Bengal Initiative for Multi-Sectoral Technical and

Economic Cooperation

BPDB - Bangladesh Power Development Board

CMDP 2 - Second Capital Market Development Program

CNG - Compressed Natural Gas

DESA - Dhaka Electric Supply Authority

DESCO - Dhaka Electric Supply Company

DWASA - Dhaka Water Supply and Sewerage Authority

DWSSDP - Dhaka Water Supply Sector Development Program

FY - Fiscal Year

GDP - Gross Domestic Product

ICT - Information and Communication Technology

IDCOL - Infrastructure Development Company Limited

NGO - Nongovernment Organization

PEDP II - Second Primary Education Development Program

PEDP III - Third Primary Education Development Project

PGCB - Power Grid Company of Bangladesh

PPIDF - Public-Private Infrastructure Development Facility

PPP - Public-Private Partnership

RCI – Regional Cooperation and Integration

SAARC - South Asian Association for Regional Cooperation

SASEC – South Asia Subregional Economic Cooperation

SCB - State-owned Commercial Bank

SEC - Securities and Exchange Commission

SHS - Solar Home System

SMEs - Small-and Medium-sized Enterprise

SSWRDSP - Small-Scale Water Resources Development Sector Project

TA - Technical Assistance

TVET - Technical and Vocational Education and Training

UGIIP - Urban Governance and Infrastructure Improvement (Sector) Project

Weights and Measures

ha – Hectare

km – Kilometer

kV – Kilovolt

MFF - Multitranche Financing Facility

MW - Megawatt

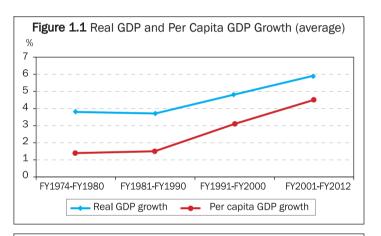


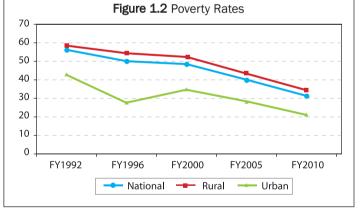
BANGLADESH-ADB DEVELOPMENT PARTNERSHIP: AN OVERVIEW

Bangladesh's Development Experience

Crowth with inclusion and social development. Bangladesh has made impressive

has made impressive economic and social gains since its independence in 1971. High population pressures, a thin resource base, and rising incidence of natural disasters have posed major challenges to Bangladesh's development. Reconstructing infrastructure, damaged extensively during the liberation war, added to the challenges. The country successfully coped with these challenges and as a result, growth rates steadily moved upward (Figure 1.1). Economic growth has also been largely inclusive and





broad based, with notable progress in poverty reduction (Figure 1.2). Food production kept pace with population growth. Population control programs helped in slowing down population growth, income per capita rose significantly in real terms, and poverty fell sharply coupled with improved life expectancy, higher literacy, and lower mortality.

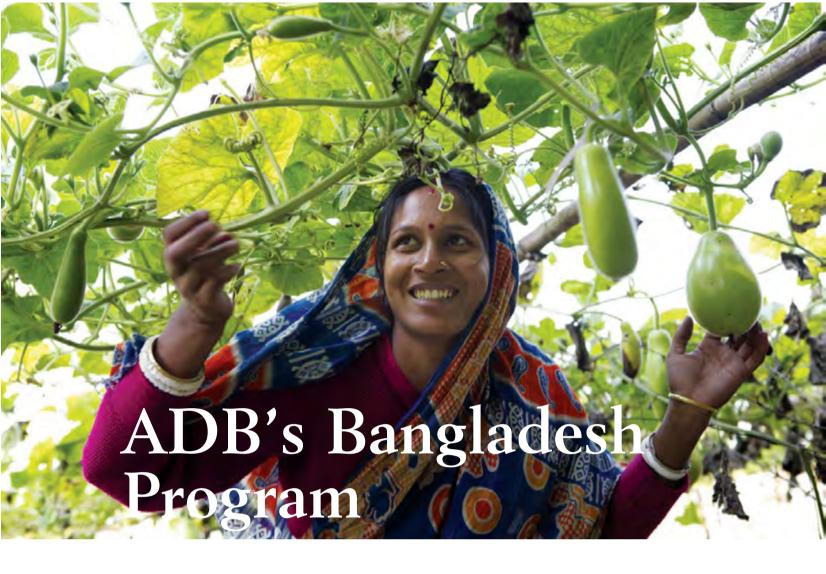
Bangladesh on track to achieve most of the Millennium Development

Goals. Child health and mortality indicators improved with greater access to clean drinking water and sanitation. Gender disparity in primary and secondary education has been removed and fertility rates have sharply declined. The government's emphasis on female education and gender equity led to women's empowerment, increasing women's economic and political roles. The priority attached to social protection programs, improvements in disaster preparedness and crisis-coping capability, wider access to microfinance, and vibrant civil society organizations also contributed to improving social indicators.

Policy and structural changes have strengthened development fundamentals. Government policies have moved toward fostering greater market orientation, privatization of major industrial enterprises, public enterprise reform, and adoption of a supportive incentive regime. As a result, the private sector progressively emerged as a key player and partner in the development process. Exports of ready-made garments (currently close to four-fifths of total exports) rose steadily, responding to favorable policies and conducive policy regime, and became a major contributor to growth and job creation, mostly for women. A vibrant entrepreneurial class also developed around the garment sector, which over time branched into other emerging sectors.

Overseas workers' remittances (11.0% of gross domestic product in FY2012) became the other major growth driver, with a surge in the number of people leaving the country for jobs abroad. Remittances boosted domestic demand and have been instrumental in cutting poverty.

Opening of banking to the private sector in the early 1980s was a major turning point for the country's private enterprise-led development. Reforms enhanced stability, depth, and efficiency of the financial system and expanded access to finance; tax reforms boosted revenues; and trade policy reforms led to greater trade openness, contributing to higher competitiveness and productivity. A rise in investments, aided by healthy growth in national savings, expanded the economy's productive capacity and supported higher economic growth (about 6.0%, on average in FY2001–FY2012) and faster decline in poverty. Over recent years, the country has shown remarkable resilience to external shocks with generally stable macroeconomic management.

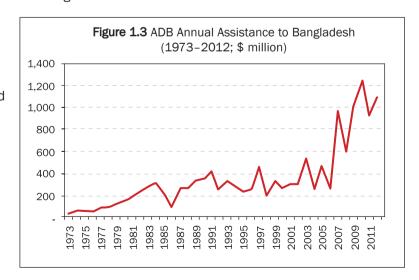


DB's Bangladesh program evolved over time in close alignment with the country's priorities of attaining rapid economic growth and poverty reduction. ADB support to Bangladesh

focused on sectors critical to attaining and

sustaining socioeconomic development including physical and social infrastructure: urban and rural development: capacity enhancement and policy advice; and partnerships to enhance development effectiveness. ADB assistance covered many sectors but focused more on agriculture and natural resources, education, energy, transport, finance, and urban development.

From the start of assistance in June 1973 until the end of 2012, ADB provided 234 loans totaling \$14.1 billion (Figure 1.3) and 389 technical assistance projects to support project design and capacity enhancement totaling \$221.7 million.



On physical infrastructure, ADB supported development of energy and transport infrastructure. ADB supported the energy sector through critical reforms. including significant upgrading of the transmission and distribution systems, installation of an electrical inter connector between the eastern and the western parts of the country, and improvement in the management and operational efficiency of the power entities. In the transport sector, ADB supported Bangladesh's agenda for propoor growth and socioeconomic development focusing on improvement and rehabilitation of road networks, connectivity, and transport efficiency. ADB also supported to improving rural transportation, Chittagong Port efficiency, reforming Bangladesh Railway, developing transport corridors, and rehabilitating communications infrastructure damaged by disasters.

ADB supported social infrastructure through interventions in education, agriculture and natural resources, finance, and urban development.

ADB played a lead role in improving education in Bangladesh, encompassing primary, secondary, non-formal, and distance education. ADB's help contributed to improved access to education and gender parity in primary and secondary education. Since 1990, ADB has assisted in constructing schools, improving teachers' training, and providing students' access to educational materials.

ADB agriculture and rural development initiatives helped increase agricultural productivity and farmers' income, provided food for the poor, generated employment, boosted agribusiness, and linked farmers to the market. Water management initiatives organized small farmers and the landless to form cooperatives and associations to manage irrigation and flood control systems.

Urban development and urban health projects aimed to provide basic health care, pure drinking water, and improved sanitation and urban services, to help reduce child mortality, improve maternal health, and ensure environmental sustainability by improving infrastructure, governance, and service delivery mechanisms.

Sustainable infrastructure financing is important for developing, upgrading, and maintaining physical and social infrastructure. ADB supported finance sector development through a focus on developing and reforming capital markets, facilitating the provision of finance to small and medium enterprises, and introducing new modalities in infrastructure financing. ADB also played a significant role in developing the leasing industry in Bangladesh.

ADB-supported projects maintained their focus on inclusion and beneficiary participation and awareness. The Chittagong Hill Tracts Development Project, for example, raised the income of the indigenous communities by improving infrastructure and providing microfinance. ADB emphasized gender participation in its projects, which enhanced women's access to infrastructure, markets, and services. In recognition of the challenges posed by climate to sustainable development, ADB focused on developing climate-resilient infrastructure.

As a knowledge partner of the government and development community, ADB has been generating and disseminating knowledge products focusing on the country's development needs. The main knowledge genres include economic, sector, and thematic work; research; country diagnostics; evaluation studies; capacity development; policy advice; assessments; and pilot testing of technology and innovation that directly contribute to capacity accretion and an improved enabling environment.

A Chronological Retrospective of the Bangladesh-ADB Partnership

Assistance program in the early years.

During 1973-1985, ADB assistance focused on reconstructing the infrastructure damaged during the war and boosting the rural economy. Broadly keeping in view the priorities of Bangladesh's first and second five-year plans of attaining food self-sufficiency, reducing unemployment, and alleviating poverty, 37.3% of ADB assistance was directed to agriculture and natural resources, the largest sector of the economy during this period. ADB helped the government expand farmers' access to improved inputs such as agricultural credit, fertilizers, and seeds. Significant support was provided for strengthening irrigation. drainage and flood protection, natural resource management, fisheries and livestock, and marketing and rural development. Assistance during this period was also provided for banking, industry, and sectors relevant for expanding the economy's productivity and supporting growth such as power generation and transport development.

Assistance program during

1986–2001. Since the mid-1980s, ADB support focused on policy and institutional reforms in sectors such as agriculture, industry, finance, energy, and transport. This was in keeping with the government's Third Five Year Plan, which marked a shift in emphasis away from a dominant role for the public sector to an efficiency and market-oriented development approach, with a leading role envisaged for the private sector. During 1986 and 1995, although ADB's share of the total assistance to agriculture declined to 25.0%, continued assistance contributed to enhancing productivity and raising food production.

Assistance to the transport sector grew rapidly (up to 27.0% of total assistance) and the power sector continued to be a priority. Support for social infrastructure (e.g., education, health, and urban development) started picking up, representing growing emphasis on human development and poverty reduction coinciding with the focus on poverty reduction as the single overriding objective in ADB's 1993 Bangladesh country operational strategy, as well as government priorities reflected in the third and fourth five-year plans.

While the Fifth Five Year Plan's priority was to attaining self-sustaining growth through boosting investment and attaching greater role for the private sector, ADB assistance in the corresponding period (1996–2001) sharpened its focus on physical infrastructure with power and transport, together accounting for 55.0% of total allocation. ADB assistance to education and health rose, and that for agriculture continued, in line with the five-year plan's priorities for human resource development, poverty reduction, and reducing unemployment.

Assistance program during 2002–2010. Between 2002 and 2006,

ADB aligned its programs with Bangladesh's interim poverty reduction strategy rather than a five-year plan. During this period, ADB expanded its support in primary education and health, urban and rural infrastructure and small and medium enterprise development in line with priorities spelled out in the 1999 country operations strategy and also consistent with government's objectives. A large volume of assistance to power and

transport was maintained, and sizable assistance for gas sector development was included. ADB effectively worked with the government and other development partners to deliver development results through selective initiation of a sector-wide approach in the primary education segment.

In line with the 2005 country partnership strategy priorities, assistance for energy (power and gas) and transport was further enhanced during 2006-2010. Assistance was also strengthened for urban development including water supply and sanitation and waste management. Support was maintained for agriculture, education, and small and medium enterprises, sectors that were accorded high priority by the government under its first and second national strategies for accelerated poverty reduction. ADB supported eight projects for disaster risk management between 1988 and 2008. and extended emergency assistance for food security to Bangladesh in 2008 in the wake of the global food crisis. Similarly, following the onset of the global financial and economic crisis, ADB in 2009 provided the public expenditure support facility and counter cyclical support facility program loans to Bangladesh to help the authorities cope with the effects of the crisis. At the government's request, ADB provided in 2007 a program loan for good governance, and in 2010, processed the strengthening governance management project.

Assistance program under the 2011-2015 country partnership strategy (CPS). Under its 2011-2015 CPS, the overarching objective of ADB support is to contribute to the government's Sixth Five Year Plan priorities of enhancing growth and cutting poverty. ADB will provide assistance within its Strategy 2020's development agenda of inclusive economic growth, environmentally sustainable growth, and regional integration. ADB will help the government address constraints to growth while promoting environmental sustainability. minimizing disaster risks, and responding to climate change and disaster challenges. During the new strategy period, ADB expects to provide over \$900 million in average annual assistance to Bangladesh.

ADB's public sector operations focus on energy, transport, education, urban, finance, and agriculture and natural resources. In the first 2 years (2011–2012) of the 2011–2015 strategy period, over half of the total allocation was directed at the energy (power and gas) and transport sectors, and a fifth of the total allocation went to education. Under the finance sector, a capital market program loan was provided accounting for close to another fifth of the total allocation. Support was also extended to agriculture and urban water supply and sanitation.

Development Partnerships

n addition to its primary partnership with the government, ADB coordinates with diverse groups of stakeholders including development partners, private sector, civil society and nongovernment organizations, academia, research institutions, and think tanks to enhance its effectiveness. Along with high-level policy dialogue conducted with senior government officials, consultations with project beneficiaries or affected people are also conducted to harness local knowledge, assess project impacts, and formulate policies.



Bangladesh Resident Mission

ADB established its first field office in Bangladesh in 1982 to support real-time coordination with the government, executing agencies, and various other stakeholders, in addition to focusing attention on implementing ADB-assisted projects. Growing steadily over the years, ADB's Bangladesh office, called the Bangladesh Resident Mission, is currently responsible for country programming; supporting loan and technical assistance processing; managing the portfolio of delegated ongoing loan and technical assistance projects; loan disbursements; and managing relations and undertaking policy dialogue (jointly with sector specialists).

Private Sector Operations

ADB's private sector operations in Bangladesh began in 1989. At the end of 2012, cumulative approvals in 12 projects amounted to \$297.2 million. ADB's largest private sector initiative for infrastructure was the 450-megawatt gas-fired combined cycle Meghnaghat Power Project approved in 2000. ADB provided a direct loan of \$50 million, a B-loan (complementary financing scheme) of \$20 million, and a partial credit guarantee of \$70 million.



Development Effectivenessof ADB Assistance

cross 4 decades, the Bangladesh–ADB development partnership yielded visible development results stemming from shared goals, joint strategies, and well-established institutional and coordination mechanisms. The paragraphs that follow give a flavor of such development outcomes from ADB supported projects:

The *Urban Governance and Infrastructure Improvement Sector Project,* which commenced in 2002, benefited about 1.85 million citizens across 30 towns, representing 6% of the total urban population. About 650,000 people benefited from reduced flooding resulting from improved drainage systems, while about 120,000 urban poor benefited from community-based environmental improvement and slum development activities.

The *Urban Primary Health Care Project*, a public-private partnership initiated in 1997, focused on improving the health status of the urban population, especially the poor, women, and children. The project benefited over 6 million people through 180 urban health care centers. The project was implemented with 16 NGOs as service providers.

The *Northwest Crop Diversification Project* initiated in 2000 raised farmer incomes by 21%–56%, depending on crop combination, through adding 43,000 hectares of high-value crops, upgrading 77 rural markets, and providing \$14 million of credit to 110,000 farmers organized in over 10,000 beneficiary groups under the project.

The Bangabandhu Multipurpose Bridge initiated in 1994, along with its railway link, helped lift over 1 million people out of poverty, in addition to stimulating the socioeconomic development of the less-developed northwestern region, and completing a segment of the link of the Asian Highway and the Trans-Asian Railway between Tangail to Sirajganj, taking regional integration a step closer to realization.

The Southwest Road Development Project, approved in 1999, supported development of a road corridor linking Dhaka with the less-developed southwestern region. The regional gross domestic product has since grown by

a high of 6% per annum over the 1999–2005 period. Vehicle operating costs in the road corridor fell by 38%.

The Second Primary Education Development Program (PEDP II) initiated in 2003 is a model of harmonization of government and development partner efforts. Over 140,000 teachers were recruited or trained; 40,000 new classrooms were constructed, augmented by a further 10,000 that were repaired by the community. Student attendance improved from 75% to 90%.

The Secondary Education Development Project, initiated in 1993, supported the government's vision of promoting secondary education and reducing gender disparities therein. The program benefited 7.3 million children. Secondary school enrollment increased from 34.9% in 1996 to 41.3% in 1999. The female enrollment rate increased to 45.6% in 2000 compared with 35.5% in 1997. There was also a 14% reduction in dropout rates.

The multi-donor-supported *Power System Expansion and Efficiency Improvement Investment Program,* approved in 2012, will significantly boost Bangladesh's power supply system by connecting 450,000 households to the power grid and reducing carbon emissions by almost 2.5 million tons per year when the project is completed in 2018. A pilot under the project will establish 200 solar energy-driven irrigation pumps benefiting around 4,000 poor farming families.

The Emergency Flood Damage Rehabilitation Project was approved in 2005 to redress some of the devastating impacts of the severe floods in mid-2004 that inundated about 38% of the country. The project financed the rehabilitation of 5,500 kilometers of rural roads, 13,200 meters of bridges and culverts, 201 kilometers of embankments, 114 bridges and culverts, and 331 embankment and river bank protection works, among others—thereby restoring flood-ravaged infrastructure and assisting people, particularly the vulnerable poor, to quickly resume their livelihoods.

The chapters that follow chronicle the Bangladesh-ADB development partnership of 4 decades more systematically—across sectors and thematic areas of operation. ■



TRANSPORT: CONNECTIVITY TO PROGRESS

nfrastructure deficit is constraining market-led growth and access to social services in Bangladesh. Construction, rehabilitation, and upgrading of the country's roads, bridges, railways, and ports is improving access to markets, enabling cost-effective movement of goods and commodities, and triggering economic development.

ADB Assistance to the Transport and ICT Sector: An Overview

Bangladesh has an extensive and diversified transport system. As of 2012, the country's transport system comprised 21.461 km of national and regional highways, and district (zila) roads; 2.855 km of railways; 24,000 km inland waterways (only 6,000 km navigable by mechanized vessels); two seaports; and civil aviation. Out of these multiple modes of transportation, the road transport has been playing the dominant role: it carries about 88% of total passengers and 80% of freight traffic, compared with 4% of both passengers and freight by railway, and 8% passengers and 16% of freight traffic by inland water transport. The pace of improvement in this sector has been positive, albeit slower than expected, with marked improvement in the quality of services.

ADB assistance in the transport sector boosted pro-poor economic and social development. Following Strategy 2020, ADB continues to help improve road networks and bridges, connectivity, transport efficiency, urban infrastructure, and ports' infrastructure and efficiency through automation. ADB is

also helping to make railway attractive to users by improving the rail infrastructure and enhancing its operational efficiency through sector and institutional reform, and development of subregional transport connectivity and information and communication technology (ICT).

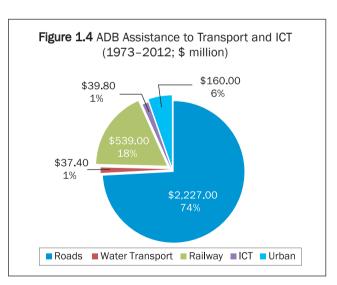
The government approved the National Land Transport Policy in 2004, and prepared the **Integrated Multimodal Transport Policy** addressing the constraints in the country's transport sector. Under the Sixth Five Year Plan of Bangladesh for 2011-2015, the government aims to develop a balanced and integrated transport network. Development will be concentrated on five main corridors: Dhaka-Chittagong, Dhaka-Northwest, Dhaka-Khulna, Dhaka-Sylhet, and Khulna-Northwest. ADB continues to support the government's endeavors and has provided a total of 39 loans and 56 technical assistance in this sector since 1973 ADB assistance for the transport and ICT sector accounts for 21.22% of total ADB assistance to Bangladesh during 1973 to 2013, amounting to about \$3.0 billion.



Building Roads, Changing Lives

Dinajpur

Maksud Ali, a truck owner transporting food grain from Dinaipur, in northwest Bangladesh, to the rest of the country, has been a witness to Bangladesh's gradual but strong strides toward development of its transport infrastructure. "During the 1970s, the condition of the roads all over the country was extremely bad," Maksud exclaimed. Transportation of goods from Dinajpur to all parts of the country including to the



capital city of Dhaka and the port city of Chittagong involved long hours and many days. Breakdown of my trucks was a regular phenomenon and costs to repair and run it were high," Maksud added. But now, "my business is brisk because almost all the roads are in good condition and many bridges were built during last 20 years allowing shorter journey time and lower costs for my trucks."

In 1973, ADB approved the first loan to the road subsector for improving the Khulna-Mongla road. Since then, ADB has approved 14 loans and 46 technical assistance projects for construction, rehabilitation, and improvement of the country's overall road network. ADB-assisted roads and bridges now traverse from Dhaka to Chittagong, connecting the major cities of Comilla, Feni, and Noakhali in between, and from Cox's Bazar to Teknaf linking the proposed Bangladesh-Myanmar friendship road at Gundhum. In central-east and northwest Bangladesh, three ADB-assisted road network improvement projects have rehabilitated the national, regional, and feeder roads in Mymensingh, Sherpur, Kishoreganj, Jamalpur, Rangpur, Panchagarh, Dinajpur, and Thakurgaon districts.



Fauzderhat, Chittagong

Kamrul Islam, a truck driver who transports containers between Dhaka and Chittagong port, has benefited from the 13 km port access road constructed in 2006 under the Road Maintenance and Improvement Project. "The access controlled road allows for faster container movement to and from the port. I no longer need to drive through the congested city to reach the port losing about one and half hours of precious time. My vehicle running cost, including incidental costs, has now been reduced," Kamrul said.



Railway Subsector and ADB Assistance

The network. Bangladesh Railways (BR), a department under the Ministry of Railways, has a network of 2,791 kilometers (km). The network is divided into two zones: the east and the west, separated by the Jamuna River. The rail network comprises 659 km of broad gauge track (i.e., 1.676 meter width track), 535 km of meter gauge track, and 375 km of dual gauge track (catering for both dual and meter gauge trains) in the West Zone. The East Zone has 1,222 km of meter gauge track.

Challenges. While railways worldwide face increasing competition from road, air, and water transport, Bangladesh Railway faces additional challenges in overcoming its lack of commercial focus, low efficiency, poor service quality, external interference, aging fleet, and congested network. Notwithstanding, railway in Bangladesh has the potential to be an efficient mode of transport as part of a balanced and integrated transport system.

ADB assistance to the rail subsector. ADB has been the lead agency in supporting improvements to the infrastructure and performance of the railway subsector. ADB provided its first loan of \$23 million for railway in 1974, within 1 year after Bangladesh became a member of ADB. Since then, ADB has provided eight more loans for improvement of the country's railway, and the total ADB assistance to the railway amounts to\$609 million. This includes the Railway Sector Investment Program, approved in October 2006 as a multitranche financing facility for \$430 million for improving the overall railway infrastructure with linkage to Bangladesh Railway's performance. In addition, ADB provided 21 technical assistance projects and grants totaling \$10.6 million. ■



Maritime Subsector and Inland Waterways

Inland water transport. The overall modal share of inland water transport in passenger and freight has registered a massive decline since 1974. Its share of total freight traffic declined from 30% in 1974 to 16% in 2012. The main reasons behind such erosion have been the dramatic development of the road subsector and gradual loss of navigability in the country's main waterways. Out of the 24,000 km of waterways in the country, about 6,000 km are accessible to mechanize driver crafts, and only 3,800 km are navigable in all seasons.

Sea ports. Chittagong and Mongla are the two sea ports in Bangladesh, with Chittagong handling about 85% of the country's export-import cargo. The shares of these two ports in handling the total maritime cargo have always been unbalanced. Since 2003, the balance has shifted further in favor of Chittagong port, while Mongla port's share has plunged from about 10% in 2002 to about 4% in 2012. This is caused by the deteriorating navigability of Mongla port's channel and diminishing demand for jute and jute goods in the international market, which were the main export commodities for Mongla port.

ADB assistance for maritime and inland waterways. ADB has been a large development partner in improving the country's maritime and inland waterways. ADB has provided \$37.40 million in loans to this subsector comprising the Chittagong Port Project for \$6.8 million in 1973 and the Chittagong Port Trade Facilitation Project for \$30.60 million in 2005. The later project helped

automate container management, which substantially improved the port's operational efficiency. ADB recently approved a technical assistance grant for \$1.0 million to finance the preparation of a master plan for Chittagong port.

The Way Ahead

Adapting to the changing strategies and priorities. ADB will focus its operations in the core areas that best support Bangladesh's needs and ADB's comparative strengths, and that complement efforts by other development partners. In line with the country's Sixth Five Year Plan's transport sector priorities, and the National Land Transport Policy, ADB will continue supporting reform, capacity building, and investments in roads and railways. Particular attention will be paid to developing urban transport, and promoting subregional cooperation through cross-border transport connectivity as well as opportunities for public-private partnerships. Considering the importance of the railways, ADB will combine support for continuing reform and investment. ADB will also help enhance the capacity and efficiency of the country's ports in handling containerized freight cargo, catering to both national and cross-border movement of export-import and transit freight.

Bangabandhu Multipurpose Bridge Project — Bridge to Prosperity



Finally, a dream came true when the 4.8 km Bangabandhu Bridge (Jamuna Bridge) was opened to traffic on 23 June 1998.

The bridge generates multiple benefits for the people by promoting interregional trade. Apart from quick movement of goods and passenger traffic by road and rail, it facilitates transmission of electricity and natural gas and integration of telecommunication links. The bridge, stretching from Tangail to Sirajganj, is located on the Asian Highway and the Trans-Asian Railway which, when fully developed, will provide uninterrupted international road and railway links from Southeast Asia to Northwest Europe.

Harmonizing and Complementing the Resources

The bridge was constructed at a cost of \$962 million, which was shared by ADB, the International Development Association, and the Overseas Economic Cooperation Fund of Japan (presently Japan International Cooperation Agency) with 22% each, and the remaining 34% was borne by the government of Bangladesh.

Impact of Bangabandhu Bridge on the National and Regional Economy

National Impact Studies revealed that the Bangabandhu Bridge had

- lifted 1 million peoples out of poverty;
- a positive impact on the national economy and, therefore, on poverty at the national level:
- a significant reduction of transport cost resulting in marked improvement of trade flows;
- a noticeable development of the northwest's regional economy due to increased regional exports of goods and migration of labor;
- an increase in the production and availability of electricity and natural gas; and
- increased attractiveness for locating processing plants in the northwest;

Northwest Regional Impacts

- Passenger commutation increased by 18%, volume of interregional trade increased by 5%, and there were increases in the movement of trucks (by 89%) and buses (by 130%) between 1997 and 2012.
- Transfer of natural gas by pipeline has resulted in significant cost savings of power generation in the northwest.
- Reduced transportation costs and access to higher-income markets in the capital have led to increased prices for farm products and substantially added to the farmers' income.
- Bangabandhu Bridge has encouraged major investments in cement and transportation industries in the northwest.

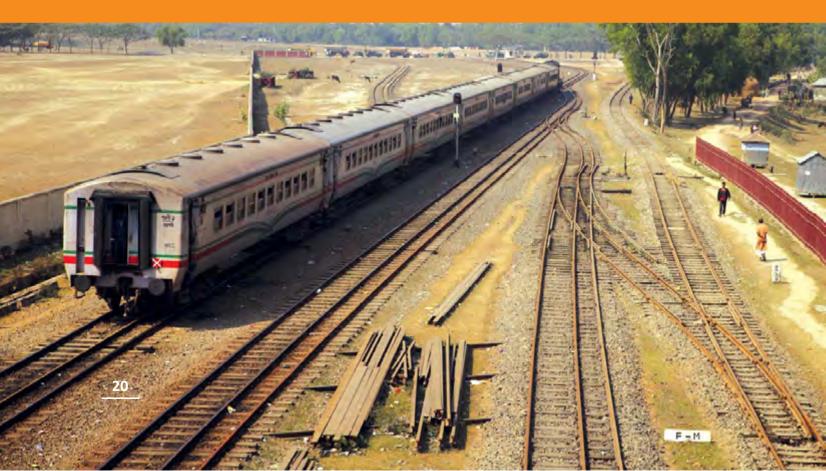
Bogra

Abdul Halim, a truck driver, experienced the stressful years before the Bangabandhu Bridge was built. "Until 1998, transportation of the fruits and vegetables to markets in Dhaka was a tedious 14 hours journey by a detour using ferry services. The owners consistently suffered loss of the perishable commodities," he lamented.

Now, after the bridge has been built, and access roads and highways to the bridge from all parts of the country have been constructed and rehabilitated, Abdul Halimjovially says he "can drive to Dhaka in just 5 hours, in all weathers and time of the day and night.....In addition, due to the shortened route, the bridge and the improved roads have reduced fuel consumption and wear and tear of my truck."

Bangabandhu Bridge Railway Link: Complementing Benefits of the Bridge

Out of the ADB-assisted projects that helped improve the railway subsector, the Bangabandhu Bridge Railway Link Project is considered a milestone in improving the country's railway system. It contributes immensely to the economic development of Bangladesh by connecting the railway system in the eastern and western sides across the Jamuna River and opening up new opportunities for subregional integration with Bhutan, India, and Nepal.



Railway Sector Investment Program

Railway Sector Investment Program

A framework financing agreement for the Railway Sector Investment Program was signed on 7 September 2006 between ADB and the Government of Bangladesh. ADB approved the program on 10 October 2006 as a multitranche financing facility (MFF) for \$430 million. The program is based on the government's Sector Road map and Investment Plan for 2007–2015, and will implement policy and organizational reforms to make Bangladesh Railways more commercially focused with improved governance, performance, and accountability. It also aims to boost investment for rolling stock capacity improvement to overcome capacity bottlenecks in sectors where such investments are both economically and financially viable (e.g., the Dhaka-Chittagong and the Dhaka-Darsana-Khulna corridors).

Improving the Dhaka-Chittagong Railway Corridor

The 64 kilometer-long Tongi-Bhairab Bazar Double Tracking works has been prioritized as the core subproject under the Railway Sector Investment Program. The immediate and long-term objectives of this subproject are to (i) reduce travel time, (ii) increase the volume of cargo and passenger movement, (iii) ensure uninterrupted railway traffic, and (iv) increase economic activities on the

Dhaka-Chittagong economic corridor. Implementation of the subproject commenced in 2011 and it is expected to be completed and open to traffic in 2014. The Tongi-Bhairab Bazar Double Line Project will help strengthen Bangladesh Railway's core business activities by enhancing its capacity to overcome constraints to increasing rail services in the Dhaka-Chittagong corridor, which has high demand for intercity passenger and freight services.



Enhancing Efficiency — Linking Investment with Results

Under the program, continuous support will be provided to implement the Bangladesh Railway reform agenda, while the investment program will be supported by a series of four tranches. The reform and the investment components are integrated; approval of subsequent tranches for investment subprojects is dependent on the implementation of specific reform actions agreed upon in the railway reform action plan in the framework financing agreement. The expected impact of this investment is efficient and safe railway transport in the Dhaka-Chittagong and Dhaka-Ishurdi-Darsana-Khulna/ India corridor.

Challenges Ahead

To seize the new opportunities from increased domestic and cross-border demand for railway services, Bangladesh Railway will start operation on a commercial footing. Reforming Bangladesh Railway and gradually transforming it into a corporate entity is a key to enhancing its efficiency. Reform initiatives are focused on restructuring Bangladesh Railway into passenger, freight, and other lines of business; improving the financial governance system; improving the human resource governance system; improving operational and maintenance practices and performance; and transforming Bangladesh Railway into a corporate entity.





EDUCATION: **BUILDING THE FUTURE**

Access to a quality and pro-poor education and learning system remained the major challenge for developing the skilled workforce needed for economic development and poverty reduction. Bangladesh has made considerable progress in establishing its education system, particularly in providing access to education at all levels, including primary, secondary, and non-formal education. Significant progress has also been made in teaching quality improvement and skill development; and in reforming the overall education system. ADB has been a reliable partner of Bangladesh throughout the process of achieving these successes.



Building Schools, Enhancing Access to Education



Gazipur

Anisul Islam, a primary school teacher at Gazipur, about 40 kilometers from Dhaka, has seen the massive but consistent improvement in access to the country's primary education system. "Twenty years before, most of the local children were out of the primary education net," recalled Anisul. "These days, with the increase in the numbers of schools and growing awareness of the parents in the rural areas, enrollment in the primary schools has sharply increased with reduced dropouts," Mr. Islam said happily.

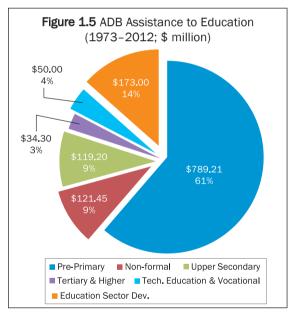
ADB Assistance to the Education Sector: An Overview

angladesh has made considerable progress in improving access to education at all levels. Net enrollment in primary education increased from 87.2% in 2005 to 94.9% in 2011 Pass rates in secondary school certificate examinations have improved from 52.6% in 2004 to 82.0% in 2011 and in higher secondary certificate examinations from 47.7% in 2004 to 70.2% in 2011. Despite significant progress in access, Bangladesh is

lagging behind on primary cycle completion (the second Millennium Development Goal). In secondary school, cycle completion has increased from 20.0% in 2005 to 38.6% in 2011, but remains low. Quality remains the major challenge throughout the education system, upon which sustaining gains in access depends. Poor quality manifests itself in unacceptably high dropout rates and is affected by poor nutrition and health.

Relevance of education and focus on core competencies. The education provided, especially in secondary schools, is not well linked to the needs of the labor market. Improving the relevance of secondary and tertiary education to the labor market is a well-recognized need. Similarly, technical and vocational education and training (TVET) institutions lack the required facilities, linkages with the labor market, and institutional capacity and organizational arrangements to qualify trainees as skilled workers. Girls have limited access to TVET. The informal labor market remains underserved.

Access to basic, secondary, and vocational education. Considerable progress has been made in improving access to primary education. This has put pressure on the secondary and tertiary levels. However, the poor, minority ethnic groups, urban slum residents, and those in remote and vulnerable locations do not have access to education of acceptable quality. Children from poorer families and disadvantaged groups and girls have lower cycle completion rates and poor learning achievements. Similarly, while the transition rate from primary to secondary education has



improved, access remains limited for the poor and disadvantaged, particularly to higher secondary education. While girls outnumber boys in both primary and secondary schools, the enrollment ratio reverses in favor of boys after grade 10. In TVET institutions, students seeking admission outnumber the available seats by more than three times on average, and the boys outnumber girls by more than three to one.

System inefficiency. The internal efficiency of the education system remains low. Although improving, high absenteeism (19% for students and teachers in primary and secondary schools) and little time spent on lessons remain as major concerns. Low retention rates, high repetition rates, and poor performance on examinations reflect massive wastage of the country's limited education resources.

Inadequate financing. At 2.4% of gross domestic product in 2011, government expenditure on education is inadequate. Other developing countries, such as India and Viet Nam, invest much more in

education (3.5%). The government's sustained support for stipends has expanded enrollment, but wide scope remains for improved targeting. While the government finances four types of schools,its financing remains uneven, perpetuating existing disparities in learning outcomes. Inadequate government financing for maintaining new buildings and facilities and chronic personnel vacancies hamper the sustainability of education investments. The move to school-based management provides opportunities to redress some financing gaps through community mobilization and contributions to schools.

Government's Sector Strategy

The National Education Policy, which emphasizes holistic and balanced development of the education sector, was approved by the government in December 2010. The policy emphasizes enrolling all students in primary education, raising

literacy levels, narrowing disparities, and improving the quality of education with a focus on teacher quality, school-level leadership, more effective application of teacher training in the classroom, more resources for the education sector, targeting



improvements, and monitoring key results. The government's emphasis is on English, ICT, science, and mathematics.

The government recognizes the need to expand the secondary education system to accommodate the primary school graduates. It is mainstreaming the *madrasah* (Muslim school) system to ensure equitable learning outcomes for all. It also recognizes the limited opportunities for organized technical and vocational skill development and seeks to improve the education system's responsiveness to the job market.

Under the Sixth Five Year Plan of Bangladesh, FY2011-FY2015, the government's main objective is to reverse the low completion rates at all levels. A related goal is to reduce the gap between rich and poor. Improving education quality, particularly in secondary school, is central to addressing these objectives and will require improved infrastructure; sufficient teachers; more recruitment of female teachers; better teaching and learning aids; greater use of computers; training in information and communication technology; the establishment of technical schools in upazilas (subdistricts); curriculum improvement; the modernization of madrasah education; and improved teacher capacity.

ADB Sector Experience and Assistance Program

ADB has been supporting educational access and quality improvements through various projects and programs. In primary education, ADB is supporting the Third Primary Education Development Program (PEDP III) with a loan of \$320 million to follow up and help sustain the remarkable achievements in improving primary education. The project is a follow-on to the Second PEDP (PEDP II), the first sector-wide approach in the education sector in Bangladesh. PEDP III will cover 1 year of

preprimary education and 5 years of primary education. Together with eight other development partners, the project aims to improve learning outcomes and completion rates and reduce regional disparities.ADB was the lead development partner for PEDP II, financed jointly by the Government of Bangladesh and 11 development partners — Asian Development Bank, Australian Agency for International Development, Canadian International Development Agency, Department for International Development of the United Kingdom, European Commission, International Development Association, Japan International Cooperation Agency, Norwegian Agency for Development Cooperation, Swedish International Development Cooperation Agency, United Nations Children's Fund, and Netherlands. A major achievement of the project has been substantial improvement in teacher recruitment process in government primary schools. ADB supports the second Post-Literacy and Continuing Education in Human Development Project, which engages major nongovernment organizations in Bangladesh at the district level following the reformulation of the project to make women the majority of targeted beneficiaries. This has helped to consolidate implementation arrangements and form a much closer link between literacy and skills.

ADB has provided substantial assistance to the government for developing secondary education. The Teaching Quality Improvement in Secondary Education Project helped the government to strengthen capacity to train secondary school teachers, and attached top priority in providing access to teacher training in remote areas. The Secondary Education Sector Development Project is helping the government build further on critical sector reforms to strengthen the management and transparency of secondary education through a decentralized management system, and more equitable access to secondary education through stipends for

girls. With ADB support, the government has introduced a number of reforms in examinations system, management system, teacher training programs, and a poverty-targeted stipend program.

ADB assistance to the development of the education sector in Bangladesh accounts for 9.32% of total ADB assistance to Bangladesh during 1973 to 2012, amounting to \$1.28 billion. Education continues to be emphasized by both ADB and the government in the overall development partnership strategies.

ADB continued to be Bangladesh's lead development partner in the country's upsurge from a rudimentary base of primary-level education to an improved and highly accessible pro-poor education system. Since 1973, ADB approved 20 loans and 40 technical assistance projects for improving and upgrading the primary and secondary education system.In the past, ADB provided support for improving access,

particularly to primary and secondary education. Over the years, ADB's focus increasingly shifted toward improving the quality and relevance of education through assistance for education policies, institutional and organizational strengthening, and capacity building.

ADB has helped reform secondary education through school performance-based management, local planning, information management, system improvement, strategic planning, management decentralization, better governance, more furniture and equipment, and stronger curricula. ADB helped establish the Directorate of Non-Formal Education, which supported 2.9 million learners, of whom 57% were women. Assistance to primary and secondary education helped build or upgrade nearly 35,000 classrooms, train around 1.5 million teachers, provide stipends to almost 39 million students, and distribute over 350 million textbooks for free.



Sherpur (Mymensingh)

Hamida Begum, a primary school teacher, looks at a new horizon of development in primary education. "In the past, most of the village children did not enroll in the primary schools. The parents were sometimes hostile when asked to send the children to schools," she recalled. "But those days are gone; more than 90% of the children are now enrolled, and dropouts are at a minimum," she said, looking proudly at her school building.

The Way Forward

DB will continue to help the government achieve its goals in education, as set out in the Sixth Five Year Plan, the second National Strategy for Accelerated Poverty Reduction, the Education for All policy, and the Millennium Development Goals. ADB will help the government to improve the quality and relevance of the education system by emphasizing support for quality improvement, to lay the foundation for development of human resources at all levels. Future ADB support for the education sector will strongly emphasize sustainability. Acknowledging that better primary education will create positive synergies with secondary education, ADB will continue to support the government's efforts in implementing secondary education reforms. Aligning with the national

education policy 2010, ADB will help the government to improve the quality and relevance of the education system, as well as improve the skills profile of the labor force, to reduce poverty and enhance economic growth. Support will be provided to reform secondary education and to continue mainstreaming madrasah schools into the primary and secondary education system. While ADB will phase out support to primary education, increased assistance will be provided for skills programs, including assistance to build sustainable technical and vocational education and training capacity, to better meet labor market requirements. ADB will selectively support higher education with a focus on public-private partnerships. science and technology, and ICT.

Skills Development Project

Developing Skills - Enhancing Income

Technical and vocational education and training (TVET) has a large role to play in economic growth and social development as a provider of trained human resources to the labor market and skills to those looking for employment. The ADB-assisted Skills Development Project is supporting the country's road map for improving the skills and earning power of its labor force.



Background of the Project

angladesh's economic growth has been constrained by the skills limitations of its work force. A recent survey of private companies in Bangladesh by the Japan International Cooperation Agency found that some 60% of businesses indicated inadequate skills and training systems to be a constraint to business growth. Training was considered to be the major issue among the "soft" problems and was only surpassed by two other constraints to growth: infrastructure (87%) and land availability/price (66%). A key contributor to poverty in Bangladesh is that people do not have the educational background and skills needed to secure jobs. According to a labor market survey in 2010, around 68% of the labor force has only up to primary education, with 38% having no education. Around 96% of the labor force has no training and only 1.4% has had some form of technical or vocational education or training. This creates a low skills equilibrium of poor-quality jobs and low wages. Therefore, it is important to link skills development with basic education-to give the population the foundational skills upon which skills development can be anchored more effectively.

To help Bangladesh improve the skills of its workforce, ADB in June 2008 approved a loan for \$50.0 million for the Skills Development Project. Implementation of the project is ongoing.



Impacts and Outcome

The project's impact will be increased pay and self-employment of graduates of skills training, locally and internationally. The project's envisioned outcome is strengthened capacity of the TVET system to provide market-responsive, short-term, relevant skills training to more Bangladeshis, including those who have not completed grade 8. The project will be implemented throughout the country.

Project Outputs

Project outputs comprise (i) enhanced relevance and access of TVET programs; (ii) improved capacity for quality TVET delivery; (iii) relevant skills training, including to the poor, women, and disadvantaged groups. The focus will be on assisting and improving the development and delivery of short skills training programs that will not necessarily require completion of grade 8 or admission into the Secondary School Certificate (vocational) program. ■

Second Primary Education Development Program (PEDP II)

Education for All



PEDP II: Project Profile

Bangladesh has one of the largest primary school systems in the world, with over 16 million children enrolled in over 80,000 primary schools. Considerable progress has been made in improving access to free and compulsory primary education. Gross enrollment rates in primary education improved from 93.7% in 2005 to 101.5% in 2011, and net enrollment rates improved from 87.2% in 2005 to 94.9% in 2011. Bangladesh was one of the few countries to achieve gender parity up to the secondary level by 2005. Despite the significant progress in access to education, opportunities for further improvement remain to ensure reduction of student dropout and repetition rates, and lower student and teacher absenteeism. Two rounds of national assessment indicate low student achievement in grades 3 and 5, but the results are improving.

Using its development experience in the education sector, ADB in 2002–2003 led a highly participatory process for preparing the comprehensive Second Primary Education Development Program (PEDP II). In addition to supporting teacher training, educational materials development, and classroom-level quality improvement, PEDP II addressed policy, systematic, institutional, and organizational weaknesses. ■



Baliadanga, Dinajpur

On a warm day in a remote Baliadanga village, about 45 kilometers northwest of Dinajpur, 10-year-old Shafiqul Islam sits with 39 other students in one of the six classrooms inside a rehabilitated primary school building. He is in grade 5, and looks forward to see prosperous days in the future. "I want to do a good job in Dhaka and have a good future," he said, when asked what motivates him to go to school.

The children hanker for a life beyond farming, the main source of income in Baliadanga, in Dinajpur district and they see education as key to creating more options. The jobs they would like to do include teaching and government service. The school, rehabilitated as part of the Second Primary Education Development Program (PEDP II), supported by ADB as the lead donor along with 10 other development partners, is helping attract these children to school so that they can fulfill their dreams.

Donor Harmonization – A Unique Case

PEDP II is a model of harmonization of aid agencies' procedures in financial management, funding, reporting, procurement, reviews, auditing, monitoring, and evaluation. ADB provided \$100.0 million of the total financing basket of \$1.8 billion, and the rest was shared by 10 other development partners and the government. The collaborative efforts promoted harmonization of assistance to achieve greater impact on system improvement and student achievement.

Financing Plan					
Financier	Actual Costs (\$ millions)				
ADB	109.8				
IDA	145.3				
DFID	112.3				
EC	115.9				
Canada	53.0				
Netherlands	46.2				
NORAD	36.6				
SIDA	33.5				
JICA	5.4				
UNICEF/AusAid	27.2				
The government	1.161				
Total	1,846.2				

Source: Government of Bangladesh project completion report

ADB = Asian Development Bank, AusAID = Australian Agency for International Development,
DFID = Department for International Development of the United Kingdom, EC = European Commission,
IDA = International Development Association, JICA = Japan International Cooperation Agency,
NORAD = Norwegian Agency for Development Cooperation, SIDA = Swedish International Development
Cooperation Agency, UNICEF = United Nations Children's Fund.

The main objective of PEDP II was to assist the government to promote Education for All and its poverty reduction agenda, which are linked with the Millennium Development Goals (MDGs). PEDP II aimed at reducing poverty through universal primary education and contributing to sustainable socioeconomic development and equity in Bangladesh society as envisaged in the MDGs. The specific objective was to provide quality primary education to all eligible children in Bangladesh.

PEDP II had four major components:

- i. quality improvement through organizational development and capacity building,
- ii. quality improvement in schools and classrooms,
- iii. quality improvement through infrastructure development, and
- iv. improving and supporting equitable access to quality schooling

Impact of PEDP II

Dagonbhuiyan, Noakhali

"Following the PEDP II, we changed from teachers' two shifts to one shift, which has made remarkable improvement in students' performance. We now give more time and attention to every student," said Ayesha Begum, head of Dagonbhuiyan Government Primary School in Feni district.

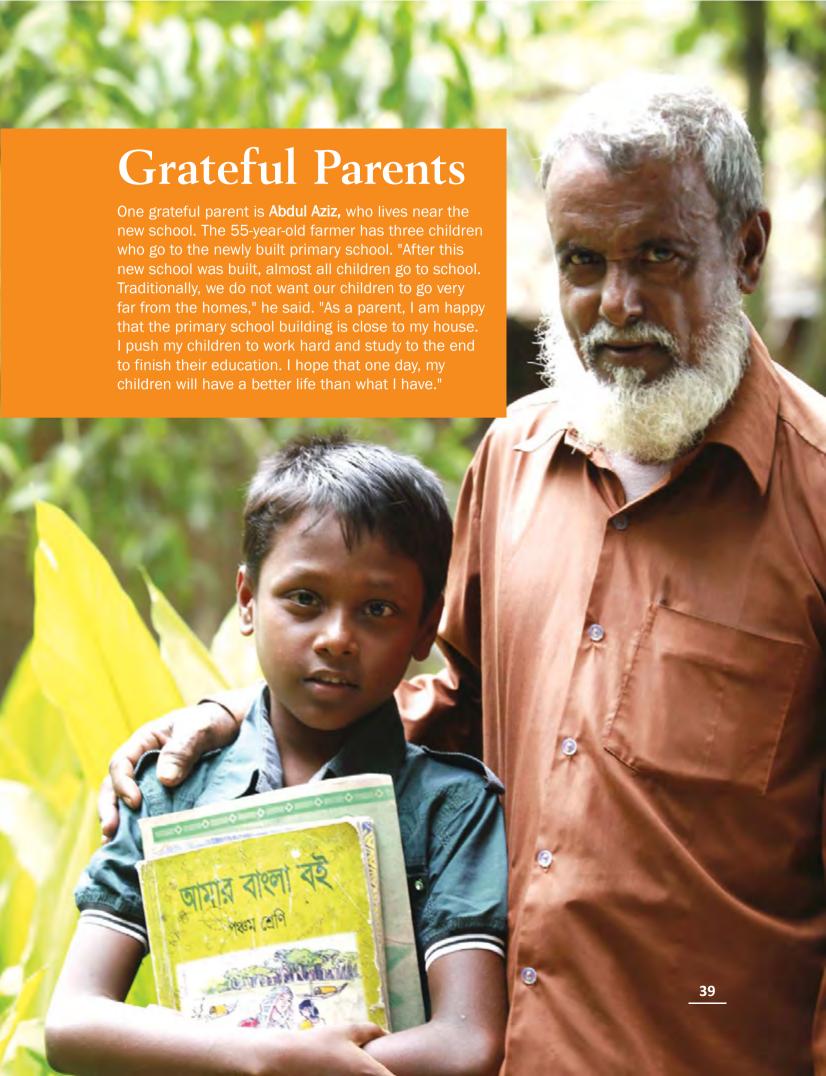


PEDP II: Summary of Impacts

- 45,000 new teachers recruited
- 35,000 head teachers' posts filled
- 95,000 teachers intensively trained
- 320,000 staff trained
- Over 40,000 new and larger classrooms provided
- 10,000 existing schools repaired and maintained by community
- 400 schools reconstructed to serve as cyclone shelters
- Student attendance improved from 75% to over 90%
- Teachers' recruitment rules and career path development established for sustainable human resource development
- All textbooks and teaching and learning materials made available to the students by the first week of the school year

verall, PEDP II has had a positive impact on the performance and efficiency of primary education. It has contributed to significant achievement in participation of boys and girls; helped improve the learning environment of many schools by mainstreaming primary school minimum service standards; and initiated important reforms that include a comprehensive teacher education and professional development framework, a transparent and merit-based teacher recruitment system, introduction of the grade 5 completion examination, and school-based quality improvement through the school-level improvement plans. Despite administrative hurdles and lengthy processes, sustained efforts were made to recruit field-level personnel, including 45,000 new assistant teachers. Recruitment rules for primary education

personnel were proposed as key steps to sustainable human resource development. Infrastructure development led to an improved physical learning environment of many schools. An integrated inclusive education strategy was developed as a step to ensure quality education to disadvantaged children. The adoption of results-based management has led to improved capacity in data collection and analysis and production of the annual performance reports. Capacity of the Directorate of Primary Education in financial management has improved. Increased awareness of good governance, and commitment to improve practices in procurement and financial management and to mitigate risks, has reduced the number of audit observations over the years.



New Intervention: PEDP III

Building on PEDP II achievements and lessons identified, ADB provided a loan of \$320.0 million for the follow-up project, PEDP III. The project is cofinanced by eight other development partners¹ for a total of \$735.5 million. The government will provide the equivalent of \$7.3 billion.

Following the successful implementation of PEDP II, PEDP III has been designed to further align and harmonize aid for development of primary education.

Secondary Education Development Project

Educating the Future Professionals

Since the early 1990s, ADB has emphasized basic and secondary education as a human development strategy for poverty reduction. The Secondary Education Development Project was ADB's first major investment to support the government's efforts to improve general secondary education. The project expanded access to educational opportunities, improved the quality of education, strengthened planning and management, and enhanced resource mobilization.

Baniachang, Habiganj

The newly built secondary school building at Habiganj accommodates nearly 450 students. "Two years before, our children had to journey about 5 kilometers each way to attend the nearest secondary school. They were always tired and less attentive to studies. Now, the school is just in the neighborhood, and it takes only 10 minutes for my son to commute," said Alimuddin, a local farmer.

The project is cofinanced by AusAid for \$45.0 million, Canadian International Development Agency for \$65.0 million, the Department for International Development of the United Kingdom for \$190.0 million, the European Union for \$70.0 million, Japan International Cooperation Agency for \$30.0 million, the Swedish International Development Agency for \$45.0 million, and the World Bank (International Development Association) for \$300.0 million, UNICEF \$0.5 million.

The school was built under the Secondary Education Development Project, with ADB assistance. "Due to proximity, enrollment of local children in secondary school has remarkably increased in the last 2 years," stated Ruhul Amin, a secondary school teacher.



The First Major Investment to Improve General Secondary Education

ADB and other development partners have been actively involved in assisting the government in secondary education since the 1970s. However, this assistance has been narrowly focused on specific areas, such as non-formal and science education. As of 1993, general secondary education continued to suffer from poor quality, low participation rates (especially among females), weak management, and insufficient expenditures on education.

ADB's approach to the education sector in Bangladesh shifted in 1988, when it accorded high priority to basic education. It was recognized that to improve quality and increase access to general education, sustained investments over long periods of time would be required in several subsectors. The government agreed that ADB focus its assistance on three subsectors: primary education, general secondary education, and non-formal education

Pre-project era. In 1990, the secondary school completion rate through grades 6 to 10 was only 40% of the original cohort. Only 4% of students starting grade 1 used to complete the 12 years of general education, one of the lowest rates in Asia. This poor education performance combined with high population growth and the high levels of unemployment, malnutrition, and poverty have been major constraints to economic and social development.

The distance of their homes from schools discouraged many boys and girls from enrollment.

New schools built nearby increased enrollment and reduced dropout rates.

Before the project, the educational attainment level of females in Bangladesh was among the lowest in the world. The national literacy rate of females from age 5 and above was 20% while that of males was 35%. Gender disparity in educational access was present throughout the system but widened significantly between primary and secondary levels—enrollment ratios in primary school were 75% for females and 85% for males, while in secondary school it was 14% for females against 25% for males.

Project outline. Approved by ADB in 1993, the Secondary Education Development Project was the first major investment to improve general secondary education. The project's specific aims were to assist the government in improving the quality of secondary education; expanding access to secondary education opportunities on a selective basis; strengthening management and planning capacity; and enhancing resource mobilization and allocation.

Multidimensional Output

The outputs of the project are multidimensional. The secondary education curriculum and instructional materials were reformed, 1,410 schools were equipped with science kits and furniture, 10,000 headmasters received management training, infrastructure of schools was expanded, and 1,448,278 female students received stipends. The infrastructure of 53 *upazila* offices of the

Secondary Education Project were established and equipped with the necessary personnel and materials. To improve the quality of classroom teaching, training facilities at the teacher training colleges were enhanced. Moreover, the capacity of the district, zone, and central offices of the Directorate of Secondary and Higher Education were strengthened through training and material support.

Secondary school enrollment increased from 34.9% in 1996 to 41.3% in 1999. The female enrollment rate increased to 45.56% in 2000 compared with 35.52% in 1997. There has been a 14% reduction in the dropout rate and 17% in the repetition rate in grades 6 through 10 during the project period. The intake capacity of the teacher training colleges (TTCs) doubled from 3,000 to 6,600 due to the introduction of double shifts in each teacher training college. A new TTC was established, and number of teachers increased in all TTCs. Construction of two hostels at each TTC provided additional residential facilities to the trainees. The estimated number of beneficiaries in the project appraisal was 4,600,000 secondary students. But the actual number was much higher—7,379,716 students, of which 44.57% were female, mostly from rural and disadvantaged areas.



Secondary Education Development Program: Project Outputs

- Total 7,379,716 students benefited by the project
- 1,410 schools equipped with science kits and furniture
- 10,000 headmasters received management training
- 1,448,278 female students received stipends
- Enrollment increased from 34.9% to 41.3%
- Female enrollment increased from 35.52% to 45.56%
- Curriculum and instructional materials reformed
- Infrastructure of schools expanded
- Infrastructure of 53 upazila Secondary Education Project offices expanded
- Training facilities at teacher training colleges enhanced
- Capacity of district, zonal, and central offices of Directorate of Secondary and Higher Education strengthened





ENERGY: ENERGY FOR PROSPERITY

mproved energy services are essential for the country's economic growth, and to support better social services and poverty reduction. As a leading development partner in the energy sector, ADB has been supporting Bangladesh to improve its energy services and efficiency



ADB Assistance in the Energy Sector: Overview

In 2012, about 85% of the power-generating capacity in Bangladesh was natural-gas-fired, while other sources accounted for the rest. The gas supply shortages have seriously affected power generation. Heavy dependence on gas as a main source of energy for generating power has made power supplies unreliable and weakened the country's energy security. The government has initiated measures to diversify energy sources for power generation by using liquefied natural gas and imported coal and is

encouraging dual-fuel power plants. Greater emphasis has been placed on developing renewable energy sources through private sector participation. The country has signed a power purchase agreement with India, and a 500 megawatt (MW) interconnection transmission with India is under construction. In the long run, a holistic approach to using indigenous energy resources including gas, coal, wind, and solar is needed to enhance diversity, energy security, and environmental sustainability.

ADB Sector Experience and Assistance Program

As Bangladesh's lead development partner in the energy sector, ADB has provided support in seven broad thematic areas: (i) promoting a commercial orientation for power sector entities, (ii) promoting investments in power generation, (iii) removing transmission constraints. (iv) expanding access to electricity. (v) increasing gas production capacity and mobilizing investments to gas production, (vi) improving the gas transmission and distribution network, and (vii) improving the governance and regulatory framework. ADB has assisted the government in implementing almost all aspects of power sector reforms. ADB's strategy for the gas sector was to (i) support increased private sector investments in oil and gas, (ii) expand the gas transmission network, (iii) improve the operational performance of gas distribution companies, and (iv) encourage the economically optimal use of natural gas. Under the country partnership strategy, 2011–2015, ADB is supporting (i) the

further commercialization of gas sector entities, (ii) developing gas markets in the western part of the country, and (iii) improving environmental sustainability by reducing loss and waste in gas production, distribution, and use.

In the power sector, this will involve

(i) support for policy, legal, and regulatory reform to create an enabling business environment for the private sector;
(ii) implementing power transmission interconnections with India; (iii) investing in new power-generating facilities and rehabilitating old power plants for improved efficiency; (iv) increasing investment in clean energy such as wind and solar power through public-private partnership; and (v) strengthening the transmission network to accommodate expected additions to generating capacity.

Government's Sector Strategy

In 1994, the government adopted the policy paper Power Sector Reforms in Bangladesh, which formed the basis for sector reform

undertaken to date. The paper recommended establishing an independent regulator and emphasized attracting private sector participation in generation and distribution. Building on progress made, the government adopted its Power Sector Reform Road Map for 2006-2008, which identified a number of actions: (i) making the Bangladesh Energy Regulatory Commission fully functional as a power sector regulator; (ii) improving the transparency, corporate governance, and accountability of the sector entities; (iii) restructuring the BPDB to make it financially viable; (iv) further unbundling the sector by establishing several generation and distribution companies under the Companies Act; (v) introducing a more streamlined process for promoting private sector investment in power generation; and (vi) mobilizing financing from the domestic capital markets for financially viable power sector entities. Power sector reform has proceeded in the context of a broader government energy policy.

The National Energy Policy, 2004 focused on (i) providing sustainable and balanced energy supplies, (ii) promoting rational energy use, (iii) improving sector management and performance, (iv) increasing private sector participation and investment, (v) reducing regional disparities, and (vi) creating regional energy markets.

The government introduced its Gas Sector Reform Road Map in 2004. The road map emphasized providing sufficient incentives for private sector investment in gas production and distribution. The government further refined the road map in 2009 to provide more detailed measures toward improving sector policy, regulation, planning, and corporate governance.

The government has adopted a comprehensive energy development strategy as part of its Sixth Five Year Plan (FY2011–FY2015). It includes measures to boost power supply and encourage demand management, emphasizing higher power

generation, energy trade, and diversified primary energy sources. Under the plan, the government will exploit all forms of primary energy through public investment, public-private partnerships, and purely private investment.

Sector Regulation

Sector regulation requires major reform. The responsibilities of the Bangladesh Energy Regulatory Commission are confined to tariff issues. Existing electricity tariffs are grossly inadequate for introducing alternative fuels such as liquefied natural gas and coal or for attracting private investors to the sector. Low tariffs have contributed to poor maintainance of facilities, causing energy loses and frequent breakdowns.

Gas

The Bangladesh Oil, Gas & Mineral Corporation (Petrobangla) has been the major player in consolidated gas sector operations since 1972. Presently, Petrobangla is mandated for oil and gas exploration, development, transmission, distribution, and conversion together with development and marketing of minerals. It also acts as the off-taker for gas produced by the international oil companies under "production sharing contracts." The subsidiary companies under Petrobangla were set up on a commercial basis from the beginning, and their activities were coordinated by Petrobangla to ensure performance on the overall sector development objectives.

Gas distribution. The potential social and environmental benefits of gas use in transport and homes have not been factored into the intersectoral allocation of gas. Only 7% of urban households have access to gas. The lack of systematic allocation among sectors has caused excess demand, gas shortages, and wasteful use.

Gas sector reform. Enhancing the commercialization, autonomy, and financial sustainability of state-owned gas companies is needed to build a sound institutional foundation in the sector. Encouraging private participation downstream, such as in maintenance, metering, and billing, has yet to take place. Further, improvements in market-oriented pricing, reduced government intervention, and overall improvement in the business environment are necessary for enhanced private sector participation.

Power

Until the mid-1990s. Bangladesh Power Development Board (BPDB) was the solely vertically integrated power entity in the country. Dhaka Electric Supply Authority (DESA) was responsible for power distribution in the greater Dhaka area, and the Rural Electrification Board was responsible for power distribution in rural areas through a system of rural electric cooperatives (palli bidyut samities). During 1996-2000, the power sector underwent several changes in institutional arrangements. Power Grid Company of Bangladesh (PGCB) and Dhaka Electric Supply Company (DESCO) were established wherein PGCB took over the construction and operation of high-voltage transmission lines from BPDB, and DESCO took over power distribution in parts of Dhaka from DESA. These two entities are being operated on a commercial basis as state-owned companies under the Companies Act 1994.

The West Zone Power Distribution Company was established in 2001, taking over power distribution from BPDB in the western part of the country. Dhaka Power Distribution Company, established in 2006, took over the remaining operations of DESA. In the generation subsector, BPDB was unbundled

with the establishment of Ashuganj Power Station Company in 2000, the Electricity Generation Company of Bangladesh in 2004, and North-West Power Generation Company in 2007.

Supply of clean and reliable energy. ADB in December 2012 approved a multitranche financing facility of \$700 million to assist Bangladesh in expanding power generation facilities and transmission and distribution networks.² The outcome will be increased access to a clean and reliable supply of electricity. Investments will be sequenced and cover generation, transmission, and distribution. Under a pilot program, up to 200 solar-energy-supported irrigation pumps benefiting 4,000 poor farming families will be installed. The expected impacts of the project are (i) increased energy sector contribution to low-carbon economic growth by increasing electrification rate from 50% in 2012 to 68% by 2015, and reducing overall system losses from 15.2% in 2011 to 12% by 2015, and improving overall thermal generation efficiency from 31% in 2011 to 37% by 2015; and (ii) increased access to clean and reliable supply of electricity by increasing supply from 26.6 terawatt-hours in 2011 to 40.08 by 2020, and reducing carbon dioxide emissions by 2.48 million tons per year by 2020 against the baseline of 67.20 million tons carbon dioxide in 2011.

The facility will comprise three tranches, out of which Tranche 1, approved by ADB in December 2012 for \$185 million, will convert the Khulna power plant into a combined cycle plant, and construct three transmission lines and associated substations. Tranche 2 will focus on expanding transmission, improving distribution, and piloting a solar irrigation scheme. Tranche 3 will focus again on modernizing and converting generation plants.

The facility is being cofinanced by the Agence Française de Développement (loan) for \$100 million, the European Investment Bank for \$198 million (loan of \$191 million and grant of \$7 million), and the Islamic Development Bank (loan) for \$380 million.

THE WAY FORWARD

DB support in the energy sector will build on the progress made in power sector reforms. ADB's private sector operations will focus on infrastructure projects and financial services for the energy sector. This could include investments in independent power producers fueled by gas; the dual fuels gas and heavy fuel oil; and renewable wind, solar, and biomass sources. Support for coal-fired independent power

producers will be highly selective and limited to projects exhibiting first-class technology and fuel supply. ADB's private sector operations may support financing the planned liquefied natural gas terminal and the development of gas fields and associated facilities. The Private Sector Operations Department will explore supporting energy-efficiency projects, particularly in energy-intensive industries.

Power-Striving for Sustainability

Bangladesh faces great development challenges in developing its power sector to accommodate increasing industrial and domestic demand for seamless power and energy supply.

Power Subsector: Overview of ADB Assistance

nadequate energy security is one of the major stumbling blocks to economic development in Bangladesh. The World Economic Forum already ranks Bangladesh 135th out of 142 countries measured for the quality and constancy of electricity supply. This is not surprising since about half of the country's population does not have access to electricity, and many of those only receive intermittent supply. During peak periods, up to 30% of demand is unmet (a deficit of nearly 2,000 megawatts).

Shortage of power stunts economic performance, cuts into business competitiveness and productivity, and seriously affects the quality of life.

The government intends to arrest this problem through both physical investments and reforms. The government has developed an investment program for the next 5 years (2011–2015). The goal is to increase energy security through a combination of sequenced interventions, including supply- and demand-side efficiency measures; new capital outlays in generation, transmission, and distribution; investments to raise electrification rates to 68% by the end of the period; and

the acceleration of reforms to improve efficiency, accountability, and effectiveness of sector institutions. The government welcomed ADB to be its partner in its strides toward power sector development and ADB continues to stand by the government in achieving these challenging and capital-intensive tasks.

Sector performance is low but there have been notable improvements in the last decade. Electrification rates have risen from 10% in 1994 to 50% in 2012—an improvement made against a rise in demand of more than 160% during 2002–2012. Transmission and distribution losses have been cut sharply, mainly due to investment and better management. The financial

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performance of most sector companies has also improved due to higher tariffs, better collection, improved financial transparency, and increased metering. However, much remains to be done. Supplies are still irregular and the system is overly reliant on natural gas. Half the population does not have access to electricity. Load shedding remains high and there are high losses in the transmission and distribution system. Total available generation capacity is 4,890 MW but demand is about 7,000 MW. Power shortages remain common, and the cost to the economy is close to 0.5% of gross domestic product. Considering that the projected demand for power supply will be 12,500 MW by 2015, the power sector needs major investments in generation, efficiency measures, and transmission and distribution.

Since Bangladesh joined ADB in 1973, the power sector has received 32 public sector loans and one private sector investment, totaling about \$2.90 billion, to improve the capacity and quality of power supply. ADB also has provided 32 technical assistance grants, totaling about \$18.5 million. ADB recently evaluated its power assistance program in Bangladesh, identifying several key lessons. At the project level, these include the need to (i) minimize extensive delays with public sector project implementation; (ii) improve local capacities in project preparation, implementation, operation, and selection of appropriate technology; (iii) improve ownership of technical assistance; and (iv) improve financial management capacities. The power sector had the highest share (24.69%) of total ADB assistance to Bangladesh. An energy sector assessment program evaluation undertaken by the Independent Evaluation Department of ADB in 2009 concluded that ADB's work has been significant and successful.

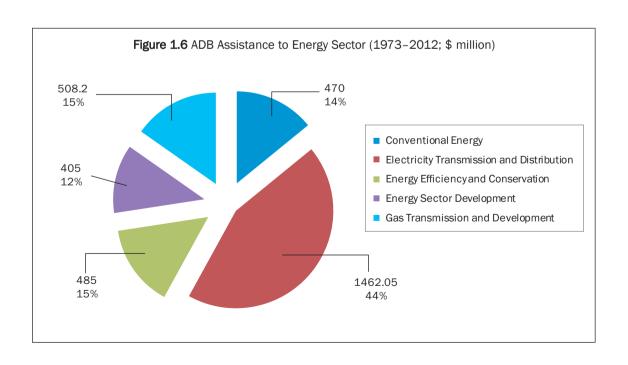
Sector performance continues to improve: The electrification rate increased from 10% in 1994 to 50% in 2012 despite a 160% rise in demand; transmission losses were drastically cut; financial performance of most power companies improved.

Since 1973, ADB provided 33 loans of total \$2.90 billion to improve the capacity and quality of power supply

Partnership in Power Subsector Reforms: Enhanced Efficiency

ADB's power subsector strategy for Bangladesh consists of changes in the business environment through corporatization, commercialization, and increasing private sector participation. Under the reform program supported by ADB and other development partners, the major achievements since 1973 include (i) institutional improvements in Bangladesh Power Development Board and Dhaka Electric Supply Authority; (ii) creation of new power subsector companies such as Power Grid Company of Bangladesh, Dhaka Electric Supply Company, North West Zone Power Distribution Company, West Zone Power Distribution Company, Electricity Generation Company of Bangladesh, and Ashugani Power Company to serve as role models for the power sector: (iii) enlarging the scope of rural electric cooperatives (palli bidyut samities); and (iv) strengthening the longterm planning and regulatory processes. On 10 March 2003, Parliament passed the new Energy Regulation Committee Act 2003 as the basis for establishing the Bangladesh Energy Regulatory Commission.

ADB helped the government in "unbundling" BPDB with the creation of Power Grid Company of Bangladesh, Dhaka Electric Supply Company, Northwest Zone Power Distribution Company, West Zone Power Distribution Company, Electricity Generation Company of Bangladesh, and Ashuganj Power Company.



Gazipur, Dhaka

Abul Kalam, owner of a large group of readymade garment factories employing about 10,000 workers, including 6,400 women, has seen the marked improvement in quality of power supply services during the last decade. "I started with one garments factory in 1994, but struggled hard to catch up with my shipment schedule due to frequent power cuts, "he recalled. These days, even with his expanded factories, Abul Kalam is comfortable with the reduced frequency and duration of electricity disruption."Although I crave for uninterrupted power supply to my factories. I know it is still a far crv. I am now more or less happy with the tolerable and anticipated power cuts these days and never

I am now more or less happy with the tolerable and anticipated power cuts these days and never failed my commitment to foreign buyers due to disrupted production.

failed my commitment to foreign buyers due to disrupted production," Abul Kalam added. The Amin Bazar substation in northwest Dhaka, improved with ADB assistance in 2005, now regulates and distributes power to the capital city and the vicinity more efficiently.

The Way Forward

DB will continue to assist the government by maintaining its role in coordinating assistance to the power subsector. In addition to its support for expanding and upgrading the power supply systems to meet the targets of the power sector road map, ADB will continue to review and monitor the reform and restructuring process. Further, ADB will help the

government pursue restructuring and deepen reforms to promote good governance, enhance sector efficiency, and encourage greater private sector participation to ensure that the poor have access to power. In addition, to enhance energy security, ADB will continue investing in renewable energy (such as wind and solar power) and promoting regional energy trade.

Ninth Power Project

Upgrading Power, Lighting Lives

The Ninth Power Project was the first ADB-financed project in Bangladesh's power sector with a link to multidimensional reform. In addition to the electricity produced from the Meghnaghat 450 MW power project, which was developed with support from ADB's Private Sector Operations Department, the project linked investment with multidimensional institutional and structural reforms, and helped Bangladesh in unbundling the power sector into generation, transmission, and distribution entities.



Rampura, Dhaka

The slow but steady improvement in power supply services has improved educational opportunities. "Seven years ago, my children could not study in the evening because power cuts were more frequent during the peak hours, from 6 pm to 9 p.m. When power supply was restored around 10 p.m. my children were already tired and sleepy," recalled Parveen Sultana, a

middle-class housewife living in Rampura, Dhaka. The ADB-assisted power distribution substation in Ulonin Rampura under the Ninth Power Project has changed the quality of electricity services in the area. "My children are now grown up and routinely study after sunset till 10 p.m. with electric fluorescent light burning overhead. Power cuts are now less frequent and the intervals are reduced. I don't have to keep stock of candles these days," Parveen added happily.



Background and Objectives of the Project

uring the 1980s, in response to the power sector's extremely poor performance, development partners active in the power sector suspended assistance. To address this situation, ADB initiated a coordination meeting in December 1992 with the Government of Bangladesh, ADB, and other development partners to discuss important power sector issues. That meeting produced an agreement among development partners to extend external assistance for projects with links to reforms. As a significant milestone, the government adopted a policy paper in September 1994, Power Sector Reforms in Bangladesh that formed the basis for reforms in the sector.

The Rural Electrification Project, approved in 1995, was the first ADB-financed project in the power sector in Bangladesh with a reform link. The second with such a reform link was the Ninth Power Project, approved in 1996. ADB supported the Meghnaghat Power Project through its public and private sector windows.

The main objectives of the project were to (i) evacuate and utilize the power generated from the Meghnaghat build-own-operate –transfer power project; (ii) maximize utilization of system assets through

Financing Plan		
Financier	Actual Costs (\$ millions)	
ADB	88.10	
Government of Bang	gladesh 73.91	
Total	162.01	

optimized load dispatch; (iii) upgrade the distribution system in Dhaka city; (iv) initiate vertical unbundling of Bangladesh Power Development Board (BPDB) into generation, transmission, and distribution entities; (v) corporatize the transmission segment of BPDB; (vi) rationalize the boundary between the Dhaka Electric Supply Authority (DESA) and the Rural Electrification Board; (vii) corporatize DESA; and (viii) prepare power generation projects for private sector participation.

The project has achieved the reform objectives envisaged at appraisal. One of the objectives was to unbundle BPDB into functional entities. With government support, PGCB was incorporated in 1996. By December 2002, PGCB took over all transmission assets from BPDB, including

Linking Investment with Reforms for Enhanced Efficiency

The Ninth Power Project financed construction of

- 230 kV transmission lines
- 230 kV substations
- National load dispatch center
- Improvement of 280 km distribution network in Dhaka
- 22,000 new connections
- Feasibility study and design of two power generation plants

load dispatch functions, and most transmission assets from DESA. Another objective was to restructure DESA through area rationalization and corporatization. DESCO was incorporated in 1996 with an objective to take over assets from DESA gradually, starting with DESA's distribution assets in the Mirpur area in October 1998. In April 2003, DESCO took over Gulshan Circle assets from DESA. PGCB and DESCO consolidated their operations, improved efficiencies, and reduced losses.

The Project Impacts

The impact of the Ninth Power Project on sector efficiency, contributing added comfort to the beneficiaries, has been remarkable. In addition to infrastructure improvements, the project also brought about sector reform, which is considered the turning point of the Bangladesh power sector's march toward development from the decade-long cycle of decline in the past.

Improvements to infrastructure that have been achieved under the project include the following: PGCB constructed 108 km of double-circuit 230 kV and 1.5 km of four-circuit 132 kV transmission line; DESA constructed 1.5 km of 132 kV overhead transmission line and 19.5 km of 33 kV underground cables; DESCO constructed 12 km of single-circuit 33 kV underground cables, 20 km of single-circuit 11 kV underground cables, and 20 km of 0.415 kV overhead lines; and PGCB and DESA augmented capacity of 132/33 kV substations by 450 megavolt-amperes.

Improvement of efficiency and consequent augmentation of quality of power services triggered by the Ninth Power Project has been in the following areas:

- Load shedding, which was prevalent in northeastern Dhaka city due to transmission bottlenecks, substantially improved following completion of 230 kV transmission lines and a new substation at Rampura.
- The 230 kV transmission system built under the project is capable of handling more than 1,500 MW peak load.
- Overall transmission losses were reduced from 4.52% in FY1994 to 3.42% in FY2004.
- PGCB and DESCO were incorporated in 1996.
- DESCO connected more than 57,000 new consumers in the Mirpur area between FY1999.
- DESCO reduced system loss in Mirpur area from 41% in FY1999 to 20% in FY2006.

ADB is committed to assisting Bangladesh to overcome the constraints imposed by inadequate power supply services. ADB will continue supporting the government in improving sector governance and in continuing the momentum for the ongoing sector and institutional reform process while promoting a regional approach to harness the power generation potential with cross-border trading.

West Zone Power System Development Project

Power for Development

To overcome institutional weaknesses and improve power sector performance, ADB supported the government's policy paper, *Power Sector Reforms in Bangladesh*, approved in 1994. The paper proposed that the government reform the power sector by improving management and corporate governance, introducing competition, and facilitating public–private partnerships. The West Zone Power System Development Project was the fourth such reform-linked assistance project provided by ADB.



Sirajganj

Transfer of surplus electricity from the east zone to the power deficit west zone of the country has lit up the lives of the people. Completed in 2006, the 230 kV Ashuganj to Sirajganj transmission line, the second east-west inter connector built under the project, has changed life for the people living in Sirajganj, Ullapara, Pabna, and Bogra across the Jamuna Bridge. Ali Ahmed, a grocery shopkeeper in Sirajganj, has immensely benefited from the improved power supply transmitted by the second east-west inter connector. His shop now remains busy till late evening with the customers queuing up for the last-minute pickup of essential provisions for the next morning. "Power supply is now steadier without long hours of load shedding in the evening. My customers are now more comfortable for shopping after dusk," Ali Ahmed said.

Background and Objectives of the Project

Dangladesh has suffered power shortages and unreliable power supply for several years, caused by unsustainable generation capacity, an inadequate transmission grid, and unbalanced distribution facilities, particularly in the western region. In addition, during the late 1980s and 1990s, the performance of the power sector was poor. The major constraints in the sector were (i) lack of institutional capability; (ii) unavailability of domestic resources for investment; (iii) limited foreign exchange debt-service capability of the economy; (iv) adoption of a centralized management policy following time-consuming government procedures and practices; (v) low employee commitment; and (vi) institutional weaknesses in governance, banking, law enforcement, and judicial processes, which are external to the sector but essential for its proper functioning. In accordance with the policy paper *Power Sector Reforms in Bangladesh*, the power sector has been undergoing gradual structural changes with support from development partners. Adopting structural changes and implementing reform-linked projects have helped to introduce competition among sector entities and gradually improve performance.

The main objectives of the project were to (i) create a 230 kilovolt (kV) transmission backbone system in the western region to facilitate the transfer of low-cost power generated in the eastern region; (ii) enable the evacuation and economic utilization of the power generated from projects being contracted at Baghabari and Bheramara, (iii) reduce losses and improve the reliability of transmission and distribution systems in the western region; (iv) create a new distribution corporate entity in the southwestern region, thus initiating the unbundling of the distribution of Bangladesh Power Development Board (BPDB); and (v) rationalize areas between the new corporate entity and rural electric cooperatives (palli bidyut samities).

Project Outcomes

The project increased the availability and reliability of power in the west zone and helped minimize load shedding, particularly during the irrigating season. Additional power generation in the near future will substantially reduce or eliminate load shedding in the west zone, facilitating industrial and commercial growth and employment generation.

Insufficient and irregular power supply was common in the west zone with the absence of adequate generating capacity in the zone and the

Financing			
Financier	Actual (\$ million)		
ADB	164.20		
KfW, Germany	53.71		
Government of Bangladesh	115.85		
Total	333.76		

saturation of the first east-west inter connector to transfer power from the east zone. Demand growth in the west exceeded 8% per year. In this context, constructing the Ashuganj-Sirajganj second inter connector-with an extension to Bogra in the north and to Khulna in the south, the addition of new substation capacity, and improved distribution networks in the southwest zone to increase the efficiency of the power transmission and distribution system in the southwest and northwest zones-clearly demonstrates the efficiency of the investment in achieving outcomes and outputs. The improved quality and enhanced supply of power have met growing power demand from large numbers of new and existing consumers. This has helped to accelerate industrial growth and poverty reduction.

The project financed construction of

- 230kV and 132 kV transmission lines and substations
- 230 kV east-west inter connector
- upgrades and expansion of BPDB's power distribution networks in five cities
- upgrades and expansion of Rural Electrification Board distribution

The main project outcomes were to (i) accelerate the sector's restructuring by unbundling BPDB's distribution operations, (ii) establish a regulatory system, (iii) augment and expand

transmission and distribution systems to improve network efficiency and reliability, and (iv) expand customer outreach. Creating West Zone Power Distribution Company effectively unbundled BPDB's distribution operations, and it is now a model for corporatizing the remaining distribution zones of BPDB. West Zone Power Distribution Company improved operational performance in the southwest zone by reducing distribution system losses from 21.4% in 2005 to 11.7% in 2010 and accounts receivable from 8.55 months equivalent to 3.23 months over the same period. Establishing the Bangladesh Energy Regulatory Commission effectively institutionalized sector regulations and

The project outcomes were

- accelerated sector restructuring,
- established Bangladesh Energy Regulatory Commission
- augmented transmission and distribution system, and
- expanded customer outreach.

helped introduce a realistic system for tariff setting. The project enhanced the capacity of the transmission system, enabling it to handle 5,050 MW of peak demand and reduce overall transmission losses to 3% in 2010.

ADB's power sector strategy for Bangladesh focuses on changing the business environment through corporatization, commercialization, increasing public-private partnership, and institutional improvements in key power sector entities. ADB will continue to stand by the government as a reliable development partner for improvement of the power sector.

Constructing the Ashuganj—Sirajganj second inter connector clearly demonstrates the efficiency of the investment in achieving outcomes and outputs.

Natural Gas: Gas for a Clean Environment

Natural gas accounts for more than 70% of commercial energy in Bangladesh. ADB has helped Bangladesh develop major gas fields, gas transmission systems, and most of the distribution networks across the eastern part of the country. But the fast-rising demand for gas with slower supply stream constrains the gas sector.



The Gas Subsector: Overview of ADB Assistance

latural gas, the largest fuel source for power generation, was discovered in Bangladesh in 1955 in the Sylhet district. Since then, more than 22 gas fields have been discovered-all but one to the east of the Jamuna-Padma-Meghna river system Two fields are offshore in the Bay of Bengal. In 1974, the government invited international oil companies to participate in gas exploration and production through production-sharing contracts. The first such contracts were awarded in the same year. Today, about 50% of the average production of about 1,350 million cubic feet per day is from government-owned fields. The other half comes from fields operated by international oil companies under production-sharing contracts. At the current consumption rate, the country has a reserve-to-production ratio of about 30 years.

Government policy since 1993 has been to attract private investments to upstream gas field development while improving the network coverage and operational efficiency of national energy companies that produce and distribute natural gas. Bangladesh managed to attract significant private sector investment for gas exploration and has increased production by over 100% since 1998. The share of gas production by international oil companies grew to almost 50% of total supply in 2008. Exponentially increasing demand for gas has introduced a supply deficit. To address the demand-supply gap, national energy companies and international oil companies have been investing in

existing fields and new discoveries to increase production. These interventions will increase the gas supply by 74% from 2008 to 2017.

ADB has been involved in the natural gas sector over the past 30 years, with 10 loans totaling \$830 million, in addition to 13 technical assistance grants amounting to about \$7.4 million. ADB, which was solely a provider of funds for individual projects in the 1970s, became a provider of funds as well as technical advice for project preparation in the 1980s. In the early 1990s, ADB adopted a proactive stance, providing policy advice to the government in implementing sector reforms. With the significant discoveries made in the past few years, ADB realizes that natural gas is one of the few large-scale natural resources available in Bangladesh that, if appropriately managed, can accelerate economic growth and improve the living standards of the people. ADB has provided technical assistance for improving operational efficiencies, preparing a gas master plan, drafting a gas law, developing a policy on private sector participation in gas pipelines, evaluating options for private sector participation in the Rashidpur-Ashugani gas pipeline, and examining the reform agenda in the gas sector. A strategy to promote the use of natural gas for the transport sector was supported through the Dhaka Clean Fuel Project, which has catalyzed private initiatives in other cities. Recently, ADB supported the preparation of the gas sector reform road map and gas sector system loss reduction plan.

ADB's strategy for developing the gas subsector covers three main areas.

ADB will support improved commercialization, including private sector participation, by deepening sector reforms and unbundling sector activities. Critical to this effort is greater autonomy of the sector from the social obligations of the government. Hence, independent tariff setting and regulation, greater private sector participation, and distancing of the management of the public sector companies from the government will be stressed. ADB's emphasis on gas sector loss

ADB assistance

- Improved commercialization
- Deepened sector reforms
- Promoted private sector participation
- Improved access to gas at affordable price
- Boosted environmental sustainability

reduction will improve sector efficiency and financial sustainability of gas companies. The commercial obligations of the boards, as well as improvement in corporate management, will be supported.

ADB will support increased access to affordable natural gas across the country, including assisting the government in developing gas markets in the western parts of Bangladesh. In addition to contributing to poverty reduction, such an expansion would lead to reduction in deforestation in rural areas and better air quality in secondary cities. The support will help (i) increase private sector investments in gas and oil, (ii) expand the gas transmission network, (iii) improve the operational performance of gas distribution companies, and (iv) encourage the economically optimal use of gas.

ADB's strategy in the gas sector will support environmental sustainability. This is to be achieved by supporting policy and institutional measures aimed at reducing unacceptably high losses in distribution, especially to the commercial and domestic sectors. Use of gas also will be promoted for transport purposes, which will reduce pollution in urban and industrial areas. ADB's support for the implementation of the Gas Sector System Loss Reduction Plan will contribute onsite economic benefits as well as global environmental benefits.

THE WAY FORWARD

DB will continue helping
Bangladesh in improving
performance of the gas sector by
increasing gas extraction and
enhancing access to the domestic
market. ADB will work together with
the government and other stakeholders
to improve efficiency of gas
distribution to non-bulk consumers.
The government's strategy will be
supported to ensure adequate

investment in the expansion of the gas production, transmission, and distribution networks, as well as their operation and maintenance. This will widen the market and help remove the constraints of Petrobangla's gas production, increase gas supply, and boost economic activities, specifically, in fertilizer production and power generation.

Dhaka Clean Fuel Project

Clean Fuel for Quality Air

In the 1980s, the ambient air quality of Dhaka city was a threat to health. Vehicle emissions of carbon monoxide increased every year, creating a public health hazard. The introduction of compressed natural gas as an alternative fuel has had a remarkable impact on improving the air quality of the metropolis. The Dhaka Clean Fuel Project, financed by ADB, pioneered this transition.



Background and Objectives of the Project

n the 1980s, Dhaka suffered from high levels of pollution, much of it from vehicular emissions. This crowded city of more than 14 million people has noisy and busy roads filled with all types of motorized and non-motorized vehicles, including buses, cars, auto rickshaws, cycle rickshaws, and trucks. But Dhaka managed to reduce air pollution drastically since 2004. Measured in particulate matter, pollution came down about 60% between 2001 and 2004, according to a survey by the Rupantarita Prakritik Gas Company (RPGC). RPGC can certainly boast of this achievement as it was tasked with introducing compressed natural gas (CNG) in Bangladesh and making this environmentally friendly fuel readily available for public use. To this end, the company opened CNG filling stations and set up conversion workshops to switch vehicles to CNG. The company has also

helped convert many smoke-emitting diesel buses to cleaner vehicles using CNG. Buses are the only means of mass transport in Dhaka, which does not have a

Financing Plan			
Financier	Actual (\$ millions)		
ADB	43.06		
The government	22.35		
Total	65.41		

light rail or subway system, and are together with auto rickshaws the cheapest modes of transport favored by the poor. About 2,400 buses now use CNG, making a tremendous difference to air quality in Dhaka, Chittagong, and elsewhere in Bangladesh.



ADB approved the project in November 2002. The main objectives of the project were to (i) increase the sustainable use and supply of domestic natural gas resources in place of imported liquid fuels for the transport sector and thus ease pressure on the foreign exchange reserves of Bangladesh; (ii) develop the use of compressed natural gas in the transport sector and improve ambient air quality in Dhaka to reduce respiratory diseases, especially among the urban poor who are most vulnerable; (iii) encourage private sector participation by implementing transparent regulations based on international emission standards and by providing a foundation for further development of the domestic downstream gas sector; and (iv) improve corporate governance in gas sector companies by appointing independent boards of directors and management.

Improved Health and Higher Incomes

All of Dhaka's 40,000 auto rickshaws now run on CNG. Three-wheeler auto rickshaws operated by CNG were imported to replace two-stroke engine auto rickshaws, which emitted suspended particulate matter, carbon monoxide, sulfur dioxide and airborne lead. The suspended particulate matter levels ranged from 2 to 4 times the Bangladesh standards and about 12 times higher than the standards prescribed by the World Health Organization (WHO).





Ambient sulfur dioxide levels were nearly 10 times above WHO standards. Reduction of pollution levels to the Bangladesh national air quality standards reduced the incidence of deaths and sicknesses reported. Improved human health in Dhaka, in turn, is estimated to save the economy about \$48 million annually.

Given the lower cost of running a vehicle on CNG rather than petrol or diesel, the transition also increased incomes of the owners and drivers. Khalilur Rahman, in his early 50s, has been driving auto rickshaws for the last 10 years. He pays daily rent for the auto rickshaw plus the cost of gas, and keeps the rest of his earnings. Since the owner switched to CNG-driven auto rickshaws a few years ago, Khalil's income more than doubled, from 200 taka (\$2.50) to 450 taka (\$5.60) per day. This is mainly because his fuel costs decreased. Life is still hard for Khalilur Rahman with a family of five, but he surely found a respite. "We can buy more food, and live little more comfortably," he added.

Khalilur Rahman has witnessed many changes on the streets of Dhaka. Since CNG was introduced, he has seen a noticeable reduction in pollution. Before CNG was introduced, pollution was really bad, he said. Since auto rickshaws are open on the sides, their drivers are particularly vulnerable to the effects of pollution. "My eyes and face used to burn and I would fall sick very often," Khalil said. "There is much less smoke now."





URBAN: WATER SUPPLY AND OTHER MUNICIPAL INFRASTRUCTURE AND SERVICES

The poverty rate in urban areas has declined from 45% in 1991 to 22% in 2011. Economic opportunities in urban areas attract large numbers of migrants from rural areas with emerging challenges to provide adequate infrastructure and healthcare to the migrants. ADB continued to be one of Bangladesh's most committed development partners in meeting these challenges.



Profile of the Urban Sector: Overview of ADB Assistance

An estimated 40 million people lived in urban areas in 2012 (28% of the total population). Though this level of urbanization is still relatively low, urban³ population growth has been 6% per annum for over four decades, compared with 1.3% growth for the total population. With existing growth rates, by 2035 the country's urban population will double to reach 74 million, or 40% of the total population.⁴ The contribution of urban areas to the national gross domestic product grew from 26% in 1973 to 48% in 2011. Rapid urbanization has created growing demand for urban infrastructure and services.

Urban infrastructure and services have not kept pace with rapid urbanization, causing an acute shortage of services in urban areas. Piped water is available in less than half of *pourashavas* (secondary towns), and typically only for 2 to 4 hours per day. Water quality is poor, with high iron content or arsenic contamination. No urban areas have sewerage, with the exception of a very limited system in Dhaka. An estimated 40% of households resort to use unsanitary hanging latrines (footnote 4). Only 20% of solid waste is collected, and households dump their solid waste directly into streets, public spaces, and drains. Drainage is underdeveloped and poorly maintained. During monsoon rains, roads

With existing growth rates, the country's urban population will double by 2035 to reach 74 million, or 40% of the total population.

and pathways become flooded, causing severe traffic congestion and risks to public health. As roads and bridges have insufficient capacity to meet growing traffic volume, traffic jams in city centers limit access to economic opportunities and social services.

Despite significant progress, a large portion of the urban population still lives below the poverty line. From 1991 to 2010, Bangladesh reduced the national poverty rate from 59% to 31.5% and the urban poverty rate from 45% to 22%. Economic opportunities in urban areas attract large numbers of migrants from rural areas. New migrants, as well as second-generation migrants, tend to live in slum areas without decent housing or basic services.

ADB's strategic thrust of assistance for the urban sector in Bangladesh has been poverty reduction through shared growth, social development, and good governance. ADB has been a leading agency in urban development and has supported a series of projects. The most important lessons indicate that the improvement of urban infrastructure and service delivery can be achieved more effectively by linking it with governance reforms and creating a proper incentive mechanism. Since Bangladesh joined ADB in

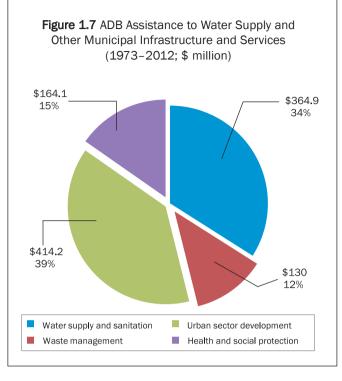
Urban infrastructure and services have not kept pace with rapid urbanization, causing an acute shortage in every urban service.

^{3.} Urban' covers water supply and sanitation, other municipal services, urban infrastructure and public transport, and urban primary healthcare.

^{4.} ADB.2009. Report and Recommendations of the President to the Board of Directors; Second Urban Governance and Infrastructure Improvement Project. Manila.

1973, ADB has provided 16 public sector loans totaling about \$909.10 million for improved urban water supply and sanitation, waste management, and overall urban development. In addition, Bangladesh has received a total of \$164.10 million for health and social protection, including urban primary healthcare.

ADB has been a leading agency in urban development in Bangladesh, actively supporting development initiatives in policy and operational levels. ADB financed urban development and drainage, flood control, and mitigation projects in Bangladesh. The Secondary Towns Infrastructure Development Project (STIDP), successfully completed in 2000, and the follow-on project (STIDP 2), completed in 2003, have



improved the urban environment and living conditions in 32 secondary urban centers or pourashavas. The Urban Governance and Infrastructure Improvement Project (\$60 million) focused on enhancing accountability in municipal management and strengthening capabilities in the provision of municipal services. The Secondary Towns Integrated Flood Protection Project, Phase II (\$95 million, including cofinancing of \$15 million from the Organization of the Petroleum Exporting Countries) mainly envisaged improving the urban environment at the municipal level, including slums. ADB has played a major role in assisting water supply and sanitation development in Bangladesh. ADB's lending operations have recognized the strategic importance of secondary towns in the urbanization process, and the need to promote them to foster more geographically balanced urban development.

Looking Ahead

DB will continue to assist Bangladesh in expanding access to improved water supply, sanitation, infrastructure, and solid waste management systems in secondary towns and cities, including those in vulnerable coastal areas exposed to natural disasters and climate change impacts. This will be combined with institutional capacity building of the municipalities in installing and maintaining water, sanitation, and waste management facilities involving women and men. Given that the main constraint in fostering sustainable municipal services delivery is the slow progress of institutional reforms, future ADB investments will continue stressing performance of local governments. Secondary towns that demonstrate the greatest efforts and progress in implementing agreed municipal governance reforms will be rewarded.



Urban Governance and Infrastructure Improvement Project

A New Horizon for Urban Citizens

Moulvibazar

The new slum rehabilitation complex constructed at Moulvibazar under the Urban Governance and Infrastructure Improvement (Sector) Project (UGIIP) stands out as an amazing example of how a formerly dirty and unhealthy slum can be transformed into a clean and comfortable home for its residents. "I can't explain how comfortable we are now living in this home for the city cleaners," said Parimal Das, standing in the spacious garden of the complex. "We have now clean toilets, separate for men and women, which our community routinely maintains. We have our office room where our leaders sit and monitor how the community members do the assigned tasks," Parimal said.



Narshingdi

Sufia Begum, 32, a middle-class housewife in Narshingdi, is enthusiastic about being a member of the town-level coordination committee formed under the ADB-assisted UGIIP. Now the women members are always consulted before approving the pourashava annual budget. Pourashava mayor respects our suggestions, said Sufia. The women committee members routinely conduct courtyard meetings with other women living in the town and motivate them to participate in the pourashava's affairs. The courtyard meetings are very interesting and successful in convincing the women residents about their rights and roles in the pourashava, she added.

Background and Objectives of the Project

n 2001–2002, only 30% of urban households used tap water for drinking, and probably less than 20% had their own house connections. Solid waste collection levels are around 20%. Only 25% of urban households live in dwellings with permanent structure. In most urban centers, air and water quality are extremely poor. The major sources of air pollution have been traffic, brick fields, and industry, while the major sources of water pollution are domestic and industrial wastewater discharges.

ADB on 28 November 2002 approved a loan of \$60.0 million equivalent from its concessional special fund resources for the Urban Governance and Infrastructure Improvement (Sector) Project (UGIIP).

The objective of the project was to promote human

development and good urban governance in Bangladesh's secondary towns by assisting the selected *pourashavas* to (i) enhance accountability in municipal management and strengthen their ability to provide improved municipal services; and (ii) develop and expand physical infrastructure and urban services to increase economic opportunities and reduce the inhabitants' vulnerability to environmental hazards and poverty.

The output of the project includes: (i) Urban infrastructure: Under the urban roads and bridges subcomponent, the project improved about 581 kilometers (km) of urban roads and 264 meters (m) of new bridges. The improved roads construction works created about 537,249 person-days of direct employment opportunities. The project also improved *pourashavas'* slum areas, which generated 676 person-days of

Financing Plan			
Financier	Actual Costs (\$ millions)		
ADB	65.10		
The government	22.13		
Total	87.23		

employment and contributed to improved solid waste management. (ii) Citizen awareness and participation: This included establishment of town-level and ward-level coordination committees

Rapid urbanization has contributed to the growing share of the urban sector in overall economic growth. Over 40% of the country's gross domestic product is now derived from the urban sector, from a low of 25% in the early 1970s.

and gender and environment subcommittees. (iii) Women's empowerment: A key output of the project was its contribution to increased women's participation in the administration and development programs of the *pourashavas*. This resulted in increased participation of the female ward commissioners in *pourashava* activities and committees.

ADB will continue to assist Bangladesh in improving its urban infrastructure with linkage to urban governance, ensuring participation of the citizenry in the management of secondary towns, including climate vulnerabli coastal towns. Building on the success of UGIIP, ADB has financed a follow-up project, the Second Urban Governance and Infrastructure Improvement Project (UGIIP 2), which is now ongoing.

Project outputs include

- 581 km of new roads and 264 m of bridges
- Created 537,249 person-days of employment opportunities
- Improved slum areas
- Promoted citizen awareness and participation in pourashavas' functions
- Empowered women

Following the Urban Governance and Infrastructure Improvement Project, the administration of the *pourashavas* has been decentralized and made transparent with increased participation by the stakeholders through town-level coordination committees. Women's participation in *pourashava* affairs was enhanced through female ward commissioners and implementation of the Gender Action Plan. Living conditions of *pourashava* dwellers, including the slum dwellers, remarkably improved because of improved roads and drainage, and access to safe water under the project.



Dhaka Water Supply Sector Development Program

Improving Supply of Safe and Reliable Water

Almost one-third of the country's total urban population of 40 million lives in the Dhaka metropolitan area, which is growing twice as fast as other urban areas. While the Dhaka Water Supply and Sewerage Authority (DWASA) serves 70% of the Dhaka metropolitan area, Bangladesh faces an enormous challenge in supplying safe, reliable water to the capital city's fast-growing population. The ADB-assisted Dhaka Water Supply Sector Development Program is helping Bangladesh in meeting the challenge.



Project Background and Objectives

The project was designed considering issues and challenges that DWASA faces. More than 80% of Dhaka's water supply comes from groundwater, and the upper aguifer of Dhaka already has exceeded its withdrawal limit. The groundwater supply inevitably and urgently will have to be augmented with treated surface water. However, treating surface water is technically more complex and expensive than using groundwater. The pilot program in Dhaka's Manikdi area found that all household connections are substandard and leaking, and that physical water losses are up to 53%. About 1.3 million people (or 15% of the population) in the DWASA service area are living in slums. However, a significant number of the more vulnerable slum dwellers do not have access to services. Of the water that is accounted for

(about 50%), only 62% of revenues are collected. In total, only one-third of the water that enters the network is ever paid for.

Financing Plan			
Financier	Estimated Amount (\$ millions)		
ADB	150.00		
The government	62.70		
Total	212.70		

ADB came forward to support the government in meeting this challenge, and in December 2007, it approved the ongoing Dhaka Water Supply Sector Development Program (DWSSDP). The ADB assistance includes a program loan for \$50 million and a project loan for \$150 million.



The DWSSDP is the first phase of a long-term support program for the urban water supply sector based on the partnership framework that the external development partners (ADB, the Danish International Development Agency, Japan International Cooperation Agency, Korea International Cooperation Agency, and the World Bank) and the government signed in November 2007 outlining the partnership arrangements and agreement on the urban water supply and sanitation sector reforms to be carried out by the government.

The overall expected impact of the project is to contribute to sustained economic growth and improved public health conditions in the country's urban centers, particularly in the Dhaka Metropolitan Area, by improving water supply services. The project will help reduce child mortality and improve general health, increase the productivity of women by shortening the time required to fetch and store water, and conserve the surface and

groundwater. The program and project loans under the DWSSDP are designed to complement each other in achieving progress toward these key goals.

The significant outcomes of the project include: (i) A massive rehabilitation of existing water supply network pipelines and metered house connections is underway. (ii) The entire population (more than 50,000) of the Korail slum is going to get formal access to the DWASA supply network by end of 2013, and this will be gradually extended to all other slums in the project area. (iii) Trenchless technology (without digging the roads) for pipeline laying is being used for the first time in Bangladesh, minimizing the disruptions to the city's congested traffic. (iv) DWASA's financial performance started improving by reducing non-revenue water loss to less than 30%. (v) The mega surface water treatment plant project is being prepared with assistance from ADB and other development partners.

Working Together

DB is taking the lead in supporting water supply improvements in Dhaka, while the World Bank is focusing on sewerage and drainage improvements, as well as scaling up successful water supply and sanitation service provision models in low-income communities and slums of Dhaka, jointly with the Department for

International Development of the United Kingdom. The Government of Japan is focusing on water and sanitation services in Chittagong. The Danish International Development Agency is providing assistance for a new surface water treatment plant (Saidabad, Phase 2) to augment the water supply sources in Dhaka.

Urban Primary Health Care Project

Taking Health Services to Doorsteps

Bangladesh experiences high levels of child and maternal ill health. Almost half of the mothers and 78% of children aged 6 to 11 months suffer from anemia, and 48% of children under 5 are underweight. Antenatal care is poor and only 6% of births take place in healthcare centers. ADB is helping Bangladesh in promoting public-private partnerships to deliver primary healthcare to the urban poor through the Urban Primary Health Care Project.



Dhaka

Shirin Akhter, 31, mother of three and a slum dweller in Dhaka, is happy that her third child's birth took place without much difficulty or anxiety. "My first two children were born in the villages with no amenities and trained nurse available. Those were the difficult days," she shuddered, recalling the ordeals. Shirin's experience is typical of women who have benefited from one of the 116 ADB-assisted urban primary healthcare centers spread all over Bangladesh.

Background and Objectives of the Project

round 40 million people lived in urban areas in 2012 (28% of the total population), a large number of whom are slum dwellers with little health knowledge and poor access to essential basic health services. Children living in urban slums are deprived of education and health care, and are vulnerable to violence, abuse, and exploitation. High rates of mortality and morbidity exist among slum-dwelling women who remain neglected in terms of meeting their basic health needs and ensuring their rights.

Financing Plan			
Financier	Actual (\$ millions)		
ADB	24.14		
UNFPA	4.24		
NDF	1.63		
The government	8.32		
Total	38.33		

NDF= Nordic Development Fund UNFPA = United Nations Population Fund

Since 1991, ADB has been supporting

the government in addressing its commitment to put in place strategies to address the issues of improving the health status of the urban population. ADB approved a \$51 million loan in 1990 for the Second Health and Family Planning Services Project. Building on the lessons learned from this project, ADB in 1997 approved a loan of \$40.0 million for the first Urban Primary Health Care Project, which supported urban primary health care (PHC) provision through contracting out services to NGOs in four city corporations. This was the first large-scale urban PHC project supported by ADB in the region. It was also the first large-scale PHC project undertaken through a public-private partnership.

The Urban Primary Health Care Project (UPHCP), a public-private partnership, is an innovative initiative with the goal to improve the health status of the urban population, especially the poor, and focusing on women and children. The UPHCP was committed to providing essential health and reproductive health services to these populations for improvement of their livelihoods.

Promoting Private Sector in Health Care

In the past, the government has been directly responsible for providing primary health care services, but under this project, the government formed partnerships with the private sector to deliver health services. Thus the government's role became primarily one of planning, financing, regulating, and evaluating service delivery. This project tested this approach on a large scale and evaluated it carefully so that it can be replicated in other settings.

Project Impacts

The impacts of the Project on healthcare services are highly visible, as it (i) emphasized on client needs, especially those of women; (ii) increased quality, efficiency, and equity of services; (iii) provided an essential health service package, with emphasis on

preventive interventions and activities related to maternal and child care; (iv) increased role for the private sector, including NGOs; (v) created provision of one-stop service for health and population services; and (vi) increased attention to cost recovery and more efficient resource utilization in the public sector.

The project financed

- Provision of primary health care through partnership agreements
- 183 new primary health care centers and 17 comprehensive reproductive health care centers were established
- Capacity of city corporations and their partners was built

Project Outputs

The project concluded 16 partnership agreements with nine local NGOs and the Chittagong City Corporation for provision of primary health care services. The innovative partnership between the public and private sectors in providing primary health care services proved satisfactory in reaching the poor—particularly women and children—with quality services. The partner agencies provided 16.35 million different services to 6.16 million patients, including attending 29,915 births. In addition, 28.59 million people were

- 16 partnership agreements with NGOs
- 16.35 million different services provided to 6.16 million patients
- 180 health care centers established

covered under the behavioral change communication program by the partner agencies. Women who were victims of violence received psychological, physical, and legal assistance from the centers.

The project established 180 health care centers (163 primary health care centers and 17 comprehensive reproductive health care centers).

Building on the success of the Urban Health Care Project, ADB continued supporting Bangladesh in providing improved healthcare to the urban poor. In 2005 and 2012, ADB and the cofinanciers⁵ agreed to provide support under the Second Urban Primary Health Care Project and the Urban Primary Health Care Services Delivery Project.

^{5.} The project was cofinanced by the Swedish International Development Agency for \$5.0 million (grant) and the Department for International Development of the United Kingdom for \$25.0 million (grant).

Second Water Supply and Sanitation Project

Clean Water for the Poor

In many secondary towns, large numbers of households obtain water from unsafe sources, such as canals, dug wells, and ponds that are generally contaminated by wastewater that percolated through the subsoil. The ADB-assisted Second Water Supply and Sanitation Project provided a solution.

Reduction in Sickness

"With this new water source we have noticed a reduction in sickness, especially for children. We get water from the deep-well pump for drinking, washing clothes, and all our needs," said Azizullah, a 42-year-old farmer and father of four, living in Faridpur that benefits from the project. "I'm very happy we now have water well. Because of the reduction in sickness, we spend less on medicine," Azizullah happily agrees.



Background and Objectives of the Project

Although piped water supply systems using groundwater sources existed in all project towns of Bangladesh, the systems were inadequate and met only 10%–30% of the actual demand through intermittent supply (3–8 hours daily). The existing systems were old and dilapidated, requiring rehabilitation and expansion to increase coverage and operational efficiencies. Many households obtained water from unsafe

Although piped water supply systems using groundwater sources existed in all project towns of Bangladesh, the systems were inadequate and met only 10%–30% of the actual demand.

sources, such as hand-operated tube wells and dug wells and ponds that were generally contaminated by wastewater. Management and disposal of solid waste and human excreta was inefficient and unhygienic. In the past, water supply and sanitation services development lacked adequate *pourashava* and beneficiary planning and participation. Although *pourashavas* are responsible for providing these services, they lacked adequate technical, administrative, financial, and community mobilization capabilities.

To combat this situation, ADB in November 1993 approved \$31.0 million loan for the Secondary Towns Water Supply and Sanitation Project to assist the government in providing sustainable safe water supply and sanitation facilities and services in nine towns, and thereby (i) improve health conditions and introduce public

Financing Plan		
Financier	Actual (\$ millions)	
ADB	27.25	
Pourashavas and beneficiaries	2.20	
The government	3.82	
Total	33.27	

health and hygiene concepts, (ii) enhance the living standard and life quality of households, and (iii) accelerate industrial and commercial development.

The main objectives of the project were to (i) increase overall water supply service coverage to 90% and provide coverage to an additional 630,000 people, (ii) increase sanitation coverage from 60% to 75% and provide coverage to an additional 130,000 people, (iii) integrate physical facilities with hygiene education and community participation, and (iv) strengthen Department of Public Health Engineering and respective *pourashava* (municipality) institutional capabilities.

The project financed

- 22,000 new service connections
- 14,600 hand-pump tube wells
- 18 public toilets
- 10 km roadside drains
- Microcredit funds for 24,000 latrines

Impact: Improving Public Health through Community Participation

The Second Water Supply and Sanitation Project has been a good example of improving public health and environment through blending public sector investments and community participation. The impacts of the project include (i) increasing coverage of safe water, especially for the urban poor; (ii) promoting 24-hour supply; (iii) reducing system waste and leakage; (iv) strengthening cost recovery and financial management of municipalities; (v) improving financial self-sufficiency

- Increased coverage for urban poor
- 24-hour piped water supply
- System waste and leakage reduced
- Cost recovery and financial management strengthened
- Facilitating community participation to achieve long-term service sustainability

through improved billing, revenue collection, and tariffs; (vi) improving *pourashavas*' system administration, operations and maintenance, and financial management capabilities; (vii) integrating water supply development with wastewater management, water drainage, and solid waste management; and (viii) facilitating community participation to achieve long-term service sustainability through community management of services.

Building on the success of the project, ADB approved Secondary Towns Water Supply and Sanitation Project in October 2006 as a follow-up projects. ■





AGRICULTURE AND NATURAL RESOURCES

DB's contribution to agricultural growth through investments in crop diversification, water resources management, and rural infrastructure has been considerable.



ADB Assistance to the Agriculture Sector: An Overview

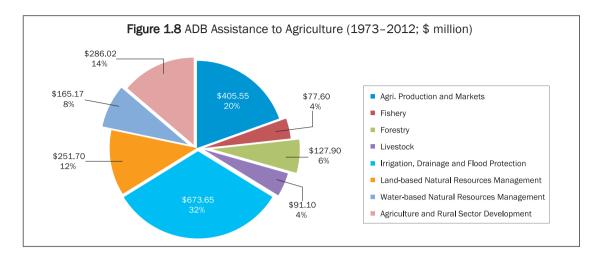
espite a decline in agriculture's share of gross domestic product, more than 80% people still live in rural areas, and agriculture remains important for food security and as a source of productivity improvement. employment, and income growth. About twothirds of the entire labor force works in agriculture. In the context of ensuring food security, rural growth, and faster poverty reduction, agriculture remains in the forefront of the development agenda of the country. Support for agriculture and rural development are therefore an important component of the inclusive growth strategy. Furthermore, growing scarcity of water and land, population growth, pressure on natural resources, competing food crop use, and the effects of extreme weather and climate change increase risks to the country's future food security. Despite challenges, Bangladesh agriculture has performed reasonably well, demonstrating about 4% average annual growth since the 1990.

Until the 1980s, ADB support focused on enhancing food production by helping the government to increase farmers' access to improved inputs. The focus broadened during the 1990s to include crop production, livestock, rural credit, forestry, and the related sectors of water resources management and rural infrastructure. The aim was to benefit the poor and reduce gender gaps by increasing people's participation in, and deriving benefits from, these areas. Water sector assistance contributed to the establishment of policy and institutional framework for decentralized and participatory water management, including sustainable operation, maintenance, and cost recovery by water management associations. Overall, these

interventions contributed to agricultural and rural growth, and were in line with the government's efforts to diversify sources of rural growth. They also contributed to the sustainability, market orientation, and pro-poor impact of public policies.

Recognizing the great importance and potential of agriculture and natural resources, ADB has been extending support to the sector since it began operation in Bangladesh in 1973. As a long-standing development partner, ADB has been closely involved with (i) the development of a broad agriculture sector (crops, input liberalization, livestock, fishery, and forestry); (ii) rural development, including rural infrastructure (road connectivity, markets, livelihood, microcredit); and (iii) water resources management (flood management, erosion control, and improved and adaptive participatory water resource management). ADB supported reforms to increase efficiency in services delivery including fertilizer and equipment availability to the farmers. Also, ADB supported commercialization of agriculture. agribusiness development, diversification of high-value crops, and value chain development.

As of 2012, ADB had assisted Bangladesh with 58 loan projects/programs in Agriculture and Natural Resources sector worth \$2.07 billion, which is 15.95% of its total support to Bangladesh. Currently, 8 loan projects amounting to \$395.64 million are under implementation, which is 8.33% of the present portfolio. In addition, ADB extends capacity building and project preparation support with technical assistance grant on regular basis.



Sirajganj

Amir Hossain, a 45-year-old farmer living in a village in Sirajganj on the bank of the Jamuna River, has experienced disaster when his farm lands were inundated by periodic floods in the rainy seasons. "Until 2007, I lost standing crops from inundation and river erosion almost every year. The erosion was so devastating that my homestead would have been engulfed by the mighty Jamuna in a few years, "Amir recalled. But the ADB-assisted Jamuna–Meghna River Erosion Mitigation Project has changed his life by giving him a respite from the annual holocaust; his farmlands are now safer, allowing him good harvest. "I can now harvest enough crops to feed my family the year round."





THE WAY FORWARD

To foster a vibrant and diversified rural economy, ADB will help the country to improve food security and rural livelihoods by boosting productivity, connectivity, and climate change resilience. The focus of the assistance will be on the following:

- Developing efficient and sustainable flood management and irrigation to boost agricultural
 productivity and encourage livelihood diversification. ADB assistance will build on the
 National Water Policy and National Water Management Plan of 2004, which adopted the
 basic principles of integrated water resources management, sustainable service delivery,
 and user participation in water management.
- Enhancement of agricultural productivity through improved agricultural extension and research systems; expanded, efficient, and sustainable irrigation facilities; and improved function of agricultural input and output markets.
- Improved rural connectivity through an improved transportation network in rural areas, improved market infrastructure, and development of agribusiness and value chain networks.
- Increased income and employment opportunities among marginal, small and medium farmers through commercialization of agriculture and agribusiness development in rural area.
- Improved public sector services in rural areas through decentralized local government institutions.
- Improved disaster management and climate resilience to protect rural infrastructure and population.
- Increased resilience of farm households to climate and natural disaster risks through weather index-based crop insurance.

Northwest Crop Diversification Project

Diversifying Crops for Higher Income



Sherpur, Bogra

Rina Rani Das, 35, a housewife and mother of three, is happy that her income has now tripled, enabling her to meet basic necessities more comfortably. She moved away from the traditional agricultural products and now produces egg-plant, spinach, country beans, and other vegetables. That is triple the amount that her husband is earning as a retailer in local market. "My children are now grown up and go to high school. We have repaired our house, bought some lands, as well as have engaged in agricultural products wholesale business," said Rina Rani. The microcredit offered by the ADB-assisted Northwest Crop Diversification Project has changed her life.

Background and Objectives of the Project

The northwest region of Bangladesh is characterized by relatively fertile and well-drained soils, a varied climate that is favorable to a range of crops, and relatively flat terrain. More than 80% of the area is classified as medium to high lands, making it one of the least flood-prone regions in the country and allowing the production of diversified crops throughout the year. Thus, the region has a significant comparative advantage for growing nontraditional high-value crops. In particular, potential exists to produce off-season fruits and vegetables, which could be marketed at high prices to Dhaka and other parts of the country. An ADB study recommended that "for economic development of the region to be successful, there must be a strong agriculture base." It also highlighted the need for increased rural credit and for such credit to reach small-scale farmers not served by commercial or NGO financing institutions.

Using its experience in the agriculture sector, ADB in November 2000 approved a loan of \$46.3 million for the Northwest Crop Diversification Project to assist the government to accelerate economic growth in the region through production of improved high-yield varieties of vegetables, fruits, spices, and other high-value crops by small- and medium-scale farmers, supported by production credit and marketing assistance.

Project Impacts

ncome of the project's small-scale farmers increased by 21%–56% during 2004–2010, depending on the high-value crop that the farmers cultivated. The region's economy gained impetus due to increased crop diversification and adoption of high-value crops. This was facilitated by effective technology transfer and needbased credit support for high-value crop cultivation. Strong monitoring, demonstration trials at farmers' fields, on-site advice by Department of Agricultural Extension and NGO field workers, and credit support have brought about these successes. Interest of the beneficiary farmers and market demand were the key driving forces behind these achievements.

ADB assistance will continue focusing on raising agricultural productivity and diversifying into higher-value crops to boost income of the rural poor.

Income of the participating farmers went up by 21% to 56% depending on the high-value crops model followed.

Jamuna Meghna Erosion Mitigation Project

Managing Water, Protecting People

Consensus is gradually building in Bangladesh that water must be managed in an integrated and strategic manner, with active stakeholder participation, to generate the returns required for poverty reduction and to mitigate the many complex ecological risks. ADB has been assisting Bangladesh in its strides toward achieving this goal.



An alternate technology using geotextile bags has been developed and is serving as a model for costeffective river bank protection.

Daudkandi, Comilla

Ilyas Ali, a moderately well-off farmer in Daudkandi, has been a victim of erosion by the mighty Meghna River. "We have lost part of my homestead's courtyard. The primary school and the family mosque are gone, engulfed by the Meghna 4 years back. We have been anxiously waiting for the final blow until 2009 when the river could erode away my entire homestead,"he recalled.But his days of horrors are gone; he no longer needs to spend sleepless nights fearing the final holocaust. "The river bank has now been protected by revetments and is

stable. I can now sleep well at night," stated a relieved Ilyas. The ADB-financed Jamuna–Meghna Erosion Mitigation Project has eased his life by protecting him and his neighbors from erosion.

Mubarak Ali, local union council member, is relieved that the project has halted the river erosion. "The speed and intensity at which Meghna River has been eroding our area every year was terrifying. We thought that our entire locality would be gone in only a few years,"he recalled. "But the project has magically stopped the erosion. Our local market, school, and homesteads are now safe," beamed Mubarak.



Background and Objectives of the Project

iverbank erosion is a perennial problem caused by dynamic channel shifting of the rivers flowing through the unconsolidated sediments of the flood plain. Nationwide, an estimated 1,200 kilometers (km) of riverbank in the major rivers is actively eroding, with more than 500 km having severe erosion problems. An estimated 10,000 hectares (ha) of flood plain land is lost annually, with the emergence of new but much smaller and short-lived low-lying charlands, which exhibit a significantly reduced production base. This process annually affects about 100,000 people, who face significant social hardships such as loss of homestead, becoming landless, and being displaced to the riverine fringe land, nearby embankments, char lands, or urban slums.

Progressive riverbank erosion has been threatening the flood embankments in the two subproject sites of the Command Area Development Project, the Pabna Irrigation and Rural Development Project (PIRDP) and the Meghna-Dhonagoda Irrigation Project (MDIP), located along the right bank of the

Jamuna and left bank of the Meghna rivers, respectively. In contrast to past interventions, the proposed measures provided a passive and adaptive approach to managing river erosion by placing the protection works parallel to the natural alignment of the river. This would reduce the risk of severe flooding that creates structural failure and high maintenance costs. The protection works would consist of a revetment with launching sections, to cover and protect the existing bank line as the scour holes develop. For the under-water protection work, they are constructed by sand-filled geotextile bags, which can be placed at about half the cost of conventional hard materials and have the advantage of using sand and labor, the most abundant resources in Bangladesh. ADB approved the project in 2002 and its implementation ended in 2011.

The specific objectives of the project were to sustain the incomes of people in the PIRDP and MDIP project areas through establishing cost-effective and sustainable riverbank

erosion management systems. It focused on providing reliable mitigation measures through adaptive riverbank protection works and a range of nonstructural instruments to adapt to the highly dynamic morphological processes of the Jamuna and the Meghna Rivers while protecting and enhancing the livelihoods of the poor in the project areas.

The project scope comprised (i) about 7.0 kilometers (km) and 4.4 km of riverbank protection works in PIRDP and MDIP, respectively; (ii) non-structural river erosion mitigation measures including data and information management, disaster preparedness, and targeted social development to the erosion-displaced poor; and (iii) institutional strengthening of riverbank erosion management systems, including capacity development and project management systems, including capacity development and project management.

Financing Plan					
Financier	Estimated Amount (\$ millions)				
ADB	42.20				
The government	19.10				
Total	61.30				

Outputs/Targets

- Increased cropping intensity of 215% in PIRDP and 230% MDIP by 2011
- Cereal production increased of 118,000 tons and 112,000 tons in PIRDP and MDIP by 2011
- Incremental fishery production of at least 500 tons more than the earlier year in 2001
- Incremental permanent employment of 2.3 million-person-days

Impact: Avoiding Loss of Land and Displacement of People

Against the target of 11.4 km, the project completed 29 kilometers of riverbank protection works with geotextile bag, which helped avoid loss of about 2,600 hectares of land and prevent displacement of about 50,000 people in the areas covered under the PIRDP and the MDIP, completed earlier with ADB assistance. This contributed to an average improved cropping intensity of about 220%, and an incremental increase in permanent employment of about 2.3 million persondays in 2012, compared with 2001.

ADB assistance will continue to build on the National Water Management Plan, which adopted the basic principles of integrated water resources management, sustainable service delivery, and user participation in its water resource management support. ADB assistance will likewise support the National Adaptation Program of Action and the Bangladesh Climate Change Strategy and Action Plan, which emphasize flood control and erosion risk reduction.

Rural Infrastructure Improvement Project

Rural Roads - Linking the Markets

Rural infrastructure improvement, assisted by ADB, contributed to reduced rural poverty in 16 districts of Khulna and Barisal divisions in southwest Bangladesh by increasing economic and social opportunities for the poor through participatory planning and rehabilitation of sustainable rural infrastructure.



Kustia, Bangladesh

Abdul Malek, a tricycle van driver in Kustia district in southwest Bangladesh, now has regular work transporting rice and vegetables to the rural market, thanks to the newly built rural road connecting the villages to the growth centers. "Six years back, there were not enough roads from the nearby villages to the markets. Local brokers used to exploit the situation by buying the farm products

The project served 22.6 million people representing 18.4% of the country's population.

from the doorsteps, but at very low price," said Abdul. "The brokers deprived the farmers, who were helpless and unable to bring the vegetable to the markets directly," he recalled. But those days have changed; an artery of rural roads now connects the farmlands to the growth centers, many of which have been improved. Abdul is very happy that farmers now hire his van for transporting vegetables to the market. He is earning good money and taking care of his family well. The roads and the growth centers were built and rehabilitated by the ADB-assisted Rural Infrastructure Improvement Project.

Magura, Bangladesh

Fatema Begum, a widow living a nearby village in Magura district, is now happier because she has found work. She has been given a job in the labor contracting society,⁶ where she works with other distressed women in maintaining the road embankment and nursing the seedlings planted on the roadside. The Rural Infrastructure Improvement Project changed her life.

Background and Objectives of the Project

The project area, totaling 35,000 square kilometers, comprised 16 districts of Khulna and Barisal divisions, which cover 24.1% of the total area of Bangladesh. The project covered 22.6 million people, representing 18.4% of the country's population. The project area was chosen because of the extensive poverty and low level of development. In the two divisions, over 11 million people were poor. In 2000, 47% of the people were below the upper poverty line-40% in Barisal and 51% in Khulna. In the decade ending in 2000, mean per capita expenditure increased by 2.1% annually in these divisions while the national average annual increase was 2.4%. Only 39% of the feeder roads and 30% of the growth center markets in the project area have been improved to all-weather standard, so there is considerable potential for further investment in rural infrastructure to reduce poverty.

^{6.} Labor contracting societies comprise poor rural women with limited earning possibilities who carry out routine maintenance on rural roads using basic hand tools and material supplied by the Local Government Engineering Department.

Improving physical infrastructure like roads, markets, and ferry crossings has a direct positive impact on the income of all categories of households living in the affected areas. Evaluation of the ADB-financed rural infrastructure development projects and other projects has shown that these interventions were highly effective in reducing poverty. Improved roads and markets helped to lower marketing costs and vehicle operating costs and improved overall access to public services and economic opportunities. The poor specifically

Financing Plan					
Financier	Actual (\$ millions)				
ADB	58.30				
KfW	19.80				
GTZ	10.20				
Local govt. bodies	0.90				
The government	34.00				
Total	123.20				

benefited because of the increased availability of goods and services at lower prices. Recognizing these facts, ADB has been assisting with improvement of the country's rural infrastructure in effective partnership with the government. ADB approved the project in 2002 and implementation was completed in 2009.

The main objectives of the project were to (i) reduce rural poverty through economic growth, rural development, and improved infrastructure; and (ii) increase economic opportunities for the rural poor through participatory improvement of sustainable rural infrastructure, social and gender development, and improved local governance in the project area.



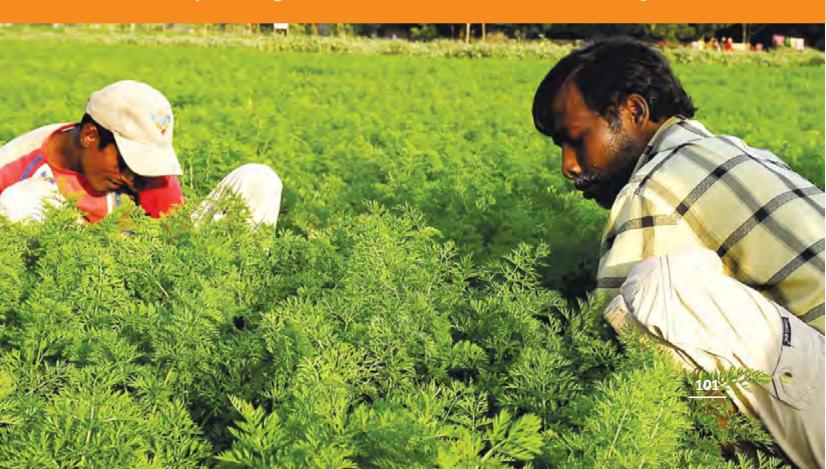
Project Impact: Reducing Rural Poverty

The project contributed to substantial reduction of rural poverty by increasing income and generating employment opportunities. About 1,226 km of *upazila* roads and 99 km of union roads were improved. Motorized and non-motorized traffic volume increased by 140% and 50%, respectively. The improved rural roads reduced travel time by 27% for trucks and 69% for motorcycles. The infrastructure improvement and maintenance works under the project helped generate about 82,000 person-years of employment. Average income of households below the upper poverty line increased by 47% in constant terms. The income of 95,200 poor households in the project areas increased by around 25%.

Looking Ahead

Despite some improvement, rural connectivity in Bangladesh continues to remain underdeveloped, particularly in climate-vulnerable areas. The quality, maintenance, and management of rural infrastructure remain weak. In the climate-vulnerable areas, key rural infrastructure remains inundated for about 3 weeks in a year. The focus of ADB assistance will be on climate-resilient rural transport connectivity; enhancing market

linkages; improving rural livelihoods; and developing systems and institutional structure for infrastructure maintenance in the country. The basic thrusts of future assistance will be on public-private partnership and local government participation in maintenance, and on adopting a performance-based contracts system to simultaneously improve maintenance quality and reduce the maintenance backlog.



Second Small-Scale Water Resources Development Sector Project

Developing Water Resources through Participatory Management

Water is the foundation for many traditional livelihood activities, including the country's main rural activities-agriculture, inland and coastal fishing, transportation, water supply, and rural industries. The demands of water management that have evolved in Bangladesh are complex and diverse. The ADB-assisted Second Small-Scale Water Resources Development Sector Project (SSWRDSP II), approved in 2001 and completed in 2010, helped Bangladesh manage its water resources through participatory rehabilitation and management.



Fazlul Haque, 52, a farmer in Chapai Nawabganj district, has benefited from the SSWRDSP II. He has seen the farmland in the whole area being inundated by floodwater in the wet seasons, and has suffered from scarcity of water for irrigation in the summer, which allowed no more than two crops each year. Every farmer used to lose crops and yield per acre was low. But those dreadful days have passed, thanks to SSWRDSP II. "We now have three crops a year. We the farmers work together and manage water supply to our farm lands throughout the year," Fazlul said. ■

Background and Objectives of the Project

Water is the foundation for many livelihood activities of the rural poor, and effective water resource management is fundamental to addressing pervasive rural poverty problems while promoting economic growth in Bangladesh. This critical resource needs strategic, integrated, and participatory management. Based on the government's main instrument to have the strategy implemented, ADB in July 2001 approved a loan of \$34.0 million for SSWRDSP II. The project was cofinanced by the Government of the Netherlands for \$24.3 million. The project aimed to enhance rural incomes by developing community-based water management associations and community-managed small-scale infrastructure. The overall goal of the project was to support the government's poverty reduction effort by increasing sustainable agricultural and fishery production. The project objective was to develop sustainable stakeholder-driven, small-scale water resource management systems with special attention to the poor. ■

Project Components and Output

The project was implemented in 61 of the country's 64 districts. About 300 planned subprojects resulted in sustainable water engagement infrastructure benefiting between 180,000 and 200,000 hectares (ha) of land cultivated by over 280,000 farm households. Subprojects covered a command area of up to 1,000 ha, with an average of some 650 ha of benefited area. Consistent with a sector approach and in accordance with the National Water Management Plan and National Water Policy, the project helped the government develop sustainable small-scale water resources for better sector performance.

Project Impact: Incremental Farm Production

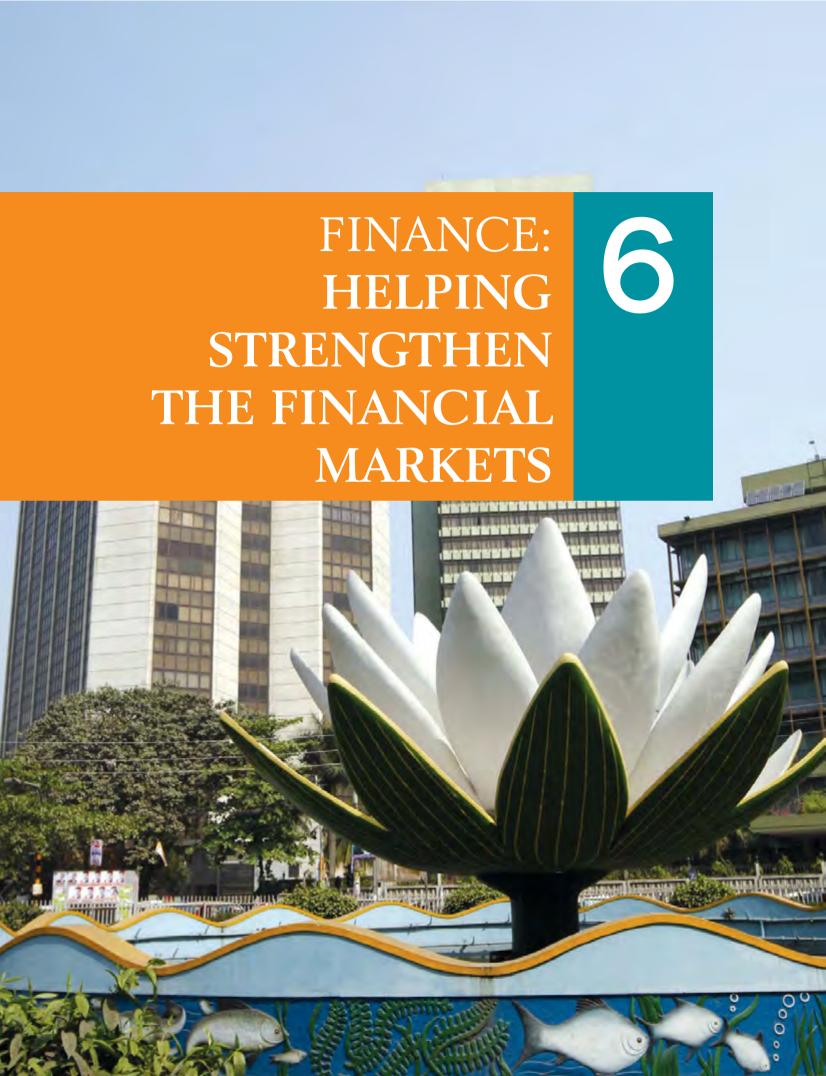
Incremental production of rice for all the 300 subprojects was 180,000 tons per year. The cumulative amount of microcredit disbursed was over Tk140 million. A total of 28,180 members received microcredit, which increased their income. The project generated employment opportunities of about 3.7 million person-days of local labor to complete about 9.7 million cubic meters of earthworks for the project. Overall, the project contributed to poverty reduction by boosting agricultural production in the project areas and beyond.

THE WAY FORWARD

ADB will continue supporting integrated and sustainable water resources development and management by enhancing stakeholder participation and empowerment, improving financial efficiency and sustainability, and improving the living conditions for the poor rural population, while not

disturbing the natural environment in line with ADB's water policy. Developing the necessary policies, institutional framework, and capacities of central and local governments and community organizations to enable these processes will continue to receive high priority.





FINANCE:

HELPING STRENGTHEN THE FINANCIAL MARKETS

Well-functioning capital markets help mobilize and allocate long-term capital resources to finance investment and enhance prospects for sustainable economic growth. Supporting the development of bond and equity capital markets ensures the balanced development of the financial sector. Diversification away from Bangladesh's predominantly bank-based system of financial intermediation expands alternative sources of credit, thereby helping to limit systemic impacts of economic shocks.



ADB Assistance to the Finance Sector: An Overview

Ithough the finance sector in Bangladesh Ais diverse, it is dominated by banks and oriented toward short-term finance. The sector comprises the money and capital markets, insurance, and microfinance. In addition to Bangladesh Bank, the central bank, there are 4 state-owned commercial banks (SCBs), 4 specialized banks, 30 domestic private commercial banks. 9 foreign commercial banks, and 31 nonbank finance institutions. As of September 2013, the Microcredit Regulatory Authority licensed 692 microfinance institutions to operate microfinance. While Bangladesh Bank has regulatory and supervisory jurisdiction over the entire banking sector and nonbank finance institutions, the Securities and **Exchange Commission exercises similar** functions over stock exchanges and merchant banks.

Banks. Banks dominate the finance sector. with 48 banks holding 90% of the sector's total assets while SCBs hold 28% of the country's bank deposits. Although the financial soundness indicators of the finance sector have improved and are generally favorable, the high nonperforming loan ratio. especially of SCBs, remains a concern. The problem of the banking subsector can be traced to priority lending to loss-making stateowned enterprises in the past, a deficient legal and debt-recovery framework, weak loan screening and supervision, bank officials' lack of accountability, and a frail credit culture. Less progress has been made in reforming SCBs or developing institutions for speedy loan recovery.

Capital market. Despite recent improvements, Bangladesh's capital market remains at a nascent stage of development. The market is dominated by two stock exchanges, one in Dhaka and the other in Chittagong. The boom-and-bust experience of 2010 and 2011, and steep slides in 2012,

illustrate the close links between stock market performance and finance sector stability. Despite rapid growth in 2010, Bangladesh has one of the lowest ratio of market capitalization to gross domestic product in South Asia. Inadequate transparency and disclosure rules, both in trading and in the quality of information provided for listed companies, and the introduction of commercial banks into merchant banking have contributed to market uncertainty.

Small and medium-sized enterprises. Small and medium-sized enterprises (SMEs) account for 40% of gross manufacturing output, and 80% of industrial employment covering many poor workers and women in the garment sector. SME development is hampered by various constraints including (i) a dearth of medium- to long-term credit: (ii) limited access, especially for the smaller enterprises, to market opportunities, technology, expertise, and information; (iii) failure to consider women as a distinct target group; and (iv) weak capacity among SME entrepreneurs in business management, among others. In addition, relatively high interest rates and collateral requirements are major hurdles for SME entrepreneurs.

Public-private partnerships. Attracting long-term financing from the private sector for major infrastructure investments is central to the government's infrastructure development plans. The government approved a new public-private partnership (PPP) policy and strategy in August 2010. The government has also allocated a budget for a PPP viability gap fund and project development activities and has created an infrastructure financing fund. However, these new institutional arrangements and financing vehicles are yet to be made operational, including the building of PPP skills and capacity in the relevant line ministries.

The Government's Sector Strategy

The Sixth Five Year Plan of Bangladesh, FY2011–FY2015 recognizes that finance sector performance is a major determinant of private sector growth in a market economy. The plan emphasizes strengthening prudential regulations and improving the supervision and oversight capacity of the central bank. It recognizes the importance of greater private sector involvement in banking

and the capital markets of the country. The plan further emphasizes developing an inclusive strategy to provide the poor and vulnerable groups' access to credit and recognizes that restructuring the finance system by streamlining the operation of state-owned commercial banks is central to macroeconomic stability and financing private sectorled growth.

ADB Sector Experience and Assistance Program

DB's partnership with Bangladesh for the development of its financial sector has contributed to positive outcomes such as enhanced discipline in the capital markets leading to financial growth and economic development. ADB has primarily focused on the capital market and SME development in Bangladesh. Initially, ADB played a significant role in promoting the development of a leasing industry in Bangladesh. Since 1990, ADB has increased its assistance for a more inclusive financial system including supporting SME lending (most recently the SME Sector Development Program from 2004 to 2010, and the ongoing SME Development Project) as well as direct lending to the poor by supporting microcredit. It has also taken on a specialist role in promoting capital market reform, with an emphasis on the securities market.

ADB's financial sector strategy for Bangladesh is based on the Sixth Five Year Plan, lessons from ADB's previous financial sector interventions, and coordination with other development partners. In line with the Sixth Five Year Plan and ADB's Strategy 2020 priorities, ADB is targeting capital market and bond market development focusing on the provision of long-term infrastructure and private sector development.

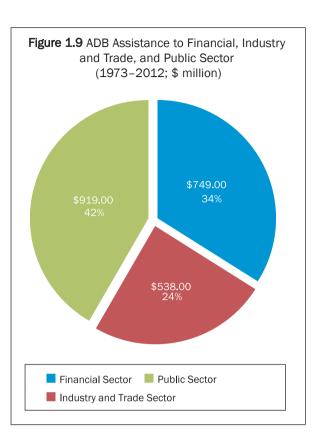
Since Bangladesh joined ADB in 1973, the country's financial sector has received 21 public sector loans for a total of \$751.73 million. The industry and trade sector received 17 ADB loans for a total of \$585.80 million. For public sector development, the cumulative amount of ADB assistance is \$919.85 million. Accordingly, the total ADB assistance to Bangladesh's financial sector, industry and trade sectors, and public sector management is \$2,257.38 million since 1973, which is about 15.94% of total ADB assistance to the country. The first two ADB loans to Bangladesh's financial sector (banking subsector) were approved in 1973,7 followed by a loan for the banking subsector in 1983,8 and another loan for the financial sector in 1985.9

^{7.} ADB. 1973. Loans 129-BAN[SF] and 130-BAN: Bangladesh Shilpa Bank, for \$3.2 million and \$6.6 million, respectively. Manila.

^{8.} ADB. 1983. Loan 657-BAN[SF]: Bangladesh Krishi Bank, for \$40.0 million. Manila.

^{9.} ADB. 1985. Loan 773-BAN[SF]: Rural and Agro-Based Industries Credit, for \$20.0 million. Manila

In 2004, ADB assisted the government with an SME development program¹⁰ to strengthen the policy environment for SMEs, improve access to finance, and provide related support and capacity building, followed by another project loan for SME financing in 200911 and technical assistance to promote women's entrepreneurship. In 2006. ADB approved Loan 2232-BAN[SF]: Improvement of Capital Market and Insurance Governance Project for \$3.0 million, and in 2008 approved loans 2453-BAN [SF] and 2454-BAN: Public-Private Infrastructure Development Facility for \$83.0 million and \$82.0 million, respectively, to meet the need for financing renewable energy and large-scale infrastructure project. In 2010, a technical assistance (\$ 1 million) was approved to help the government operationalize its new PPP policy and strategy.



The Way Forward

ADB will continue to concentrate financial sector assistance through its public sector window on the development of the capital market and infrastructure finance. While ADB's public sector operations will continue to play a role in improving access to finance, its broader support for private sector development will include nonsovereign and private sector lending in a number of indicative areas including microfinance, financing housing, clean energy development, infrastructure, trade, SMEs, and private equity funds. The development of new

instruments for infrastructure financing will also be supported. This will include assistance to develop financing arrangements and model projects suitable for PPP financing, and providing additional financing support through the Public Private Infrastructure

Development Facility (PPIDF) intervention. Particular emphasis will be placed on helping the government develop the institutional architecture for implementing its new PPP policy to create an enabling environment for attracting private investment in infrastructure development.

ADB. 2004. Loans 2148-BAN[SF], 2149-BAN[SF], and 2150-BAN[SF]: Small and Medium Enterprise Sector Development Program, for \$15.0 million, \$30.0 million, and \$5.0 million, respectively. Manila

^{11.} ADB. 2009. Loan 2549-BAN[SF]: Small and Medium Sized Enterprise Development, for \$76.0 million. Manila.

Capital Market Development Program 2

Deregulating the Capital Market: Supporting Economic Growth

Capital market reforms can stabilize the economy and facilitate sustainable growth by addressing the dual concerns of boom and bust cycles in the stock markets as well as limited private investments that curtail long-term infrastructure financing options.



Dhaka

Abdus Sobhan, 42, came all the way from Rajshahi, a northwestern district, and has been regularly participating in the trading in the Dhaka and Chittagong stock exchanges. In the office of his facilitator, a stock brokerage house, he and many others have been watching the restless movement of the index. He was tired, and tense, because his stake was 'big'; he had invested Tk2 million (approximately \$25,000) in stocks that were so promising in 2010, but were selling much below the purchase price in 2011. He realized that the money was tied up till the stock market bounces back, which seemed far from happening. "I earned good money in 2010; the stock prices were going up and up every day. But then, the happy days vanished by a sudden jolt; don't know when it will bounce back," exclaimed Sobhan. "Our government should help us by eradicating all the evil elements. Only then, the market will stabilize."



Background and Objectives of the Project

ADB responded to the stock market crash of December 2010 by formulating the \$300 million Second Capital Market Development Program(CMDP 2) in November 2012, which encapsulates a policy framework for (i) financial market stabilization following the history of booms and busts and (ii) sustainable capital market growth through liberalizing investment decisions, removing distortions, and promoting stronger supervision and governance of the markets. Correcting the existing legal and regulatory framework, continuing improvements to the market infrastructure (stock market surveillance system), and empowering institutions (e.g., the Securities and Exchange Commission [SEC]) by reducing government tutelage are crucial elements under CMDP 2 to develop a more stable and resilient financial system.

The main objective of the CMDP 2 is to develop a deeper and more stable capital market. Capital market reforms under the project will stabilize the economy and facilitate sustainable growth. The recent episode of stock market volatility provides an opportunity for the CMDP 2 to redefine the regulatory partnerships to augment transparency, fairness, and effectiveness as well as compliance, which would lead to enhanced trust and confidence in Bangladesh's capital markets. Under the CMDP 2, the SEC would enable a reformed regulatory partnership that defines the proper role of classes of participants and ensures that each participant carries out its responsibilities. The program will help to ensure the balanced development of the financial sector, which will reduce systemic vulnerabilities in the bank-dominated financial system. Capital markets can also stimulate

healthy competition with the banking sector that results in lower financing costs for all borrowers.

The CMDP 2 components include (i) strengthened market stability by enhancing the SEC's role in developing the market, promoting financial stability through joint supervision of the financial system, strengthening regulatory measures, and developing a market surveillance system; (ii) enhanced market facilitation by developing a long-term vision for capital markets, upgrading accounting and auditing standards, expediting adjudication of enforcement actions, improving governance of listed companies, and pursuing demutualization of the stock exchanges; (iii) enhanced supply measures by incentivizing the issuance of equities and bonds; and (iv) enhanced demand measures by developing liquid bond markets and catalyzing institutional investor demand. Technical assistance (TA) attached to the project is providing crucial resources to support the implementation of key reform actions under the program. The TA components include (i) strengthened enforcement capacity of the SEC by ensuring an effective structure for detecting and investigating possible violations of securities laws and regulations as well as formulating and prosecuting cases; (ii) expedited adjudication of enforcement actions by promoting mechanisms to ensure disposition of capital market cases, such as the establishment of a separate tribunal; and (iii) improved regulation, governance, and operation of the stock exchanges by facilitating the demutualization process in the Dhaka and Chittagong Stock Exchanges.

Support for Capital Market Development

DB is the country's lead Adevelopment partner for capital market development. ADB retains this role under the ongoing CMDP 2, which builds upon policy reform measures implemented under the first Capital Market Development Program (CMDP). CMDP 2 was designed to complement and support the government's commitment to meaningful capital market reform, and is fully aligned with the government's Sixth Five Year Plan, ADB's Strategy 2020, and ADB's country partnership strategy with Bangladesh. ADB has assisted the government in regulating, promoting, and reforming the capital market since 1996. Support was initially provided through CMDP at the outbreak of the

equity market collapse in 1996 and through associated TA grants. CMDP addressed the need to strengthen market regulation and supervision and to develop the capital market infrastructure and support facilities. ADB continued its support to strengthen capital markets in Bangladesh when it approved the Financial Market Governance Improvement TA loan in 2005 to improve good governance practices in the financial system. CMDP 2 builds on lessons from CMDP by ensuring that capital market reforms are an integral part of a government-owned long-term development strategy and that there is ownership at the highest levels of government and the private sector.

Public-Private Infrastructure Development Facility

Improving Infrastructure and Providing Electricity to Rural Households



Background

Serious constraints in infrastructure in Bangladesh restrict investment, including foreign direct investment in flow. ¹² Many years of under investment have taken a toll and resulted in poor access to basic infrastructure for a large part of the population, particularly the economically disadvantaged and those in rural areas. Bangladesh needs better infrastructure, including electricity, to underpin growth.

Objective

Through the public-private Infrastructure Development Facility (PPIDF), ADB directly supports the government's infrastructure development agenda by providing long-term funds for

^{12.} Asian Development Bank. 2011. Country Partnership Strategy: Bangladesh 2011–2015. Manila.

infrastructure financing. With ADB's assistance through the facility, the Infrastructure Development Company Limited (IDCOL)—the implementing agency—will be able to provide funds at commercial terms with maturity of more than 20 years for infrastructure subprojects, which are otherwise currently not available in the market.

The PPIDF is funded by an \$82 million loan from ADB's ordinary capital resources, an \$83 million loan from ADB special funds resources, and a technical assistance grant of \$500,000 for capacity building and supporting project implementation.

The facility also supports IDCOL's renewable energy program, which brings solar power to rural households and is one of the most successful solar home system (SHS) programs in the world.

IDCOL's Solar Home System Scheme

Starting with an initial target of 50,000 solar home systems, IDCOL's program installed more than 2 million by the end of March 2013, making it one of the most successful such programs in the world. Through the public-private Infrastructure Development Facility, ADB provided funding of \$78 million to the program, which has financed the installation of 330,000 SHS.

The program aims to double installations by 2015 for a total of 4 million systems.

Together with ADB, the Islamic Development Bank, and the World Bank are supporting the program. The Global Partnership on Output-Based Aid, the German development institution (GIZ), and the German development bank (KfW) are also providing subsidies to reduce the cost of SHS for consumers.



Implementation Arrangements

The project is implemented by IDCOL, which provides loans to private sector companies to support infrastructure projects in Bangladesh. IDCOL is a limited company owned by the government of Bangladesh, and governed by an independent board of directors drawn from the government and the private sector.

The project uses a financial intermediary credit model. Customers use donor-supported credit to purchase the SHS from partner organizations. IDCOL selects partner organizations based on clear eligibility criteria.

All partner organizations are private organizations (mostly NGOs) with a strong base in microfinance, ranging from very small organizations operating in specific localities to well-known renewable energy providers like Grameen Shakti. The partner organizations obtain the SHS from equipment suppliers, in compliance with the technical standards set by an independent technical standards committee. IDCOL also reviews product credentials and approves and certifies eligible equipment.



The SHS scheme targets poor Bangladeshis living in remote areas where grid electricity is not expected to reach in the foreseeable future. The program provides customers with rooftop photovoltaic collectors, from which batteries can be charged to run lights or small TVs or radios and to charge mobile phones. These systems provide better lighting facilities for children's education and help women to work and cook. It also enables women to take part in income-generating activities after dark. Shops and small businesses have also installed SHS in order to stay open after sunset. New businesses opportunities and jobs have been created, such as running community TV stations and renting mobile phone time. Women have been able to start small-scale businesses such as poultry and handicrafts.

In addition, the partner organizations have helped their clients to sell surplus electricity to neighboring shops for a fee, or else to charge portable lanterns which can be rented to other shopkeepers. Access to solar energy has enabled rural people to start businesses and improve their overall living standards. Unlike conventional electricity, the client can enjoy the fact that there will be no monthly electricity bills, no fuel cost, very little repair and maintenance cost, easy installation and portability, and reliable electricity supply. In addition, the SHS scheme provides an affordable energy solution for the small shop owners in the rural areas who are otherwise unable to pay even the low down payment.



Project Results

The SHS have greatly improved the quality of life for rural households and the productivity and profitability of local businesses. SHS installations of 750,000 per year currently far exceed those of grid connections. The rapid growth of this demand-driven program demonstrates the high value that the households place on getting off-grid electricity services. Meanwhile, this off-grid option reduces pressure on the government budget for grid expansion.

The number of partner organizations involved in the SHS program has grown from 5 to 42, and they compete vigorously to provide attractive credit packages to consumers. The partner organizations conduct their own due diligence to extend loans to households. The implementation mechanism of the IDCOL approach has proved sustainable. Partner organizations have an average loan collection efficiency of about 96% while fully servicing their debts to IDCOL on time.

Under the PPIDF, a total of 330,362 solar home systems have been funded by IDCOL using the proceeds from ADB's Asian Development Fund loan. Assuming that each system saves at least \$61.8 worth of kerosene each year and reduces 375 kilograms of $\rm CO_2$ emission annually, it is expected that the 330,363 systems financed through the ADB program will amount to savings of \$408 million and a reduction of 2,476 tons of $\rm CO_2$ emissions over the systems' 20-year lifecycle.





PRIVATE SECTOR DEVELOPMENT: CATALYZING PRIVATE SECTOR PARTICIPATION IN DEVELOPMENT

through investments, new technologies, knowledge transfer, and enhanced productivity. ADB, through its private sector operations window, has been Bangladesh's reliable partner in catalyzing private sector development.



Dhaka

Mahmud Hashem, 52, a former senior banker and now an owner of a spinning mill near Dhaka, is aware of ADB's private sector operations in Bangladesh. "I am a keen observer of the financial investment opportunities that have been prevalent since the 1970s. I know ADB private sector development program helped the country in establishing new textile mills, power stations, telecommunications networks, and financial institutions,"he said.

The removal of impediments to growth and poverty reduction, such as inadequate infrastructure (especially energy supply and transport), underdeveloped financial and capital markets, and weak legal and regulatory frameworks, is a high priority for ADB, along with development of a dynamic private sector. The two most challenging constraints are lack of access to finance and inadequate availability of energy, particularly electricity. ADB has been working to help address these challenges to private sector development in a manner that reflects the diverse needs of its developing member countries, including Bangladesh.

Private Sector Operations: ADB Experience in Bangladesh

ADB has supported nine private sector projects in Bangladesh worth \$242 million since 1980, including the Meghnaghat Power Project-the first power plant built on public-private partnership arrangements-and Grameen Telecom, which revolutionized rural access to mobile phone services. In addition, ADB provided technical and financial support to Bangladesh for policy, institutional, and regulatory reforms. In transport, the 13 km Chittagong Port Access Road is operated and maintained by a private sector operator. Notably, ADB is helping the government to design the proposed Dhaka-Chittagong Expressway, the first public-private partnership project in the transport sector. Under its Trade Finance Facilitation Program, ADB is also supporting 12 private sector banks in Bangladesh by extending trade finance support to importers and exporters.

Bangladesh will need better infrastructure, public policies, regulatory regimes, and improved governance and law and order to increase private investment. ADB helps the government improve the climate for private sector development through investments and by easing key infrastructure bottlenecks to growth (in energy, power, roads, bridges, rail, and ports). ADB will also help the government in building the basic education, skills, and health foundation for a more productive labor force; fostering public-private partnerships to provide essential infrastructure and economic services; nurturing a vibrant SME sector; improving private financial governance; and assisting the government to improve the policy and regulatory environment for private sector development. ADB assistance will facilitate simplification of rules and procedures to enable micro-level entrepreneurs and women to access business development services, thereby contributing to economic and private sector growth.

Meghnaghat Power Project

Let There Be Light

The steady and efficient electricity supply from the 450 MW Meghnaghat power station, 30 km southeast of Dhaka, is providing a significant and much-needed boost to the country's electricity generation capacity, serving the growing demands of an expanding economy.



Kachpur, Dhaka

Ashraf Chowdhury, 55, owner of a large ready-made garments plant located 20 km from Meghnaghat, is grateful to the investors who made the Meghnaghat power station a reality. "I shudder recalling the turbulent days in the 1990s, when electricity supply was the poorest, with about 6–7 hours of load shedding on average every day,"he said. But he sees better days now, with more regularized power supply to his factory and lesser power cuts even in peak seasons. The ADB-assisted Meghnaghat power project has been contributing to improved and uninterrupted power supply to his factory in Kachpur and the whole country.



Meghnaghat, Dhaka

Adnan Ahmed, 45, of Meghnaghat Power Company, is happy being a part of the most modern and efficient power station. "Our project is state-of-the-art as far as technology is concerned. Its operation is so simple that a few of us are doing it seated in the control room with no hassle," Adnan said proudly. The power station has a lesser record of breakdowns or

interruption, thanks to the high technical performance of the power plant. "I am happy that the local people, including the area's small and medium scale industrialists, respect me because I belong to the Meghnaghat power station project, which has made their lives easier," he concluded.

Project Profile

The 450 MW combined-cycle gas-fired power plant, completed in 2002, accounted for 11% of the average generation capacity of Bangladesh as of 2010, and produces an average of 3,154 gigawatt-hours of power every year. It had an annual availability rate of 91.9% in 2002–2010. The project has helped change lives in Bangladesh. Before the plant was operational, annual per capita electricity consumption in Bangladesh was just 70 kilowatt-hours, one of the lowest in the world. By 2010, however, with the aid of the Meghnaghat plant's contribution to the national grid, the annual per capita consumption level has more than tripled to 220 kilowatt-hours.

The project is on a 25ha site about 22 kilometers southeast of Dhaka, on the northern bank of the Meghna River. Meghnaghat Power Company was formed to build, own, and operate the power plant, which is exclusively powered by indigenous natural gas. It includes full effluent treatment, fire control systems, waste management facilities, and other systems required to maintain and monitor daily operations. The gas price is provided through a power purchase agreement to Bangladesh Power Development Board, which pays a tariff incorporating a fuel charge.

The plant is controlled through modern software and computerized controls. All control functions that affect the availability of the generating units are duplicated and available at several control levels to ensure adequate backup.

First public-private partnership project in the power sector. The Meghnaghat power plant was built using the build-own-operate structure, supported by a \$50 million loan, a \$20 million loan from complementary financing scheme, and a political risk guarantee of \$70 million from ADB. A consortium of financial institutions and commercial banks provided an additional \$80 million in financing.

Looking Ahead

The success of the Meghnaghat Power Company has clearly demonstrated the effectiveness of the private sector in building and operating infrastructure, advocating corporate governance and transparency, and promoting professional work ethics. Overall, ADB's involvement and investment in the power sector led to positive institutional developments, particularly over the 8 years since ADB became the coordinating development partner for the sector. The unbundling of the sector was partially accomplished, private generation is now an accepted feature of the power market, and

new institutions are achieving good results. The growth of the independent power plants increases competition among public and private power producers. The investment opportunities in the Bangladesh power sector are promising for the private sector. The government has taken steps to create an environment conducive to private sector involvement through appropriate policies and power sector reforms and restructuring. ADB will continue to stand by the government in promoting private sector investment-based infrastructure, including independent power plants.

Grameenphone Telecommunications Project

Improving Telecom-Connecting People

Mobile phone operations have penetrated even the remote regions of Bangladesh to open up new business prospects for the people.

The country's mobile revolution began in 1997 with the introduction of the Village Phone Program by Grameen Telecom, where ADB's private sector operations provided an initial investment of \$1.6 million in equity and \$16.7 million in loans in 1998. Grameen Telecom was one of the share holding companies of Grameenphone and Grameen Bank. ADB also provided \$20 million in 2004 for expanding the network of the cellular phone company, which now has the largest mobile telephone network in Bangladesh.



Grameenphone connects users by helping them get better information instantly, and makes them aware that information is a means of increasing returns on investment. Anil Das, 48, a small fisherman, has benefited by eliminating the middlemen and earning more. "Earlier, middlemen took away the bulk of my profit, because I could not communicate with buyers in the wholesale market in district town and know the going price for my fish," Anil recalled. But the days have changed. With the advent of Grameenphone mobiles introduced in 1997, Anil is talking to wholesalers and negotiates with the buyers to fetch higher prices for his fish.

ADB Assistance – A New Era of Connectivity for Development

The project supported the construction and expansion of a nationwide cellular telephone system that would provide common cellular telephone services in the main cities, and a village-pay telephone service in the rural areas. Out of ADB's initial investment, several reinvestments have been made over the years in network facilities that now reach more than 40 million subscribers. Today, in Bangladesh's rural environs where not even 60% of the population gets electricity, mobile networks have launched a new wireless revolution and empowered millions across the country. ADB's partnership with the private sector for improving the infrastructure and communication has ushered in a new era of connectivity for development.

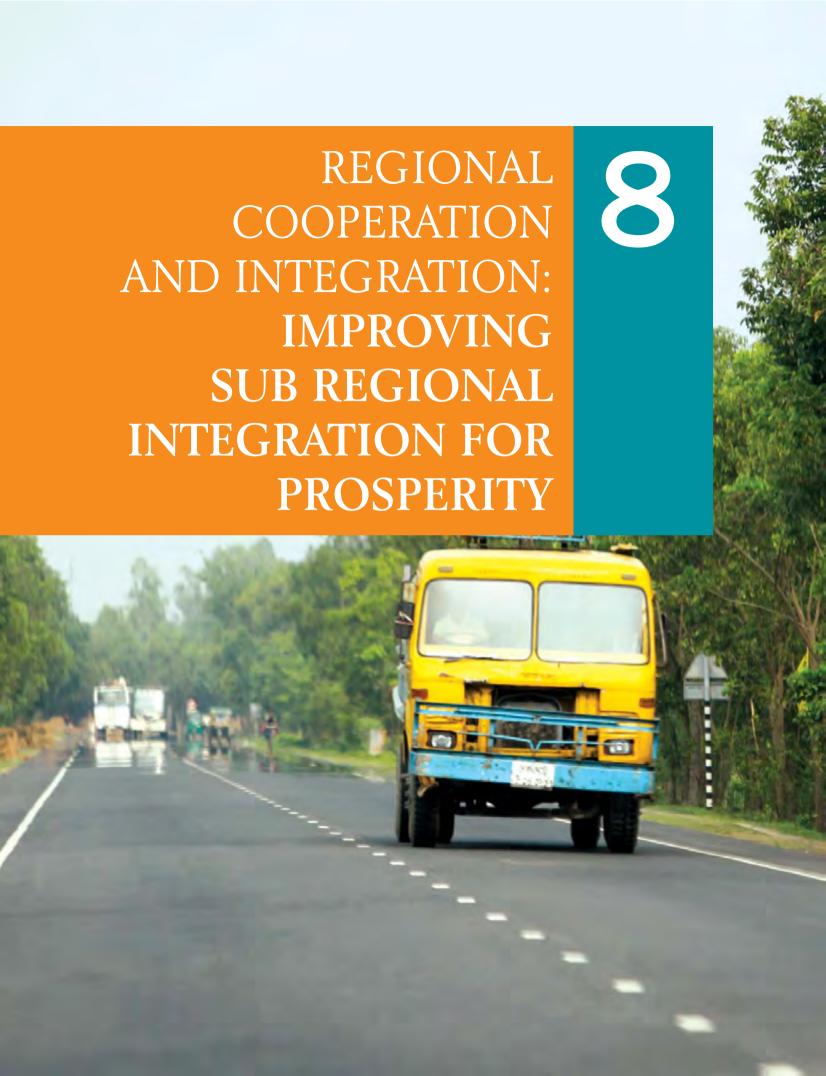
Connecting the Remote Areas

The change was even more radical in the Chittagong Hill Tracts in the southeast part of the country. Now local farmers in Khagrachari district, about 480 kilometers southeast of Dhaka, are busy making decisions about harvesting pineapples from the field. They can now contact the buyers directly by mobile phone and get better prices.

Poor Women Win Connectivity

With Grameenphone's deep penetration into remote areas where land phones would probably never reach, all types of new ventures are spawning with the fast spread of Grameenphone's network. Poor village women were given mobiles, which they used as pay phones. Suddenly, the villages were hooked up to the world and the technology-shy villagers got used to the technology. Today, as mobiles have become cheap and widely available, the Village Phone Program's popularity has waned, but it still is regarded as a trailblazing scheme, with about 250,000 women using the phones commercially. Grameenphone connects users by helping them get better information instantly, and makes them aware that information is a means of increasing returns on investment.





REGIONAL COOPERATION AND INTEGRATION: IMPROVING SUB REGIONAL INTEGRATION FOR PROSPERITY

A DB is promoting accelerated economic cooperation in South Asia, especially under the South Asia Subregional Economic Cooperation (SASEC) program for prosperity of the region.



ADB's Role in Regional Cooperation and Integration

ADB is the only development finance institution with regional cooperation and integration (RCI) written in its charter. RCI is one of the three strategic agendas under ADB's long-term strategic framework, Strategy 2020, which also emphasizes inclusive growth and environmentally sustainable development. This reflects how ADB prioritizes RCI.

ADB promotes regional cooperation and integration as a strategic priority to link national with regional interests to help countries benefit from each other's strengths and overcome mutual problems. ADB pursues these objectives in South Asia through the SASEC program involving Bangladesh, Bhutan, India, and Nepal. SASEC focuses on project-based cooperation in energy, trade facilitation, and transport, and has also pursued cooperation in information and communication technology and tourism. Through SASEC, ADB collaborates with other subregional initiatives: the South Asian Association for Regional Cooperation (SAARC) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Through the RCI programs, ADB supports Bangladesh to improve connectivity, increase regional trade and investment, develop regional tourism, raise cooperation in energy, and strengthen the private sector.

ADB recognizes economic cooperation as an important means of achieving more efficient use of regional resources; making economies more complementary; and promoting the orderly expansion of foreign trade, in particular, subregional and interregional trade. Improving connectivity, facilitating trade and investment, developing regional tourism, facilitating cooperation in energy to meet growing regional energy

needs, and promoting private sector cooperation are the key strategic objectives of ADB for South Asia. ADB will continue to assist the government to reform the external trade regime, to participate actively in subregional cooperation initiatives and to establish an integrated subregional transport and energy network to enhance Bangladesh's position as a transport and transshipment hub.

ADB is helping Bangladesh to improve transport connectivity, increase regional trade and investment, develop regional tourism, promote regional cooperation in energy, and strengthen the private sector.

Appropriate infrastructure is the key to establishing business-to-business and people-to-people contacts. In short, it is critical to look at regional integration with a holistic approach focusing on infrastructure, transport, trade, trade logistics, and transaction costs, among other issues. RCI also enhances private sector participation by facilitating and expanding trade and investment. By helping to build trust, understanding, and shared expectations of the benefits of cooperation, it can contribute significantly to both maintaining and restoring regional stability and peace.

Building on three ADB-supported sector studies (SAARC Regional Multimodal Transport Study, BIMSTEC Transport Infrastructure and Logistics Study, and SAARC Regional Energy Trade Study), ADB will work under SASEC to develop investment projects for transport logistics and trade facilitation among Bangladesh, Bhutan, India, and Nepal. These include developing the Petrapole–Benapole border crossing, the Kakarbhitta–Panitanki–Jaigaon–Banglabandha and Phuentsholing–Jaigaon–Changrabandha–Burimariroad corridors, and a cross-border management regime focusing regional connectivity of rail and road among Bangladesh, India, Myanmar, and the People's Republic of China.

ADB is supporting Bangladesh and India to connect their power grids for commercial trade of power. ADB is also supporting

projects to improve infrastructure for regional tourism by connecting the Buddhist circuits in Bangladesh, India, and Nepal. In addition, a regional information highway project is helping the South Asian countries to improve cross-border ICT infrastructure and connectivity. ADB is also improving trade facilitation regimes, including land port development in Bangladesh, Bhutan, and Nepal through a combination of budget support programs and technical assistance to complement work on SASEC transport connectivity. Future RCI interventions aim at broader issues including trans-boundary river management, disaster management, climate change, and environment.

Table 8.1 ADB-Assisted SASEC Investment Projects in Bangladesh

			Project Cost		
Project Name	Year Approved	Total Cost (\$ million)	ADB	Government	Cofinancing
SASEC Road Connectivity Project	2012	314.7	198	86.7	30
Dhaka - Chittagong Expressway PPP Design Project	2012	12.5	10	2.5	0
SASEC Trade Facilitation Program Bangladesh-India Electrical Grid	2012	21	21		0
Interconnection	2010	159	100	58.6	0
South Asia Regional Tourism Infrastructure Development Project	2009	15	12	3	0
SASEC Information Highway Project	2007	3.1	3.1		0
Railway Sector Investment Program	2006	825	430	108	287
Chittagong Port Trade Facilitation	2004	41	30.6	10.7	0
Total		1,391	781	270	317

PPP = public-private partnership, SASEC = South Asia Subregional Economic Cooperation

Bangladesh's Outward-Looking Policies are Paying Off

angladesh's outward-looking policies and emphasis on regional cooperation contributed to a rise in its economic growth rate from 4% in the 1970s to 6% in the 2000s. The country's shift from inward-looking policies to export orientation helped generate employment, achieve a 130% increase in real per capita income, and halved poverty during this period.

Bangladesh's strategic location with access to both land and sea allows it to become an important transit hub for trade within South Asia, and between South Asia and East Asia. The country could immensely benefit from its strategic location by becoming a gateway for global supply chains and production networks, among others, for the northeast part of South Asia. By utilizing its competitive priced and skilled labor, strategic ports, and central location between three main growth areas (the People's Republic of China, Association of Southeast Asian Nations member states, and India), Bangladesh has much to gain from economic integration. Increased connectivity with the People's Republic of China, India, Myanmar, and the rest of Southeast Asia will also open huge opportunities for trade and investments. Bangladesh could also address its energy constraints by establishing power grid connectivity with the northeastern states of India, Nepal, and Bhutan.

Bangladesh-India Electrical Grid Interconnection Project

Trading Power for Prosperity



Electricity Trading in the Region

ADB has been discussing with South Asian countries the development of power exchange projects in South Asia for over a decade. Under the India-Bangladesh Electricity Exchange Project (1997), a proposal to develop a regional power exchange was initially discussed. ADB has also supported cross-border power trade between Bhutan and India under the Green Power Development Project (2008). The SAARC Regional Energy Trade Study (2010) explores options to enhance regular supply of energy to support economic growth and to help alleviate poverty in South Asia. The SASEC Bangladesh-India Electrical Grid Interconnection Project was one of the recommended initiatives under the action plan of the Study. It is the first inter-country power trade involving Bangladesh.



Project Scope

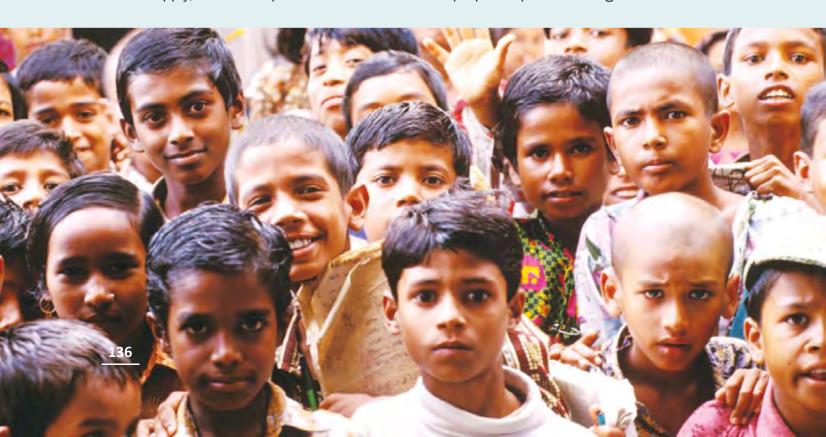
The project involves construction of transmission facilities in both India and Bangladesh. In India, the Power Grid Corporation of India is responsible for developing a switching station at Bahrampur and 85 km of 400 kV double-circuit transmission line to the border. Power Grid Company of Bangladesh will develop about 40 km of 400 kV double-circuit line from the border to Bheramara, a 500 MW high-voltage direct current back-to-back 400/230 kV substation, and some connection facilities. The project will facilitate an initial power flow of 500 MW into Bangladesh from the Indian grid, with scope for later expansion to 1,000 MW.

Project Cost

The estimated cost of the project in Bangladesh was \$158.6 million. On 31 August 2010, the ADB Board approved the loan to lend \$100 million to the Government of Bangladesh on concessional terms to finance the transmission lines and high-voltage direct current substation components.

Expected Results

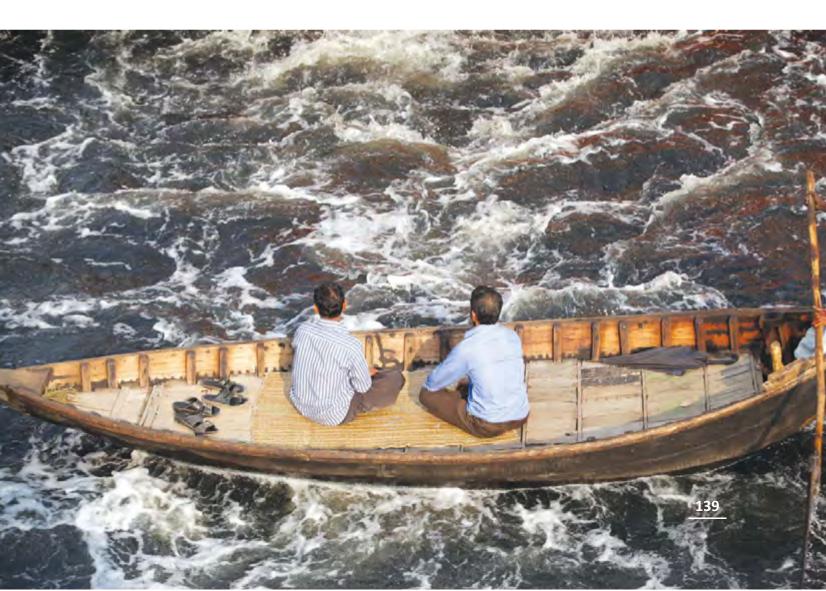
The project is expected to improve the power supply and reduce the dependence on small, inefficient captive generation facilities in Bangladesh. More reliable power supply will, in particular, benefit manufacturing and service industries in the generally underdeveloped western part of Bangladesh. Poor and vulnerable consumers, who are often the hardest hit by inadequate and poor quality power supply, are also expected to benefit from the proposed power trading.





CLIMATE CHANGE: IN QUEST OF GREEN GROWTH

climate change is called by many the greatest development challenge facing Bangladesh. Through its Strategy 2020, ADB has committed to reduce the risks of climate change as part of the efforts to achieve environmentally sustainable economic growth.



Climate Change: The South Asian Context

he fertile delta of Bangladesh and peninsula of India, and the jewel-like islands of Sri Lanka and the Maldives in the Indian Ocean, cover climatic zones as diverse as their physical landscape. The region is experiencing an array of climate change impacts, including glacial melt, forest fires, rising sea levels, increased temperature, mountain and coastal soil erosion, and saline water intrusion. Erratic monsoon patterns and more frequent and intense cyclones and storm surge have aggravated natural disasters and climate change impacts in recent years. Bearing the brunt of these are more than 600 million absolute poor-more than half of the world's total poor living in the region, who depend on climate-sensitive sectors including agriculture, forestry, and traditional fishing for many of their day-to-day needs. With changes in the global climate system likely to span into the next century, geographic location, high population density, and immense poverty will continue to make South Asia especially vulnerable. Human health, biodiversity, agricultural production, food security, water, energy, and coastal settlements will be imperiled as natural disasters and extreme climate events worsen and migration grows, intensifying stresses on major cities.

In partnership with developing member countries, ADB continues to respond to these enormous climate change challenges. ADB assists in reducing greenhouse gas emissions, focusing on the energy, urban, and transport sectors. ADB will help reduce South Asia's vulnerability by undertaking climate and disaster risk screening of projects, assisting in the integration of climate change in national development planning and programming, and strengthening capacities in adaptation planning and implementation.

Consistent with ADB's Strategy 2020 to incorporate environmental sustainability in the fight against poverty, climate change efforts are guided by five strategic priorities:





- expanding the use of clean and renewable energy;
- encouraging sustainable transport and urban development;
- promoting climate-resilient development, especially in the agriculture- and waterdependent sectors;
- strengthening policies, governance, and capacities; and
- managing land use and forests for carbon sequestration.

Climate Change: Regional Responses

he most severe impacts of climate change cut across boundaries. South Asian developing member countries have reaffirmed their commitment to work together in addressing common challenges. In 2007, the SAARC Declaration on Climate Change called on the Association leaders to collectively assess and respond to climate change risks and impacts. In 2008, the SAARC Environment Ministers' Dhaka Declaration on Climate Change included a 3-year action plan that urges the international community to promote partnership and provide additional finance to address climate change. The SAARC Summit in 2010 concluded with the Thimpu Declaration on Climate Change, set an ambitious goal for South Asia to lead the world in furthering renewable energy, cutting greenhouse gas emissions, and reducing poverty while strengthening resilience to climate variability and change. Other regional organizations are taking supportive actions as well.

Bangladesh: Mainstreaming Climate Change in ADB Operations

limate change is a pressing development concern for Bangladesh, given its high vulnerability to impacts on account of its geographic location, low deltaic flood plain. and hydro-meteorological influence of erratic monsoon rainfall and other extreme weather events. Climate change scenarios such as sea level rise, increased air and sea surface temperatures, enhanced monsoon precipitation and runoff, reduced dry season precipitation, heat waves, increase in the intensity of tropical cyclones and storm surges, floods, and prolonged droughts have all been experienced in the recent past. Impacts of climate change could force millions of people to migrate. Climate change under a business-as-usual scenario will threaten the significant gains made in poverty reduction over the past two decades and disproportionately impact the lives and well-being of vulnerable groups.

Relevant Ministries and line agencies are working to mainstream climate change issues in development activities. A climate change unit13 was established in the Ministry of Environment and Forest in 2010 to facilitate and coordinate with the climate change cells and manage the Bangladesh Climate Change Trust Fund. The National Adaptation Programme of Action was completed in 2005 and further updated in 2009. In 2008, the government adopted the Bangladesh Climate Change Strategy and Action Plan, focusing on six thematic areas: food security, social protection, and health; comprehensive disaster management: infrastructure development; research and knowledge management; mitigation and lowcarbon development; and capacity building and institutional strengthening. The government set up the Bangladesh Climate Change Trust Fund with a budget allocation

of about \$350 million¹⁴ from its own resources and the Bangladesh Climate Change Resilience Fund with contributions of about \$190 million from Australia. Denmark, the European Union, Sweden, Switzerland, the United Kingdom, and the United States. The Climate Investment Fund endorsed an amount of \$110 million for climate-resilient development under the Pilot Program for Climate Resilience. Supported by ADB, the World Bank, and International Finance Corporation, this program will climate-proof coastal embankments; raise the coastal greenbelt; improve drainage, connectivity, and water resource management; promote climate-resilient agriculture and food security; and ensure that drinking water is safe in vulnerable coastal communities. This program will also enhance capacity of the government and generate knowledge to fill the current knowledge gaps on climate change.

ADB has prepared a country-specific climate change implementation plan and integrated climate change considerations into country partnership strategies and country operations business plans to mainstream climate change adaptation and mitigation into country portfolio project design and implementation. In line with corporate policy, ADB is helping Bangladesh expand its use of clean energy, encourage sustainable transport including low-carbon options and mass urban transport systems, and promote climate resilience in agriculture and natural resources, water resources, and urban sectors. ADB is also supporting this process through policy dialogue, capacity building, and knowledge services. It helps Bangladesh to mobilize new and innovative sources of financing to meet its nationally appropriate and prioritized climate change objectives,

^{13.} The climate change unit was recently renamed as Climate Change Trust.

^{14. &#}x27;Block budgetary allocation of \$100 million each year for 3 years (FY2010 to FY2012) and \$50 million in FY2013.

and to cultivate and foster partnerships to support broader climate change objectives.

ADB is currently implementing several loans, grants, and technical assistance projects incorporating climate change components to assist the country toward climate-resilient and low-carbon development. ADB has also accessed several global climate funds (e.g.,

Climate Investment Fund, Nordic
Development Fund, and Global Environment
Facility) and used other donor funds in this
endeavor. ADB is also actively collaborating
with multilateral and bilateral development
partners in helping the country to promote
green growth.

Increasing Resilience

DB, under regional technical assistance financing, has implemented a subproject in a remote and vulnerable location of the southwestern costal belt (Satkhira) of Bangladesh. This subproject piloted a model with an innovative participatory approach and simple implementation arrangement to reduce climate and disaster risk through community-based adaptation and to diversify the livelihoods of the climatevulnerable coastal poor. The initiative has demonstrated the use of (i) adaptive agriculture, aquaculture, livestock, and offfarm livelihood options for selected poor and vulnerable families, (ii) low-cost service for safe drinking water in salinity-intruded areas, (iii) innovative climate-resilient shelter homes to the vulnerable people, and

(iv) low-cost energy provisions for selected poor families to meet basic energy needs for lighting and cooking. This subproject also demonstrated an innovative, feasible, and cost-effective approach for rehabilitating climate-vulnerable coastal communities. A capacity building initiative has also enhanced the coping capacity of these communities, with the aim to mainstream climate change adaptation and disaster risk reduction in community-level planning and programming.

The subproject was composed of three phases: Phase 1 involved impact and vulnerability assessments for preparation, Phase 2 piloted adaptation and provisioning service for climate resilience, and Phase 3



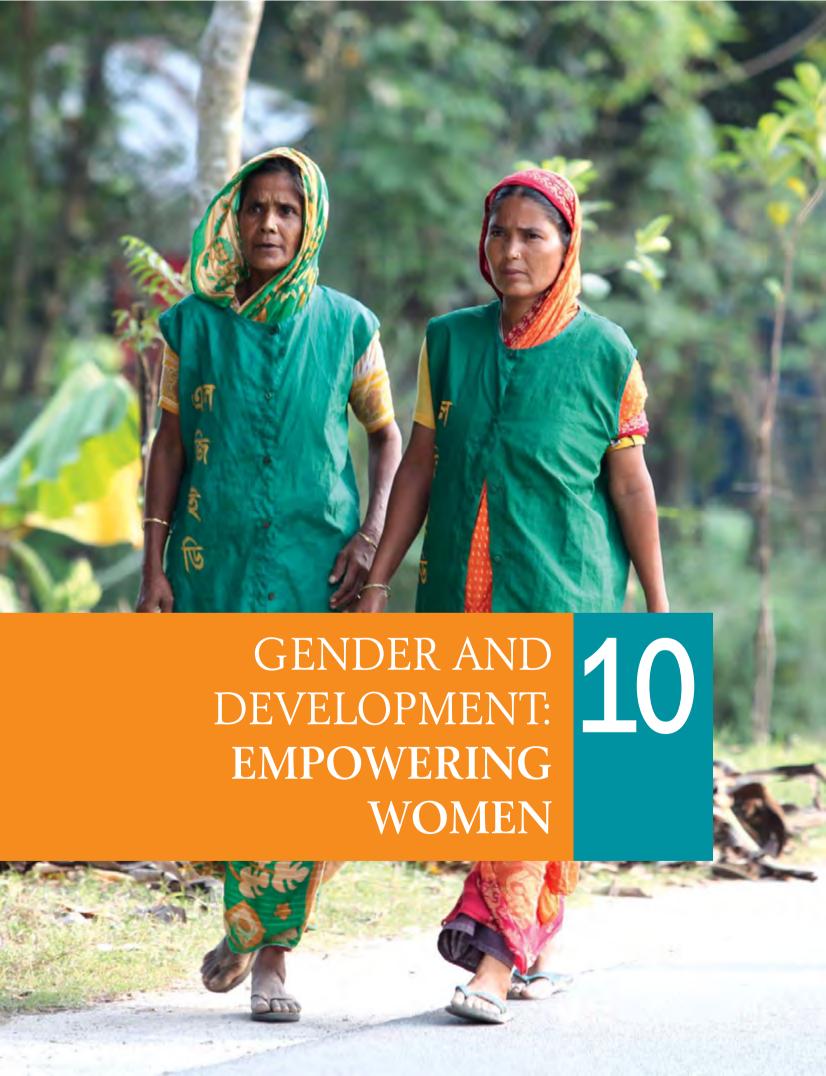
improved communication for risk reduction. Members of vulnerable communities were trained in community-based adaptation and disaster risk management. A manual for farmers and fishers on adaptive agriculture and aquaculture was also prepared and disseminated to enhance resilience.

Through the support from this subproject, poor and most vulnerable communities benefited through access to safe drinking water (e.g.,artificial aquifer tube wells, piped water supply, rainwater harvesting, etc.) in saline-prone areas, provision of improved shelter homes through a climate-resilient housing scheme, improved sanitation services, diversification of livelihoods through adaptive agriculture (e.g., dyke cropping, weather forecasting display board for farmers, mangrove plantation), aquaculture (crab fattening, cage

aquaculture, etc.), and access to cleaner energy (promoting solar lighting, improved cook stoves, etc.).

This subproject has successfully piloted a model by adopting innovative participatory approach and simple implementation arrangement to reduce the climate and disaster risk through community-based adaptation and diversified livelihoods for the climate-vulnerable coastal poor including women. This subproject has demonstrated that coping capacity of the coastal poor and vulnerable communities could be improved through community level planning, programming, and capacity building initiatives. There is a potential for large scale replication of similar project activities in similar climate-vulnerable areas with similar socio-economic setting.





GENDER AND DEVELOPMENT: **EMPOWERING WOMEN**

The partnership between ADB and the government has been instrumental in promoting gender equality and extending the benefits of development to women. The support evolved with a shift from a "women in development" approach in the 1980s to a gender mainstreaming approach for reducing the gender gap in the 1990s. Partnerships to benefit women and promote gender equality are also no longer focused in the social sectors, and have spread to other key sectors of ADB operation. Gains have been made in economic and social fronts as well as toward creating space for women's voice.



Gender and Development: An Overview

In the late 1970s and 1980's, support focused on providing skills development and microfinance to involve women in economically gainful activities. Gradually, women were included in sectors like livestock, horticulture, and crop diversification requiring technical services. In the 1990's, consistent with ADB's Policy on Gender and Development, the partnership evolved and expanded to ensure economic benefits by mainstreaming women into different sectors. Women have benefited from the agribusiness value chains, high-value crop production, infrastructure construction, and so on. Women entrepreneurship in small and

medium enterprises has been promoted by increasing their access to institutional finance.

Human development, services, and social protection

The two main areas of ADB's partnership that have contributed toward improving the social development index of the country are education and primary health care. The transition rate from primary to secondary



education has improved and the gender parity index shows that more girls than boys are attending primary and secondary school, although girls still have a lower completion rate than boys. Gender-responsive teaching methodology has resulted in higher retention rates over the years. The intervention in primary health care, through partnership with NGOs, has been instrumental in ensuring access of poor urban women and children to health and immunization support. Bangladesh's 2011 human development index of 0.500 was above the average of 0.456 for countries in the low human development group. Maternal mortality rate, a major weak area, has been addressed through the urban primary health care centers. Creating

employment opportunities in infrastructure construction and maintenance provided support to vulnerable women during the economic crisis and post-flood situations. Access to clean water and participation in operation and maintenance of water-related infrastructure has been instrumental in improving the living conditions and health of women and their families in the cities and small towns.

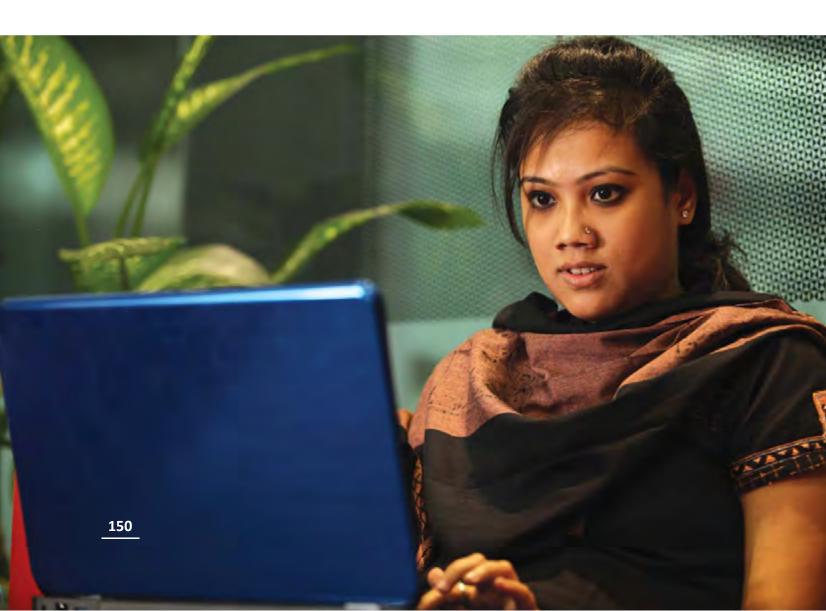
Space and voice

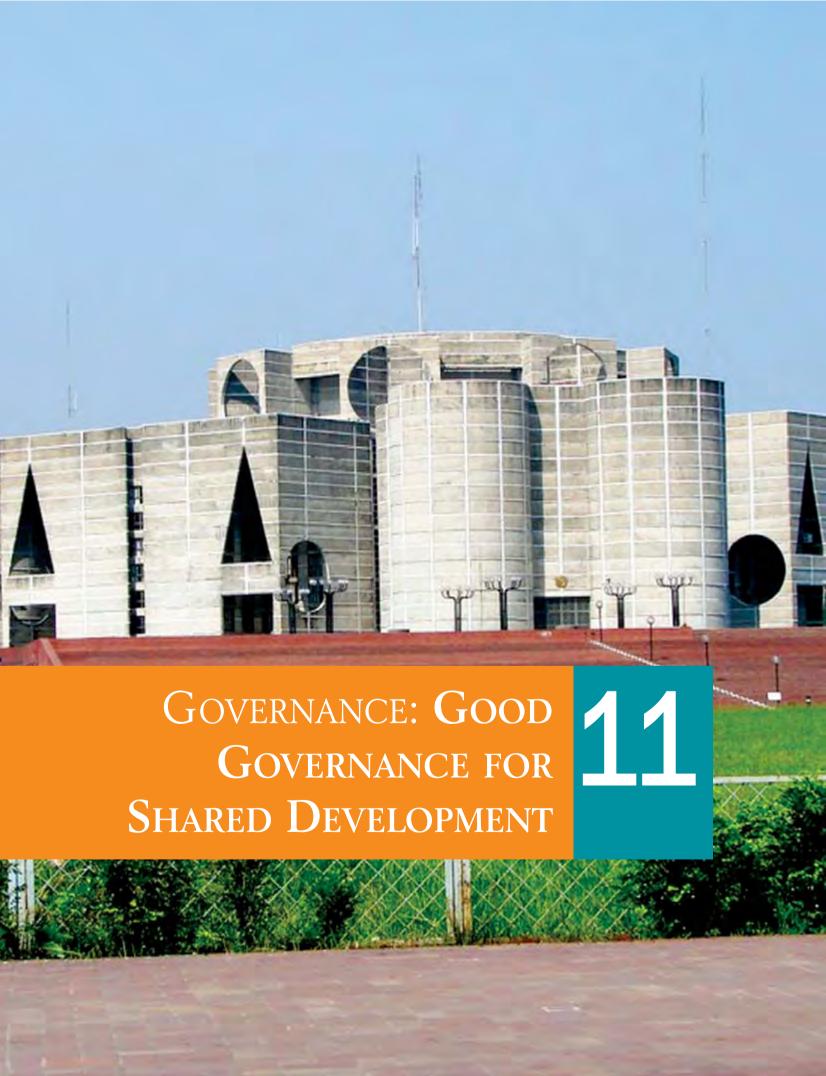
The Government of Bangladesh has been a pioneer in ensuring that women benefit from infrastructure initiatives in partnership with ADB. Consideration of women's needs as



users in infrastructure design-such as in union council buildings, bus terminals, and public toilets-has facilitated women's mobility and their access to public domain. Women's participation in selection of infrastructure and operation and maintenance has instilled greater confidence in them. Allocation of space and shops in markets has created economic and social space for women in the markets, the heart of the rural economy and an area that previously was inaccessible for them. In the beginning of the new millennium, the infrastructure development support gradually combined efforts to strengthen voices of women in the local government and other areas facilitating women's empowerment, enabling them to take greater control over their own lives and influencing decisions that affect their livelihoods. Reduction of gender gaps in decision making has been attempted by incorporating women's voices in union councils, municipalities, and the water management cooperative associations and their capacity building. The methodology in ensuring women citizens' and elected representatives' participation in different ward/union and municipal-level committees proved to be effective and has been incorporated in the Local Government Act of 2009 and the Municipal Act 2009.

Empowerment of women is a gradual process and the 40 years of partnership with ADB has observed the rise of women to higher levels of the empowerment ladder in different sectors. The project executing agencies have also gained knowledge and confidence from their endeavors toward gender equality promotion. ADB is proud to be a partner in this empowerment process.





GOVERNANCE: GOOD GOVERNANCE FOR SHARED DEVELOPMENT

ADB has made good governance one of the strategic priorities in its assistance to Bangladesh, and has been addressing governance at project, sector and policy levels. ADB defines governance as "the manner in which power is exercised in the management of a country's economic and social resources for development." ADB considers four mutually reinforcing elements of good governance as yardsticks in assessing the quality of development management: accountability, participation, predictability, and transparency.



ADB Assistance in Governance: An Overview

ADB has made good governance a strategic priority in its assistance program to Bangladesh, and has been addressing governance at project, sector and policy levels. ADB defines governance as "the manner in which power is exercised in the management of a country's economic and social resources for development." ADB considers four mutually reinforcing

elements of good governance as yardsticks in assessing the quality of development management: accountability, participation, predictability, and transparency.

ADB, in Bangladesh, traditionally focused on incremental improvements of sectoral governance and played important role in

ADB has made good governance one of the strategic priorities in its assistance to Bangladesh.

improving governance in key sectors including education, health, energy, power, and transport. ADB continues to support sector governance by strengthening financial management systems, internal controls and audit, and accounting and procurement practices. ADB's sectoral governance reform outcomes include (i) reconstituting regulatory bodies, (ii) promoting corporatization, (iii) setting tariffs and separating management from regulatory functions in the power sector, (iv) introducing mechanisms for broad stakeholder participation in urban sector planning and management, (v) encouraging improved regulation and supervision of the capital markets, and (vi) adopting and enforcing regulatory standards in the transport sector.

ADB's assistance to Bangladesh in governance sector projects includes the following initiatives:

- ADB became actively involved in the core governance and public sector management areas in early 2000s. In 2004, ADB undertook a comprehensive country governance assessment and provided technical assistance to the government to establish the independent Anti Corruption Commission (ACC). ADB has been the lead development partner for capacity development and operationalization of the anti-corruption body.
- ADB in November 2007 approved the Bangladesh Good Governance Program to implement critical policy and institutional reforms in the governance and public management sector with a focus on combating corruption, ensuring separation and independence of the judiciary, and improving efficiency in the public service. Under the Program, ADB is providing the Government with \$150 million over six years in three tranches for implementing governance reforms.
- Under ADB's Good Governance Program, so far 44 policy reforms have been implemented.
 These include (i) reconstitution and operationalization of the independent ACC,
 (ii) ratification of the United Nations Convention against Corruption (UNCAC), (iii) separation
 of the judiciary from the executive, (iv) enactment of a Law on Right to Information,
 (v) legislation of a Whistleblower Protection Act, and (vi) approval of the National
 Integrity Strategy.
- Atechnical assistance project of \$2.5 millionis supportingimplementation of the Good Governance Program and capacity development of a number of governance institutions and line ministries including the ACC, Supreme Court, Judicial Service Commission, Ministry of Law, Public Service Commission, Cabinet Division, Economic Relations Division,

- and Ministry of Public Administration. ADB so far implemented four governance sector technical assistance projects under the Cabinet Division to strengthen the ACC, undertake anti corruption initiatives, and improve public sector governance.
- ADB in 2010 also approved an e-governance project entitled Strengthening Governance Management Project, for \$25 million. The project is assisting the government to (i) develop an online tax return filing system in all direct tax units, (ii) establish a digitized land records management system in 45 *upazilas* of five districts in phases, and (iii) establish information and service centers in selected tax and land offices.

Core Governance Challenges in Bangladesh

mproving governance continues to be a major challenge for Bangladesh.

Approval of the National Integrity Strategy (NIS) in October 2012 is an important milestone in Bangladesh's governance reforms and demonstrates the government's commitment to take on all critical governance issues as the NIS incorporates

a roadmap and phased actions for all governance and accountability institutions. To steer implementation of the NIS, National Integrity Advisory Council (NIAC) headed by the Prime Minister, and the Executive Committee of NIAC (ECNIAC) headed by the Minister for Finance were formed in November 2012. Recently, the government



has established Ethics Committee and appointed a focal point in all line ministries to deal with integrity and governance matters as recommended in the NIS. In addition, the Government has acceded to the United Nations Convention against Corruption (UNCAC), enacted the law on Right to Information (RTI) and, accordingly, formed the Information Commission in July 2009. Between 2009 and 2011, the government also enacted several important governance related laws including Whistle Blower Protection Act, Anti-Terrorism Financing Act, Money Laundering Prevention Act, and Public Money and Budget Management Act.

The government completed the separation of the judiciary from the executive in November 2007. Furthermore, a Judicial Service Commission has been established and it has so far recruited about 1200 judges for the lower courts. Since separation, disposal of court cases has improved and the Supreme Court has assumed responsibility for all judicial and administrative functions, including inspection, supervision and control of the subordinate judiciary, judicial magistrates, and the criminal justice system. However, Bangladesh needs to bolster judicial performanceas approximately 800,000

cases are pending at different levels of the judicial system at any given time.

Several reform initiatives have been undertaken by the Ministry of Public Administration to improve efficiency and responsiveness of the members of the civil service. A draft public service act and related rules, such as, promotion rules, rules on placement and clustering of ministries, and conduct rules, have been formulated but are yet to be approved. Alongside, a draft format on annual performance report by public sector agencies and a performance based evaluation system for all public sector staff have been developed. In April 2012, a Governance Innovation Unit was established at the Prime Minister's Office (PMO) to conduct studies, prepare action plans and advise on how to address governance constraints and improve service delivery at all levels of the Government.

Extensive initiatives in e-governance in the last few years, such as, introduction of various e-services at ports and other public sector agencies, networking with union council offices at the grass root level, e-procurement, e-payment, e-submission of tax returns, etc. have helped improving service delivery and strengthening transparency and accountability in public administration.

The Way Forward

ADB will continue supporting Bangladesh for improving governance and enhancing transparency in public administration. To promote effective coordination among aid agencies, and between aid agencies and the government, several coordination

bodies have been established. ADB has been actively participating in all the governance related local consultative groups andwill continue to coordinate with the development partners and other stakeholders to supportgovernance reforms in the country.

Bangladesh-ADB Partnership: Looking Forward

The development partnership between Bangladesh and ADB is expected to further grow as ADB remains committed to help Bangladesh further unlock its potentials. Despite strong potentials, the country faces daunting challenges in raising growth from the current level of an average of 6%. Acute infrastructure deficit, with a widening gap between supply and targeted investments in large infrastructure projects in transport, energy, water supply and sanitation, agriculture and irrigation sectors remain critical impediments to accelerating growth.

Reflecting ADB's CPS for 2011–2015, ADB support will be to contribute to the government's Sixth Five Year Plan goals and commitments for enhancing growth and reducing poverty. Toward this objective, ADB will provide assistance within ADB's Strategy 2020's development agendas of inclusive economic growth, environmentally sustainable growth, and regional integration.

ADB will deepen its support for promoting inclusive growth through creating the conditions for sustained high growth with expanded economic opportunities, and broadened access to these opportunities. To this end, ADB will continue to support investment and reform to boost energy efficiency and access to power, develop railway connectivity, enhance skills and quality of secondary education, and improve the urban environment, governance, and services, including urban water supply and sanitation. ADB will also strengthen support to financial markets, develop climate resilient rural connectivity, and foster integrated management of water resources, including flood control and river bank erosion mitigation. To promote regional cooperation, ADB will continue supporting transport connectivity, cross-border energy trade, and trade facilitation. ADB will step up its support to foster public-private partnership through development of institutional capacity and improving the regulatory framework. Good governance, and gender equity will be prioritized. Climate change and environmental development will be mainstreamed through ADB-assisted infrastructure projects. ADB will also continue to promote private sector operations, including expansion of its trade finance program.



Bangladesh-ADB: 40 Years of Development Partnership

Bangladesh has made impressive socioeconomic gains with a steady rise in its gross domestic product, a decrease in overall rates of poverty, boost in social development, and steady movement toward achievement of the Millennium Development Goals. ADB has been a key partner in Bangladesh's struggle for a better future since 1973 by contributing to critical socioeconomic and governance reforms. As of 31 December 2012, ADB's cumulative lending amounted to about \$14.1 billion for 234 loans, and its technical assistance grants amounted to \$221.7 million for 389 projects. The country is also one of the largest recipients of concessional Asian Development Fund resources. ADB has been the second-largest source of development financing, and one of the lead financiers in energy, transport, education, water supply and sanitation, agriculture and natural resources, and finance sectors of Bangladesh.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than \$2 a day, with 828 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, quarantees, grants, and technical assistance.

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