

ADB

INDIA

Development Effectiveness Brief

India-ADB: Partnering for Sustainable and Inclusive Growth



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Abbreviations

ADB	Asian Development Bank
ANR	agriculture and natural resources
CDRC	Capacity Development Resource Center
CGC	community group committee
CPS	country partnership strategy
DEA	Department of Economic Affairs
FYP	Five-Year Plan
GDP	gross domestic product
ha	hectare
HLC	Hippocampus Learning Centres
IIFCL	India Infrastructure Finance Company Limited
IIPFF	India Infrastructure Project Financing Facility
KEIP	Kolkata Environmental Improvement Project
km	kilometer
MDG	Millennium Development Goal
MFF	multitranche financing facility
MPPSIP	Madhya Pradesh Power Sector Investment Program
MW	megawatt
OCR	ordinary capital resources
OIIAWMIP	Orissa Integrated Irrigated Agriculture and Water Management Investment Program*
PIM	participatory irrigation management
PMGSY	Pradhan Mantri Gram Sadak Yojana
PPP	public-private partnership
PSM	public sector management
SASEC	South Asia Subregional Economic Cooperation
SHG	self-help group
TA	technical assistance
TPRM	tripartite portfolio review meeting
UWSEIP	Urban Water Supply and Environment Improvement Project in Madhya Pradesh
WUA	water user association
WUS	water and other urban infrastructure and services

* In 2011, the Government of India approved the name change of the state of Orissa to Odisha.



India and ADB: Partnering for Sustainable and Inclusive Growth

India on the Move

Balachand Rabha, 38, is a young entrepreneur who works to support his wife and three children. At present, he owns a poultry farm in Bathan, which was once, despite being just 5 kilometers (km) from the national highway, an isolated village in the Kamrup district of Assam.

Balachand recalls that 5 years ago, when a rough, stony path connected Bathan with the national highway, 35%–40% of the eggs would break on the way from the poultry farm to the market, resulting in a significant loss of income. Now, the newly constructed road enables him to cycle the eggs to the market without any spoilage. This improved connectivity has increased his income at least twofold. Today, Bathan has become a poultry hub with approximately 200 poultry farms, and accessibility to the market has helped many who own or work at nearby poultry farms. Balachand's family is among the millions whose lives have been positively impacted by the Asian Development Bank (ADB).

ADB operations in India resulted in the construction of all-weather



A young poultry owner in Bathan, Assam

roads in Bathan under the Rural Roads Sector II Investment Program that complements the Government of India's "Pradhan Mantri Gram Sadak Yojana" (PMGSY).¹ Rural roads have increased people's access to services, such as health, education, and livelihood, which have a long-term positive impact on poverty reduction and standard of living.

The PMGSY is one among many development programs—National Rural Employment Guarantee Programme, National Rural Health Mission, Mid-Day Meal, and Sarva Shiksha Abhiyan—launched by the government to accelerate economic growth and to reduce poverty by

¹ The PMGSY (Prime Minister's Rural Road Programme) is the flagship program for the development of rural roads.

focusing on human and physical capital.² These initiatives, combined with favorable global conditions, ensured that India clocked its best ever performance on growth and poverty reduction between 2005 and 2012. During this period, gross domestic product (GDP) grew at an average of 8.5%, placing India among the fastest-growing nations, with a significant reduction in poverty from 37.2% in 2004–2005 to 21.9% in 2011–2012.³

Significant decline in poverty enabled India to meet its first Millennium Development Goal (MDG) of halving the proportion of people living on less than \$1.25 a day—from 49.4% in 1993–1994 to 24.7 % in 2011–2012. India has progressed on many other MDGs as well (Table 1). The infant mortality rate decreased to 44 per 1,000 births in 2012 from 88 per

1,000 births in 1990. The maternal mortality ratio, that is, maternal death per 100,000 live births, went down from 437 in 1990 to 178 by 2012. Adult literacy increased from 64.8% in 2001 to 74% in 2011, and enrollment at primary school was near universal for boys and girls by 2012. In 16 of the 29 Indian states, female literacy in the 15–24 age group exceeded 90%.⁴ By 2012, 93% had access to improved drinking water. The prevalence of HIV, tuberculosis, and malaria has significantly decreased over the years, meeting the targets earlier than the stipulated deadline.

India–ADB Partnership

ADB supports the government’s vision of faster, inclusive, and sustainable growth and has been a development partner since

Table 1: Key Development Indicators, India

Non-MDG		MDG	
Population (as of 1 July 2013, million)	1,229	Population living on less than \$1.25 a day (2011–2012, %)	24.7
Annual population growth rate (2008–2013, %)	1.3	Population living below the national poverty line (2011–2012, %)	21.9
Adult literacy rate (15 years and above) (2011, %)	74.0	Under-5 mortality rate, per 1,000 live births (2012)	56.0
Total population in urban areas (2013, %)	31.7	Population using improved drinking water (2012, %)	93.0

MDG = Millennium Development Goal.

Sources: ADB. 2014. *Key Indicators for Asia and the Pacific 2014*. Manila; World Bank. 2014. *World Development Indicators 2014*. Washington, DC; Government of India. National Census 2011.

² Sarva Shiksha Abhiyan (Education for All) is the flagship program for universalization of elementary education.

³ These poverty rates are based on national poverty lines.

⁴ Government of India, Ministry of Statistics and Programme Implementation. 2014. *Millennium Development Goals India Country Report 2014*. New Delhi.

1986. Initially, ADB strategies were designed to match the early priorities of the reform agenda, assisting with the infrastructure and foreign exchange requirements for trade liberalization. Over the years, India’s program has developed and matured in terms of its sectoral, geographic, and thematic coverage.

ADB provides India with a mix of lending and nonlending products, including loans, technical assistance (TA), and grants. Investing in institutional strengthening and capacity development, aided by an effective knowledge program focusing on project- and sector-specific knowledge, are integral to ADB operations in India.

Between 1986 and 2013, ADB approved loans worth \$31.5 billion. Of this, \$29.1 billion was through 175 ordinary capital resources (OCR) sovereign loans and \$2.4 billion was through 35 OCR nonsovereign loans (Table 2).

During its first phase of operations in India (1986–1999), ADB provided assistance for national

programs through central public utilities in the transport and energy sectors. Credit lines were also provided through national development finance institutions. During 2000–2006, significant expansion happened in urban sector operations. Since 2007, ADB has had a diverse portfolio in India (Figure 1). Apart from continued support to core infrastructure sectors such as energy, transport, and urban development, ADB is also engaged in innovations in infrastructure finance, improving water resource management, assisting states for fiscal reforms, agribusiness infrastructure management, and skills development.

The current lending portfolio of ADB reflects the changing priorities and needs of India. As of 31 December 2013, the ADB portfolio of ongoing projects in India amounted to \$10.68 billion, with

ADB assistance in India has diversified and matured and is reflective of the development needs of the country.

Table 2: ADB Loan Approvals to India
(\$ million)

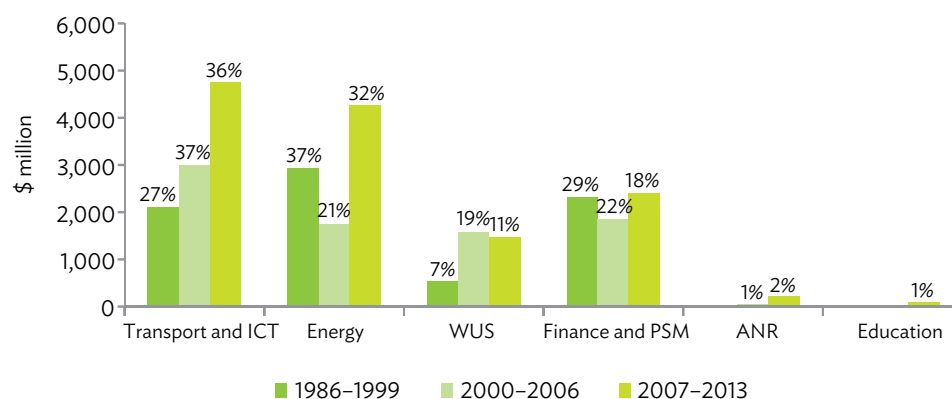
Loan	1986–2007	2008	2009	2010	2011	2012	2013
OCR sovereign	17,117.6	1,777.6	1,711.0	2,119.6	2,324.9	1,952.0	2,111.5
OCR nonsovereign ^a	592.0	705.0	100.0	...	548.0	238.0	248.4
Total	17,709.6	2,482.6	1,811.0	2,119.6	2,872.9	2,190.0	2,359.9

... = not available, OCR = ordinary capital resources.

^a The total includes private and public sector nonsovereign operations.

Source: ADB estimates.

Figure 1: ADB Loans to India by Sector, 1986–2013



ANR = agriculture and natural resources, ICT = information and communication technology, PSM = public sector management, WUS = water and other urban infrastructure and services.

Note: Data labels show sector-wise share in total approvals by period.

Source: ADB estimates.

almost two-thirds invested in the energy and transport sectors. Water and other urban infrastructure and services (WUS) had a share of around 19%, while the finance and public sector management (PSM) sectors accounted for 13% of the total lending portfolio (Figure 2).

ADB's portfolio also includes specific TA projects and grants at national and state levels. TA is provided for capacity development, improved project preparedness and implementation, public-private partnership (PPP) initiatives, and knowledge products (Figure 3). During 2000–2013, ADB approved TA projects worth \$218.5 million on a cumulative basis.

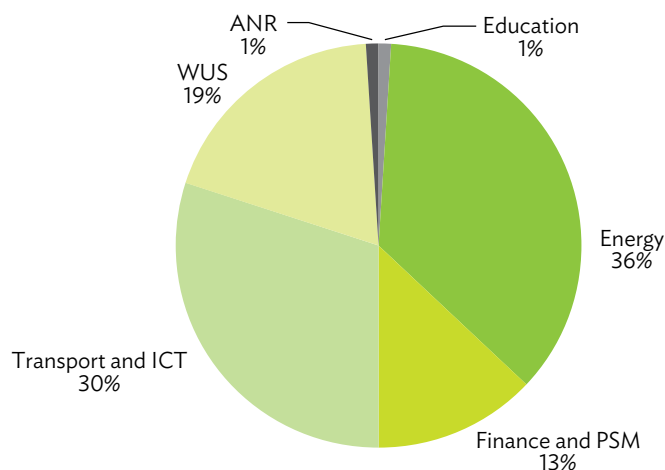
ADB operations in India have been supported by several development partners who have a similar mandate and vision. The Japan Fund for Poverty Reduction

has helped strengthen the poverty focus in ADB operations in India, including themes such as entrepreneurship for women's empowerment, improving agribusiness value chains, and promoting participation of vulnerable groups in water user associations (WUAs). About 17 projects and TA grants amounting to \$33.1 million were approved for India during 2000–2013.

The Department for International Development (DFID) of the United Kingdom has been collaborating with ADB in India since 2001. The ADB-DFID partnership for India (2009–2014) has a total contribution of \$22 million, and this has helped leverage ADB's support for projects in the lagging states of Assam, Chhattisgarh, Jharkhand, and Odisha.⁵

⁵ In 2011, the Government of India approved the change in the name of the state of Orissa to Odisha. This document reflects this change. However, when reference is made to projects that predate the change in name, the previous name Orissa is retained.

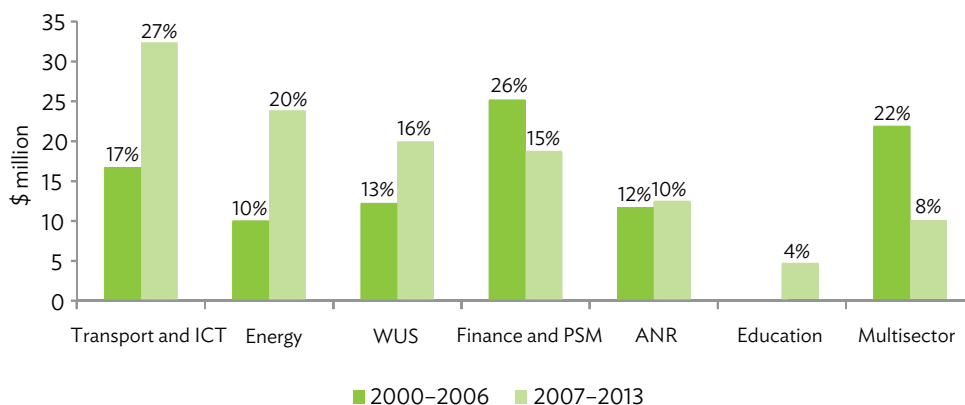
Figure 2: Sector Distribution of Ongoing Projects, as of 31 December 2013



ANR = agriculture and natural resources, ICT = information and communication technology, PSM = public sector management, WUS = water and other urban infrastructure and services.

Source: ADB estimates.

Figure 3: Technical Assistance Projects by Sector, 2000–2013



ANR = agriculture and natural resources, ICT = information and communication technology, PSM = public sector management, WUS = water and other urban infrastructure and services.

Notes: Data labels show sector-wise share in total approvals by period. Multisector includes technical assistance projects across themes such as knowledge, capacity development, gender, and so on.

Source: ADB estimates.

ADB envisions an innovative, inclusive, and integrated Asia and the Pacific; the three Is together can help the region sustain growth momentum and address inequalities.

ADB's partnerships with civil society organizations in India have been very useful in providing a grassroots perspective for the design and implementation of projects, in ensuring community engagement and mobilization, and in imparting technical trainings.

Apart from national-level operations in India, ADB supports the expansion of regional connectivity for trade and cooperation. ADB, through the South Asia Subregional Economic Cooperation (SASEC), strives to strengthen economic and trade relations in the subregion

by supporting cross-border infrastructure investments and connecting economic hubs. ADB's first regional connectivity loan to India is for the SASEC Road Connectivity Sector project. The first tranche worth \$300 million was approved in March 2014.

ADB recognizes that while financial assistance in niche sectors is important, the government expects much more from its development partners. This insight comes from the fact that the total finance extended by all of India's development partners forms only 0.5% of the GDP and is declining over time.⁶ Technical assistance, leveraging good practices, support for innovations, financial leveraging, high-performance portfolio, and facilitating knowledge sharing are, therefore, critical for adding value through partnership in India.

⁶ ADB India Country Partnership Strategy 2013–2017.



ADB's Contributions to Development

ADB has been contributing to development initiatives in India for about 3 decades now. ADB's operational strategies and geographic focus have, however, changed in line with government priorities over these years. While in the first decade of its operations ADB's initiatives were focused largely on national-level entities with some presence in states, the present scenario is considerably different with ADB having a presence in 23 Indian states. ADB's investments in basic infrastructure and services, such as electricity, roads, and water supply, have benefited millions of people (Table 3). These benefits are of particular significance for people living in isolated rural areas, the urban poor, and women, as this opens up new opportunities for mainstreaming.

During 2010–2013, ADB assisted in the construction and/or upgrade of around 35,000 km of roads in India, with 65% of these roads in the rural areas and the remaining being highways or priority roads connecting rural areas to urban centers. More than 80% results are concentrated in the lagging states.

In the energy sector, ADB-funded projects have resulted in around 9,000 megawatts (MW) generation capacity, 7,000 km of transmission lines, and 66,000 km

of distribution lines, benefiting about 0.8 million households. The projects have resulted in a reduction of 837,000 tons of carbon dioxide-equivalent per year. About 85% of the distribution network is spread across lagging states.

ADB's operation in the WUS sector has resulted in installation and/or upgrade of 9,000 km of water supply pipelines, positively impacting about 3.6 million households. In addition, ADB augmented waste treatment capacity by 1,339,000 cubic meters per day, thereby increasing the number of households getting better sanitation by about 1.2 million. More than 65% of the urban services are delivered in the lagging states.

In terms of financial inclusion, ADB projects have reached out to about 0.5 million people through microfinance interventions.

Considering that gender equality, capacity building, and environmental sustainability are key elements of sustaining development results, the focus on these areas has gained pace within ADB operations in India. Of the 78 ongoing projects, 50.0% address capacity development, 42.0% address environmental sustainability issues, and 27.0% fall in the category of gender equity theme/effective gender mainstreaming. Between

2009 and 2013, 32.4% of the approved projects showed significant gender mainstreaming against 18.0% during 2000–2008. A major focus of gender equality efforts in the projects has been on women’s representation in the participatory processes, access to basic services that are critical

to poor women, and community development and slum rehabilitation components, which generally include livelihood initiatives supporting women. The following sector-specific success stories provide a glimpse of how people have benefited from ADB operations in India.

Table 3: Development Results of ADB-Supported Operations in India

Sector	Results Achieved, 2010–2013
Transport	
Use of roads built or upgraded (average daily vehicle-km in the first full year of operation)	9,321,000
Roads built or upgraded (km)	35,000
Expressways and national highways	3,000
Provincial, district, and rural roads	32,000
Energy	
Greenhouse gas emission reduction (tCO ₂ -equivalent per year)	837,000
New households connected to electricity (number)	850,000
Installed energy generation capacity (MW equivalent)	9,000
Renewable	200
Transmission lines installed or upgraded (km)	7,000
Distribution lines installed or upgraded (km)	66,000
Water and Other Urban Infrastructure and Services	
Households with new or improved water supply (number)	3,611,000
Rural	416,000
Urban	3,195,000
Households with new or improved sanitation (number)	1,164,000
Wastewater treatment capacity added or improved (cubic meters per day)	1,339,000
Water supply pipes installed or upgraded (length of network in km)	9,000
Households with reduced flood risk (number)	170,000
Finance	
Microfinance loan accounts opened/end borrowers (number)	491,000
Female	442,000
Male	49,000

tCO₂ = ton of carbon dioxide, km = kilometer, MW = megawatt.

Notes: Results are rounded off to the nearest 1,000. The above table provides information for closed and ongoing projects. Green highlighted indicators are gender indicators.

Sources: Project completion reports; tripartite portfolio review meeting briefing sheets; ADB results online.

Transport: Reaching Out

India, with a total of 3.3 million km of roads, has one of the largest and densest road networks in the world. About 65% of the freight traffic and 80% of the passenger traffic use roads.⁷ Despite its importance to the national economy, the road network is inadequate because of capacity constraints as well as the poor condition of the overall network. The government has estimated an investment need of \$220 billion during the Five-Year Plan (FYP) 2012–2017 for the expansion of national highways, state, and district roads, as well as the universalization of rural connectivity.

ADB's strategy for supporting the government's mandate includes strengthening road networks as well as road corporatization, which entails setting up and strengthening the state-level nodal agency for development and management of the state road network. The ADB-supported Madhya Pradesh Road Development Corporation is now regarded as the benchmark for best practice in managing state road networks. ADB has supported operations related to road transport in 10 states of India, apart from supporting the national highways and railways.

Given the government's focus on improving rural connectivity, ADB has been involved with Pradhan Mantri Gram Sadak Yojana (PMGSY) since 2003, investing in states with high deficits in rural road networks. Through its long-



Young girls from rural areas going to college in Assam

term investment programs such as the Rural Roads Sector Investment Programs (RRS I and II) and Rural Connectivity Investment Program (RCIP), ADB aims to support the construction and improvement of about 32,000 km of rural roads in Assam, Chhattisgarh, Madhya Pradesh, West Bengal, and Odisha.

Rural Roads Sector II Investment Program

The ADB-supported RRS II program is a \$750 million multistate, multitranches financing facility (MFF) covering Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. RRS II aims to construct or upgrade 14,000 km of rural roads connecting about 5,000 habitations in these states in five phases. The program aims to improve the rural road network in partnership with the state governments and also to strengthen the agencies involved.

RRS II projects have built about 6,900 km of roads connecting

⁷ Government of India, Annual Report 2011–2012. *Ministry of Road Transport and Highways*. New Delhi.

Due to roads, I can inform mothers easily to attend the village health and nutrition day. They also find it easy to reach my center for meetings, immunization, and Antenatal Care services.

**—Bhanumati Das, 54,
anganwadi worker,
Bondapara, Assam**

3,000 habitations, benefiting nearly 5.5 million people by increasing their access to development services. The project has helped in expanding livelihood options, reducing travel time and cost, increasing access to essential services, and effective service delivery.⁸ The Assam example shows the immediate and long-term impact on the lives and livelihoods of rural communities in the project area.

Subhas Rabha, a teacher at Bondapara primary school 60 km from the state capital of Guwahati, says: “Before the project, attendance

of children used to be very poor in the rainy season as it was impossible for young children to reach school through the old muddy roads. With improved roads, children hardly miss school, even in the peak rainy season.” Improved road connectivity has reduced commute time for teachers and other rural service providers. Bhanumati Das, 54, an *anganwadi* (child care center) worker, feels that the paved road has facilitated people’s access to the center, helping her to meet the targets of providing nutrition, antenatal services, immunization, and preschool education services. Earlier, she had to walk an hour to reach her center, whereas it now takes just 15 minutes on her bicycle.

Better road connectivity has helped people in the area to readily access health services such as blood tests, leading to a drastic reduction in the prevalence of malaria and related fatality. Outreach coverage by health workers has doubled, while improved connectivity has helped in the effective implementation of the Janani Suraksha Yojana (Safe Motherhood Programme). In Bondapara, for instance, a majority of births are recorded in hospitals since the construction of paved roads 3 years ago.

Rural roads, connecting villages with highways, have a significant impact on farmer incomes as well. Prior to road construction, because of the high transportation cost, farmers depended on agents to sell their paddy and were forced to



Young children are able to access nutrition and preschool education service due to improved road conditions in Bondapara, Assam

⁸ Project completion reports of RRS II tranche 1, tranche 2, and tranche 4.

accept the rates offered. Now, with good roads, they themselves take their produce to the market and negotiate for better prices.

Better connectivity also means diverse livelihood options that generate extra income, such as growing betel nuts and leaves, fishery, weaving, piggery, and poultry. For example, the family of Gopal Rabha in Silobari village earns more than \$400 per year making and selling bamboo strips to the incense stick industry, reducing their dependence on wage labor during the nonagricultural season.

Farmers are now encouraged to undertake entrepreneurial ventures such as setting up rice mills, grocery shops, and poultry farms, among others. Since the rural road was constructed with ADB support, farmers have started nearly 200 poultry farms in and around Bathan. Input cost per batch of chickens has decreased by about \$50, directly increasing overall profit.

ADB project officials in Assam feel that the training and review opportunities provided under the program are useful in understanding the contracting and procurement processes and environmental impact of their work.

Energy: Power to the People

India is the fourth-largest consumer of energy in the world with continued growth in energy demand. The energy



A farmer family making bamboo sticks in Silobari village, Assam

requirement is expected to grow at 5.7% annually during the FYP 2012–2017 as against 5.1% during FYP 2007–2012.⁹ With regard to electricity, despite the creation of 55 gigawatts of new generation capacity in this period, a large growth in demand resulted in an overall deficit of 8.7%. Apart from enhancing power generation capacity, other challenges relate to tariff management, reducing aggregate technical and commercial loss, harnessing potential renewable energy, rural electrification, and leveraging private investments.

The energy sector constituted the biggest component in the lending portfolio of ADB as of December 2013. The current involvement of ADB in India's energy sector comprises assistance related to electric power and focuses on promoting energy efficiency measures, clean energy, and capacity building in about eight states apart

⁹ Government of India. The 12th FYP 2012–2017. *Economic Sectors (Volume II)*, Planning Commission, New Delhi.



ADB-supported power grid in Warangal

from support to national entities. This extensive involvement has benefited people directly or indirectly—small enterprises, school children, farmers, and households—as evidenced by the Madhya Pradesh Power Sector Investment Program (MPPSIP).

Madhya Pradesh Power Sector Investment Program

ADB has been involved with power sector reforms in Madhya Pradesh since 2001 through the 6-year project Madhya Pradesh Power Sector Development Investment Program. While the program was successfully implemented, the demand–supply gap persisted because of growing demand from both urban and rural areas. A diagnostic study by the state government revealed the need for further investments to enhance transmission capacity, and so an MFF, the MPPSIP, was developed to address the existing gaps. The MFF comprised six tranches between 2007 and 2012, with a

total outlay of \$620 million focusing on transmission, distribution, and institutional strengthening.

Results of the subproject, funded through the first tranche of the MFF worth \$106 million, were positive from various perspectives. A noteworthy achievement was the construction of 1,437 km of transmission lines that increased the transmission capacity from 5,563 MW in 2005–2006 to 8,170 MW in 2008–2009, which is sufficient to meet demand in 2012 and beyond. Also, between 2006 and 2012, system availability increased from 95.0% to 99.2% and technical losses decreased from 5.2% to 3.5%.

Along with macrolevel statistics, real-life experiences at the ground level also attest to the important changes that took place through this partnership. As distribution issues were also addressed within the MFF, people felt they were part of the change. Box 1 shows how access to improved power supply supported by ADB projects helps an entrepreneur in increasing productivity and profitability.

In Halwai Mandir colony, a low-income neighborhood in Jabalpur, electricity literally brings light and hope for children from poor families as they are able to study without interruption. Vandana Armo, 42, a resident, is willing to pay for improved electricity as it allows her college-going children to prepare better for their exams.

Equity in access and use is key to sustaining development benefits. Residents of a low-income neighborhood in Jabalpur expressed satisfaction at being treated equally

in terms of accessing the benefit of amenities provided by the government, which a few years ago seemed to be limited to families who lived in better-off areas.

The perspectives shared by women from Jabalpur defy the common perception that people are not ready to pay for services. Indeed, people with low incomes value the quality and consistency of electricity supply and tend to balance the cost by using electricity judiciously. Guddi Bai, 50, a domestic worker, is proud to have an authorized electricity meter. She now uses electrical gadgets in her daily chores and also ensures that her family uses electricity judiciously.

Madhya Pradesh Power Transmission Company officials feel that training and capacity building provided through ADB assistance was very useful in achieving and sustaining the project results. Periodic review meetings also helped in understanding best practices and resolving implementation issues.



Women workers at Anmol packaging unit, Jabalpur, Madhya Pradesh

The electricity situation has improved a lot compared to what it was 5 years ago. Supply is regular and when it goes, it goes for everyone.
—Kanchan Chowdhary, 27,
Jabalpur

While the power sector project helps the state in improving its transmission and distribution infrastructure, the related TA covered under this project helps in supplying quality 24-hour power to rural households. The TA also

Box 1: Improved Electricity Helps Entrepreneurs and Workers

Anmol Namkeen is a popular snacks brand of Jabalpur, Madhya Pradesh. Rajneesh Gulati started this home-based enterprise 25 years ago. As the demand increased, he shifted the production unit to the industrial area on the outskirts of the city, while the packaging and distribution unit continued to function at his house in Jabalpur, which falls under the Madhya Pradesh Power Sector Investment Program project area. Although power requirement of the packaging operations is not high, consistency of power supply is crucial. According to Rajneesh, the improvement in power supply in terms of regularity and quality in Jabalpur has certainly made a huge difference to his business operations. He also saves on the huge cost for power backup.

“Earlier, we faced scheduled power cuts and had to depend on power back-up. Now, with improvement in power supply, work is much more productive. Also, with new meters, bills are on time and accurate.”

—Women employees of Anmol Namkeen

Source: Group discussion with the owner of Anmol Namkeen and its women employees.



Women entrepreneurs showcasing their products in Madhya Pradesh

aims to build the capacity of women entrepreneurs and women self-help groups (SHGs) to enhance the business opportunities opened up by improved power supply in rural areas. A glimpse of the TA is provided in Box 2.

Water and Other Urban Infrastructure and Services: Toward More Livable and Sustainable Cities

Urban centers contribute to about two-thirds of the economic output and thus serve as one of the key drivers for economic growth in India.¹⁰ Currently, about 31% of the Indian population lives in urban areas, which is likely to grow to 43% (about 600 million) by 2031.¹¹ The national program Jawaharlal Nehru National Urban Renewal Mission was launched by the government in 2005 to address the growing need for investment in urban infrastructure. Meanwhile,

Box 2: Enhancing Energy-Based Livelihoods for Women Microentrepreneurs in Madhya Pradesh

The Madhya Pradesh Energy Efficiency Improvement Investment Program is helping to create livelihood opportunities for small entrepreneurs through improved access to electricity. Socioeconomic data across 32 project districts pointed, among other issues, to the nonavailability of regular electricity as a crucial factor that negatively impacted women's work load, entrepreneurial potential, and health.

Considering the specific support needed by women entrepreneurs, a technical assistance grant worth \$1 million was provided to the state government to build the capacity of women entrepreneurs to enhance their access to energy-based income-generating business opportunities so that they are able to improve their socioeconomic status.

A business needs assessment survey was conducted as a first step for the technical assistance. The survey indicated the need for women's training on benefits of electricity-based technologies, lack of access to business-related training, and lack of access to markets. This was followed by capacity building of self-help groups on business development services and an integrated entrepreneurship development module. So far, nearly 3,068 of the 22,593 self-help group members have benefited from such training. Some of the energy-based enterprises upgraded under the project include a flour mill, motorized tailoring, making paper plates and cups, and photocopying and lamination machines. A Project Planning Monitoring and System was developed including social- and gender-related results.

Source: ADB.

¹⁰ October 2011, *Report of the Working Group on Financing Urban Infrastructure in the 12th FYP*.

¹¹ Estimates based on National Census 2011.

the Union Budget 2014–2015 proposes to develop 100 smart cities and urban renewal services in 500 smaller cities across the nation. However, attracting private investments, strengthening urban governance systems, and implementing comprehensive urban planning are key gap areas in making Indian cities habitable and safe.

ADB support has primarily aimed at development and delivery of sustainable urban infrastructure and services, urban planning, financial innovations, and environmental sustainability. Projects have also focused on slum rehabilitation, building up community infrastructure, and provision of vocational training. So far, ADB has supported WUS interventions in over 18 states. Recent experiences from Madhya Pradesh and West Bengal (Kolkata) give a glimpse of how improved urban infrastructure brings positive changes in the lives and livelihoods of people in project areas.

Urban Water Supply and Environment Improvement Project in Madhya Pradesh

The Urban Water Supply and Environment Improvement Project (UWSEIP) was a 10-year project launched in Madhya Pradesh in 2003. The project was started in the context of high deficits in urban infrastructure and services across six major cities of the state. On an average, 42.3% households did not have access to in-house water



People of Ambedkar Nagar, Bhopal, now have access to water close to their slums

supply, while 15.1% were deprived of access to piped water. About 18.8% of households did not have private toilets, and 40% reported no solid waste collection.¹²

The project was designed and implemented to assist the state government in addressing these infrastructure and service deficits in the project cities—Bhopal, Indore, Gwalior, and Jabalpur—through regular and supplementary loans amounting to \$211 million. The project intended to incur direct social benefits in the form of

We used to call the tube-well operator (a municipal provision) all the time to ask if he will supply water because there were frequent disruptions in supply. All this for a few buckets of poor-quality water! Now we don't face all these hassles. Life is much better now.

**—Mamta Srivastava, 32,
housewife, Jabalpur**

¹² ADB. 2003. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to India for the Urban Water Supply and Environmental Improvement in Madhya Pradesh Project*. Manila.



Water treatment plant constructed under UWSEIP, Jabalpur

sustained improvements in water supply, sanitation, and garbage collection and disposal. Indirect benefits included improved living conditions, healthier living environments, and improved health status of the population.

The project involved laying down 2,400 km of pipes which ensured improved water supply to 5.6 million people and 317 km of sewage pipes which benefited 0.5 million people through improved wastewater management. Furthermore, solid waste management initiatives have benefited about 4.7 million people across the state.

The impacts of the project interventions are now visible. For example, in the Sharda Mandir area of Jabalpur, Kamini Chauhan and her family are among the beneficiaries of improved urban infrastructure through ADB assistance. She feels that regular access to clean water has reduced her hardships and made her life comfortable.

Prior to the water supply project, the municipal corporation was supplying water through a tube well, which was irregular because

of constant repair and maintenance issues and irregular power supply. Pragyesh, a young student, shared the ordeal of unpredictable water supply that kept the whole family unsure every morning. Attending school or work depended on whether or not water would be supplied on time. Poor water quality led to frequent health problems such as diarrhea. With regular and improved water supply, his family was able to manage their routine with ease.

Municipal action plans for poverty reduction were developed in collaboration with WaterAid and local nongovernment organizations for formation and capacity building of community group committees (CGCs) to ensure active participation of communities, especially women. As a result, 50% of CGC members in the project area are women. A subproject, Urban Development Around You (UDAY), was implemented in collaboration with the Centre for Entrepreneurship Development in Madhya Pradesh to promote skills and entrepreneurship development of women CGC members. A snapshot of this subproject is provided in Box 3.

Kolkata Environmental Improvement Project

ADB supported the Kolkata Environmental Improvement Project (KEIP) through a regular loan of \$177.8 million approved in 2000 and a supplementary loan of \$79.1 million approved in 2006. The project was initiated when Kolkata, one of India's biggest cities, was

marked by inadequate sanitation, sewerage, and drainage systems.

The project focused on improving basic infrastructure by extending sewerage and drainage infrastructure, improving solid waste management facilities, and providing improved urban infrastructure for slum dwellers. It also intended to ensure continued exemplary operation of the artificial East Kolkata Wetlands.

More than 1.2 million people benefited from improved sewerage and drainage facilities and 5 million people have benefited from improved solid waste management facilities. Around 0.3 million slum dwellers benefited from the project as their living environment and hygiene conditions improved. Under



Resettlement colony built under KEIP, Kolkata, West Bengal

the resettlement component, 2,880 families residing on canal banks were provided with one-bedroom apartments.

Access to safe drinking water and improved sanitary facilities had a positive impact on health and well-being in slum areas.

Box 3: Sharing Benefits: Community Involvement under Urban Water Supply and Environment Improvement Project

Ramnagra, a village 20 kilometers from Jabalpur, is on the banks of the Narmada. The site was selected under the Urban Water Supply and Environment Improvement Project (UWSEIP) for construction of an intake well, jack well, raw water tunnel, and water treatment plant to supply water to Jabalpur. However, it was found that Ramnagra itself did not have piped water supply. The baseline survey (2006) showed that only 15% of families had improved toilets and all families depended on the Narmada for water, including drinking water.

The village was covered under the “community involvement and development initiative” through the Area Improvement Fund. A group of motivated women took the responsibility of managing the water distribution and formed the community group committee (CGC). A local nongovernment organization helped in developing leadership and management capacities of the group. The nongovernment organization, with the support of UN-Habitat and WaterAid, undertook awareness sessions on health and hygiene, provided vocational training, and enhanced women’s capacity to manage saving and credit activities.

The CGC is now fully capable of managing user fees and reinvests the fees for repair and maintenance. It has set a new precedence in the village where women usually do not get to interact publicly. The intervention has a favorable effect on all villagers, but more so on women.

“Earlier we used to get water for drinking as well as all other purposes from the Narmada River, which required us to go up the high embankments. We had to spend a lot of time in getting water. Now we are free and able to give time to our children. Water quality is good, and incidence of diseases has gone down,” said Radha Upadhayaya, a CGC member.

Apart from an enhanced understanding of the links between hygiene and health, women are also more conscious about water wastage, and there is a sense of ownership of the water distribution system.

Source: Based on narratives of the community group committee and self-help group members in Ramnagra, Jabalpur, Madhya Pradesh.



An irrigation canal upgraded under the ADB-supported OIIAWMIP, Odisha

The rehabilitation program had a number of other components aimed at community empowerment and poverty reduction, including the provision of identity cards, opening of bank accounts, and linking of families with social security schemes. Forty-five women's SHGs were formed and skills development programs were made available, resulting in some SHG members undertaking individual or collective entrepreneurial activities.¹³

Kolkata Municipal Corporation, apart from the infrastructure and community rehabilitation and empowerment activities, also made substantial progress in e-governance initiatives, including computerization of all revenue-earning departments, establishment of e-billing centers, installation of a computerized system and scrutiny of building plans, and establishment of a fully operational mechanism to address grievances. Regular accounting and auditing systems

were introduced, and procurement systems were modernized to promote competitiveness and efficiency.

Agriculture and Natural Resources: Promoting Efficient and Sustainable Irrigation Systems

The agriculture and allied sectors constituted 15.2% of India's GDP during the FYP 2007–2012, and accounted for 54.6% of total employment.¹⁴ Between 2001 and 2011, the absolute number of cultivators declined from 127.3 million to 118.7 million primarily because of diversification of nonfarm employment avenues.¹⁵ Low access of small landholders to irrigation facilities, appropriate technologies, and agriculture inputs, including credit, makes them particularly vulnerable. The Union Budget 2014–2015 of India emphasizes investments in agriculture infrastructure and technology, credit, climate change adaptation, and support to landless farmers.

In India, ADB started operations in the agriculture and natural resources (ANR) sector about a decade ago through TA projects for sector studies and stakeholder consultations. Currently, six states benefit from ANR intervention. The Chhattisgarh Irrigation Development

¹³ SHGs are informal or formal groups of individuals who come together for savings, credit, and income-generation activities.

¹⁴ Ministry of Finance, Government of India. *Economic Survey 2013–2014*. Chapter 8, Agriculture and Food Management. New Delhi.

¹⁵ National Census of India 2001 and 2011.

Project, launched in 2005, was the first project, and it was supported through a regular loan worth \$46.1 million for rehabilitation and upgrade of 144 medium-sized and minor irrigation schemes through participatory irrigation management (PIM) and strengthening of WUAs. In October 2010, ADB granted a \$120 million MFF project to Assam. The Assam Integrated Flood and Riverbank Erosion Risk Management Investment Program was developed to protect key urban and productive rural areas along the Brahmaputra River, benefiting about 1 million people.

Although the ANR sector represents a small proportion of ADB's overall portfolio in India, the support has primarily targeted lagging states with high potential of sustainable increase in productivity, strengthening institutional capacities at the state and community levels. ADB support has promoted fair distribution of water and strengthened capacities at the community as well as department levels, as shown by the Orissa Integrated Irrigated Agriculture and Water Management Investment Program (OIIAMWIP).¹⁶

Orissa Integrated Irrigated Agriculture and Water Management Investment Program

Odisha, like many states in India, has an agro-based economy. However, despite a high dependence on agriculture, the adequacy and quality of irrigation infrastructure has been a major concern in the state.



Riverbank protection with sand-filled geotextile bags in Guwahati, Assam

The program was designed to establish productive and sustainable irrigation systems through renovation of facilities and associated infrastructure as well as provision of operations and maintenance support in a command area of 215,000 hectares (ha) in four northern river basins in the state, aimed at increasing incomes and improving the livelihoods of the people living there.

Irrigation infrastructure was improved by rehabilitation, upgrading, and extension of four major and medium-sized irrigation schemes and 650 community-based minor lift irrigation schemes.

Despite delays in some areas, significant progress has been made. For instance, in the Sunei command area, which is spread over 9,000 ha of cultivable land across 135 villages, all civil works of the main system and irrigation distribution network have been completed. Compared with baseline levels in this area, irrigated area increased 38%, cropping intensity increased 30%, and paddy productivity increased

¹⁶ In 2011, the Government of India approved the name change of the state of Orissa to Odisha.



Women representatives in a WUA meeting in Odisha

132%. This has allowed the villagers to adopt paddy cultivation and diversified cropping.

ADB worked closely with the Department of Water Resources and the Department of Agriculture on PIM through the WUAs (also known as *Pani Panchayats*) to ensure sustainability. The Odisha water management program mobilized local farmers and built their awareness and capacity toward sustenance of benefits accrued through its interventions. Regular subproject office and WUA meetings were institutionalized as a major forum for decision making.

WUAs have played an important role in ensuring gender equality and social justice. In the Sunei command area, participation of women, as members and leaders,

Earlier the canal system was inadequate. So, we could not grow pulses. Now water is available even at the tail end because of lined field channels which allow us to grow paddy as well as pulses.

—Jogindra Patra, 55, farmer

was near equal to that of men. For instance, of the 1,258 *chak*¹⁷ committee members, around 47% were women, and women were key office-bearers in 10 of the 20 WUAs. Commenting on WUAs in this area, Saviti Behra, 46, said that “with more and more women getting elected to the executive committee of *Pani Panchayats*, we feel a sense of empowerment. Villagers listen to us and all disputes are resolved amicably.” Participation of members from scheduled castes and scheduled tribes was significant as well. For instance, of the 415 WUA executive committee members, 35% were from scheduled castes and scheduled tribes. There is also a feeling of equality regarding water distribution. Sachindra Nath, a 66-year-old farmer with 2 ha of land, said that earlier there was low availability of water in his area at the tail end of the irrigation system but the participatory approach of WUAs has ensured fair access to water.

Institutional strengthening was another significant component of the program under which a specialized multidisciplinary PIM–Command Area Development Directorate was created within the Department of Water Resources to initiate state-wide programs for WUA awareness and promotion.

Finance: Improving Fiscal Governance

The Government of India targets an average GDP growth of 8.2% during the FYP 2012–2017,

¹⁷ *Chak* is an area irrigated by a single outlet from a distribution canal.

with renewed emphasis on infrastructure development. The estimated investment required for infrastructure development is \$1 trillion, with 48% investment sourced from the private sector. This requires strengthening of the financing instruments and a favorable regulatory environment for private sector investments. Meanwhile, state governments face the challenge of increasing tax revenues, reorienting expenditure policies, and introducing reforms aimed at fiscal sustainability.

ADB programs under the finance and PSM sectors help the states in creating fiscal space by improving public financial management, increasing revenue mobilization, reducing high-cost debt, restructuring public enterprises, and building capacity. Fiscal space thus created enables states to channel spending in critical development programs.

About 32% of ADB loan assistance in the finance and PSM sectors has been aimed at leveraging private sector expenditure for infrastructure investments, followed

by public expenditure and fiscal management programs (22%), and microfinancing (19.7%).

So far, public resource management loans worth \$1.45 billion have been provided to Gujarat, Madhya Pradesh, Kerala, Assam, Mizoram, and West Bengal. ADB has provided support for interventions in public financial management, tax administration, and service delivery. These interventions have created demand for similar assistance as evident from the Assam experience (Box 4). ADB's assistance for fiscal reforms in West Bengal has resulted in positive results as the state's tax revenue to gross state domestic product exceeded 5% in 2012–2013 for the first time in 15 years; public debt decreased to 35% in 2013–2014 from 41% of gross state domestic product in 2010–2011; and development financing strengthened as the collaboration progressed.

The government estimates a shortfall of \$350 billion in its target of investing \$1 trillion in infrastructure by 2016. It is also

Box 4: Assam Governance and Public Resource Management Sector Development Program

Through the Assam Governance and Public Resource Management Sector Development Program, completed in 2013, ADB assisted the government in legal, regulatory, and institutional reforms for improving fiscal governance. These initiatives helped create revenue and fiscal space, enabling the government to spend more on infrastructure, health, and education. The operation also helped improve the transparency of budget planning and reporting systems, computerized revenue and expenditure accounts, developed state-wide procurement standards, and introduced performance-based quality reviews of management and public administration.

Source: ADB. 2014. *ADB Development Effectiveness Review 2013*. Manila.

clear that financing infrastructure projects through bank loans is not a viable option, which necessitates innovative ways of credit enhancement to bridge the gap in investments.

ADB partnered with India Infrastructure Finance Company Limited (IIFCL) to leverage public resources to draw in private sector funds and build up management expertise for infrastructure investment.¹⁸ The IIFCL was supported through a loan of \$1.2 billion and through TA for capacity development. Financing instruments and credit enhancement products were developed, including the partial credit guarantee product for credit enhancement of local bond issuances by infrastructure project special purpose vehicle and the associated Bond Guarantee Fund for India.

ADB also undertook the India Infrastructure Project Financing Facility (IIPFF) to complement government initiatives in contractual savings, corporate bonds, and PPP initiatives. The IIFCL provides long-term funds for financing PPP projects selected through a transparent and competitive process across sectors, notable examples being the upgrading of airports at New Delhi and Mumbai and the expansion of national and state highways. The IIFCL leveraged about \$2.5 billion–\$3.5 billion under IIPFF, phase I and \$7.6 billion under IIPFF, phase II from the private sector for

financing PPP subprojects. With regard to the current Accelerating Infrastructure Financing Facility for India, 31 subprojects are programmed for direct lending, including for subordinate debt and takeout financing transactions.

The partnership has strengthened the IIFCL's institutional capacity in terms of credit risk assessment procedures and pricing policies, and in designing a detailed environmental and social safeguards framework. Through ADB support, the IIFCL received its first international credit rating, enabling it to source long-term funding from international markets. The ADB–IIFCL partnership is being closely studied and lessons are being shared with other existing and potential stakeholders.

Under the current country partnership strategy (CPS) 2013–2017, these efforts will continue with increased focus on tapping capital market finance for infrastructure and social services projects, apart from supporting state governments in creating fiscal spaces.

Strengthening Public–Private Partnerships

The FYP 2012–2017 of the Government of India aims to increase the share of private funding to about 48%, 10 percentage points higher than it aimed in the FYP 2007–2012. To boost PPPs, an exclusive PPP cell was created within the Department of Economic Affairs (DEA), Ministry of Finance.

¹⁸ IIFCL is a special purpose vehicle set up by the Government of India in 2006 to facilitate private sector investments in infrastructure.

Box 5: Supporting Public–Private Partnership Pilot Projects for Providing Urban Amenities in Rural Areas

The Asian Development Bank is providing technical assistance to the Ministry of Rural Development in developing a public–private partnership implementation modality for developing the “providing urban amenities in rural areas” (PURA) scheme and pilot projects. PURA aims at improving infrastructure in the rural sector in a comprehensive manner. Under Phase I of PURA, nine projects were developed, of which three projects worth \$66 million have been awarded and three more worth \$56 million are in the immediate pipeline. In addition, 10–15 projects are being developed under Phase II.

Source: ADB.

The Union Budget 2014–2015 announced a corpus of \$83 million for establishing 3P India—a corporate entity to provide PPP services under the auspices of the DEA.

ADB, in partnership with the central government, started a joint initiative called Mainstreaming PPP in India in 2006. So far, ADB has provided \$17 million in TA through eight projects to assist the government’s PPP initiative, supporting a wide range of activities that include regulatory frameworks, guidelines and manuals, knowledge development and sharing, capacity building, and pilot projects. This is the largest PPP program of ADB. The initiative is managed from the PPP cell in the DEA, and is given technical support by the PPP cell in the ADB India Resident Mission. Twenty-two PPP cells have been set up so far, of which 15 are at the state level. ADB supported the introduction and institutionalization of marketing plans, project

appraisal, and reporting systems in the PPP cells. A robust pipeline was developed through the pilot projects initiative, an example of which is discussed in Box 5. ADB also supported the drafting of a national PPP policy and development of PPP rules, manual, compendium, and business plan for 3P India. A green book for PPP in the health sector, a relatively unexplored area, was also developed with the aim of developing a model concession agreement on investments.

Private Sector Operations and Development

“Private sector development and private sector operations” is one of the five key drivers of change identified in ADB’s Strategy 2020, aimed at scaling up private sector development and operations to 50% of ADB’s annual operations by 2020.¹⁹

¹⁹ ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank*. Manila.



A rural school operated by Hippocampus Learning Centres in Karnataka

The private sector in India contributes over 75% of the domestic capital, accounting for more than 80% of GDP growth in the 2000s and more than 90% of employment opportunities since the 1980s. The government recognizes the role of the private sector in boosting the economy, especially in meeting infrastructure deficits. However, the business regulatory environment, particularly in the infrastructure sectors, constrains private sector operations.

ADB, since commencing nonsovereign operations in 1987, has been contributing to create a sound business environment for private sector investment in energy and finance through TA and financial support to the government, and public and private entities. As of December 2013, \$3.2 billion had been approved for 47 nonsovereign projects, including support to state-owned enterprises.

Recent private sector operations of ADB in India have focused on clean energy initiatives that include lending and equity investments for windmills and solar power plants.

ADB provided a \$103 million OCR loan to Rajasthan Sun Technique Energy, a 100% subsidiary of Reliance Power Limited, for the construction of a 100-MW concentrated solar power plant near Dhursar village in the Jaisalmer district of Rajasthan. The project is the largest concentrated solar power project being developed in the country and is part of Phase I of the National Solar Mission. The project will use compact linear fresnel reflector technology to capture solar energy and convert water to superheated steam through multiple solar steam generators. The steam produced will be used to drive a steam turbine that will produce electricity. The project will promote the efficient use of a relatively untapped, indigenous energy source for electricity generation.

ADB's inclusive growth strategy advocates maximizing access to energy for economic and social development under its Energy for All initiative, which aims to share knowledge and to identify and scale up successful models that will bring energy to the poor people across Asia. Simpa Networks is an example of such an initiative in India.

ADB invested \$2 million in equity in Simpa Networks in March 2013, aimed at rolling out Simpa Networks' off-grid, pay-as-you-go

solar home systems in rural India. The project will increase access to clean energy for 63,125 new households by 2015 through the sale and installation of 29,000 new solar home systems and 34,125 metering units for solar-powered microgrids by 2014. The project is directly aligned with ADB's Asia Solar Energy Initiative, which aims to help develop, finance, and commission 3,000 MW of solar power generation capacity, including off-grid projects in ADB developing members.

In 2014, ADB made a \$2 million equity investment in Hippocampus Learning Centres (HLC). HLC is a venture capital backed company pioneering an affordable supplementary education system aimed at improving learning outcomes for children aged 3–11 in rural Karnataka. HLC recruits and trains women teachers from the communities and villages to operate its education centers. ADB's investment in HLC will provide much-needed growth capital to a company with an innovative

education service delivery model to scale up its operations to improve learning outcomes for early education and to provide training to women in the state.

ADB's Private Sector Operations Department has also made notable interventions in the finance sector. Under its Microfinance Risk Participation and Guarantee Program, ADB has allocated \$100 million for 17 microfinance institutions in India. Under the structure, ADB provides guarantees to India-based commercial banks, covering 50% of the default risk of a microfinance institution against loans made available in local currency. The assistance has resulted in increased access to finance for over 700,000 individuals; over 95% reside in rural India and most of them are women.

ADB has also invested \$3.9 million in India Mortgage Guarantee, a private limited company that provides guarantees to mortgage lenders in India against borrower defaults, representing a 13% ownership stake.



Improving Operational and Organizational Effectiveness

Performance and Efficiency

The annual lending program of ADB is largest in India. Since starting its lending operations in 1986, ADB has approved 210 loans worth \$31.5 billion, 348 TA projects of \$262 million, and 10 grants amounting to \$173.8 million as of 31 December 2013.

Over the past 3 decades, the overall success rate of projects in India was 70.7% with a 7.1-percentage-point increase between the 1990s and 2000s. The final review and validation of the CPS 2009–2012 rated ADB operations in India “*successful*” based on satisfactory strategic positioning, a relevant program, an effective and efficient delivery of outputs, and expected outcomes. This rating is in line with the Country Assistance Program Evaluation (CAPE) of 2007. ADB operations in the energy and transport sectors, which constitute a significant share of the ADB portfolio in India, were particularly appreciated. Implementation delays were, however, noted in the areas of ANR, water, and other municipal infrastructure. The proportion of loans at risk witnessed an increase of 2.7 percentage points between 2011 and 2013.

Efficient delivery was particularly challenging in lagging states due to weak institutional capacities of implementing agencies and their limited exposure to international standards in project management. Slow procurement and complexities involved in land acquisition, resettlement, and environmental clearances led to delays in project implementation.

Several measures have been implemented to improve risk management in the light of increasing expansion to lagging states and time lags in regulatory clearances. New project readiness filters have been introduced to shorten time gaps between approvals and actual initiation. As per the DEA’s project readiness checklist, at least 30% of tendering work is to be completed before loan negotiations. Additional streamlined business processes and procurement reforms within ADB are likely to reduce implementation delays and associated risks. Also, ADB is in the process of strengthening resident missions by delegating more projects and empowering them with more responsibilities and authority.

Overall, operational effectiveness improved because of a range of modalities such as stand-alone project loans, program loans,

Table 4: ADB Loan Disbursements in India
(\$ million)

Loan	1986–2007	2008	2009	2010	2011	2012	2013	Total
OCR sovereign	10,010.9	1,507.7	1,339.8	1,699.0	1,434.3	1,270.3	987.0	18,249.0
OCR nonsovereign	338.9	147.9	212.0	159.1	110.3	141.5	186.1	1,295.8
Total	10,349.8	1,655.6	1,551.8	1,858.1	1,544.6	1,411.8	1,173.1	19,544.8

OCR = ordinary capital resources.

Source: ADB.

financial intermediation loans, and MFFs offered by ADB to meet client needs and demands. Efficiency measures introduced or strengthened in recent years, such as targeted capacity development programs on PPP and project management, and periodic tripartite portfolio review meetings (TPRMs), also contributed positively to efficiency levels.

ADB is laying greater emphasis on strengthening results framework and monitoring procedures, as suggested by the CPS final review and validation report. The CPS results framework is being further strengthened with particular focus on framing sharper objectives and well-aligned, verifiable indicators. This is particularly important in the light of the government's increasing results orientation in collaborative projects. In 2013, ADB introduced a results-based lending modality for program loans that links disbursements directly to the achievement of program results. The results-based lending aims to increase accountability and incentives for delivering and sustaining results, improve the effectiveness and

efficiency of government-owned programs, promote institutional development, and enhance development effectiveness.

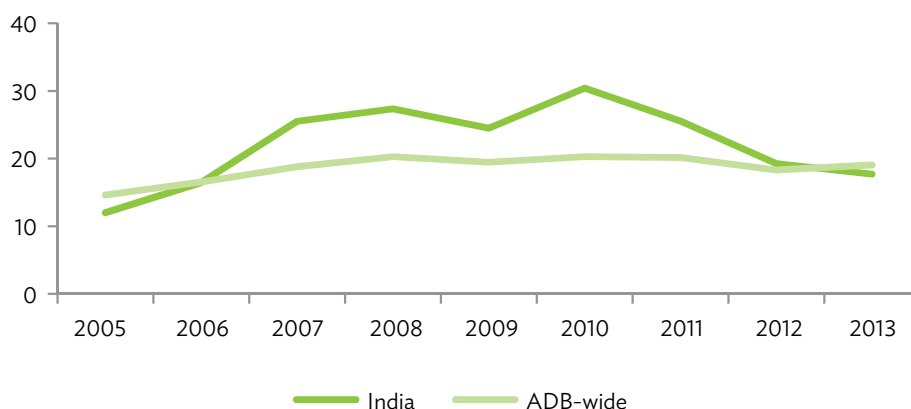
The project management clinic under the aegis of the Capacity Development Resource Center (CDRC) at ADB's India Resident Mission is helping stakeholders in getting familiarized with the results framework and better reporting on outputs and outcomes in addition to better assessment of risks and challenges.

Portfolio Management

Total disbursement under OCR sovereign loans was \$18,249.0 million and that for OCR nonsovereign loans was \$1,295.8 million between 1986 and 2013 (Table 4).

India constantly maintained a higher disbursement ratio (OCR project loans) compared to the ADB-wide average between 2006 and 2012. However, the disbursement ratio started declining from 2010 and was slightly below the ADB-wide average in 2013 (Figure 4).

**Figure 4: Disbursement Ratio (Project Loans):
Comparing India's Performance
and ADB-Wide Performance**



Source: ADB estimates.

The disbursement ratio in India fell from 24.5% in 2009 to 17.6% in 2013, primarily due to expansion of portfolios into lagging states, which stood at 70% in 2013 against 30% in 2009.²⁰ Lack of experience and weak institutional capacity of the executing and implementing agencies in these states are key reasons for the weakening disbursement ratio. Furthermore, a rising number of projects leading to young portfolios with smaller contracts in the initial stages also contributed to a low disbursement ratio.

Over the past decade, several measures have been taken for improved portfolio performance in India. ADB has sought greater participation by stakeholders in planning, monitoring, and capacity building initiatives through well-defined mechanisms comprising capacity building for better

adherence to ADB guidelines and procedures, orientation of social and environmental safeguards, project planning and management training, and continued support for improved monitoring and reporting. Among these, the quarterly TPRM has received particular appreciation by all stakeholders, including the DEA.

The TPRM was started in 2005 and has since worked as a key platform to discuss contract awards, implementation issues, progress updates, and follow-up measures. It has also emerged as a forum to share knowledge products and good practices adopted by executing agencies across sectors and states. The TPRM has helped bring in results orientation among stakeholders apart from making them more accustomed with ADB standards and procedures.

²⁰ The ratio of disbursement achieved in a year to the total net effective undisbursed loan funds at the end of the year.



A TPRM in progress in Delhi

Encouraged by the effectiveness of TPRMs in lending collaborations, the DEA and ADB started TPRMs for TA projects in August 2010, for improving, design and delivery of such projects. Similarly, pipeline Tripartite Review Meetings (P-TPRMs) were initiated in 2013, providing a forum to undertake a review of the status of readiness of pipeline projects, and to make a realistic assessment of their processing schedule.

Cofinancing

Cofinancing operations enable ADB's financing partners, governments or their agencies, multilateral financing institutions, and commercial organizations to participate in financing ADB projects. Between 2009 and 2013, the total cofinancing for India was \$1,144.3 million (Table 5).

By the end of 2013, the cumulative direct value-added (DVA) official cofinancing for India was \$1.18 billion for 18 investment projects, and \$97 million for 113 TA projects. The cumulative direct value-added commercial cofinancing was \$543.26 million for six investment projects.

Capacity Building and Knowledge Exchange

Capacity development has been an integral part of ADB's India country programming strategy. The CDRC was established in the

**Table 5: Projects Cofinanced for India,
1 January 2009–31 December 2013**

Cofinancing	No. of Projects	Amount (\$ million)
Projects ^a	9	551.75
Grants	4	10.50
Official loans	2	288.00
Commercial cofinancing	3	253.25
Technical assistance grants	51	40.80

^a A project with more than one source of cofinancing is counted once.
Source: ADB. 2014. *Asian Development Bank and India: Factsheet*. Manila.

Portfolio Management Unit of ADB's India Resident Mission in 2011. Its aim was to strengthen project implementation capacities of executing agencies implementing projects funded by ADB. CDRC activities have generated interest within ADB and are strongly supported by the DEA.

During 2011–2013, the CDRC delivered about 90 programs, benefiting more than 2,700 executing agency staff, contractors, and consultants. Program coverage included ADB procedures, such as social safeguards, improvements in project implementation, and thematic topics such as road safety, detailed project report preparation, highway maintenance, and so on. Between 2011 and 2013, average participation increased from 25 to 38 per program. Between 2008 and 2013, various ADB programs trained more than 4,629 executing agency staff, contractors, and consultants.

Moving forward, the CDRC plans to expand its capacity development activities to further strengthen the implementation of ADB projects through various initiatives such as collaboration with the Department of Personnel and Training of the government and state-level administrative training institutes, undertaking targeted training programs for weak

executing agencies, and providing concurrent hands-on guidance through regular videoconferencing. This collaboration reduces training cost and helps in creating a learning platform with other multilaterals such as the World Bank and Japan International Cooperation Agency.

ADB, to promote knowledge exchange, is supporting the idea of piloting an India Knowledge and Experience Exchange Hub proposed by the DEA. The hub aims to

- (i) identify innovations and the applications of best practices in various sectors across states; and
- (ii) document the experience, distill lessons, and prepare detailed modules and tool kits for replication in other states and/or scaling up.

The hub will act as a platform to systematically document and disseminate lessons emerging within India as well as among other developing member countries in Asia and the Pacific. ADB will contribute to the India Knowledge and Experience Exchange Hub by supporting 4–5 pilot knowledge exchange programs. The first pilot knowledge exchange on Roads Corporatization: the Madhya Pradesh Experience will be an endeavor in this direction.



Moving Forward: Challenges and Opportunities

India's share of global GDP almost doubled from 1.2% in 1994 to 2.6% in 2011 and about 134 million people were lifted out of poverty. Although India has done better than many economies in economic growth, the degree of poverty reduction is less than many East and Southeast Asian economies. Furthermore, 68.8% of Indians continue to live below \$2 per day and remain at risk of falling back into poverty in the event of economic shocks.²¹

Despite unemployment declining from 4.3% in 1994 to 3.5% in 2011, skills gaps, especially in high growth sectors such as telecommunications, finance, insurance, transport, and real estate, remain high. The negative employment elasticity in manufacturing between 2005 and 2010, indicating movement of people out of the sector, is a cause of concern. Moreover, about 57% of India's youth suffer from some degree of unemployability.²²

In terms of human development, significant gains are discernible, but India still lags on several MDG indicators, including infant mortality rate, maternal mortality rate, and access to sanitation facilities. India stood 135th among 187 countries in 2014 on the Human Development

Infrastructure deficits, unfavorable regulatory environment, skills gap, gender disparity, and environmental sustainability are key concerns.

—ADB

Index, and interstate disparities in development indicators are high, warranting greater investments in physical and social infrastructure in lagging states.

Gender disparities continue as manifested in the declining child sex ratio,²³ unfavorable labor market segmentation, and low ownership of productive assets. As urbanization grows, there is an increasing demand for gender-sensitive urban planning for ensuring personal security.

Environmental sustainability, while boosting growth, is a major challenge in the country. Depleting groundwater, water scarcity in urban as well as in rural areas, growing air pollution levels, and poor waste management systems are challenges that require long-term integrated measures.

Slow-moving MDGs and lower inclusion, as measured by the pace of poverty reduction, are mainly due to infrastructure deficits, slow

²¹ ADB. 2014. *Key Indicators for Asia and the Pacific 2014*. Manila.

²² Team Lease Services, *India Labour Report 2007*, Mumbai.

²³ A total of 914 girls per 1,000 boys in the 0–6 age group in 2011.

The value of ADB operations in India lies in their relevance, responsiveness, and result orientation.

growth of the manufacturing sector, unfavorable regulatory environment, skills gap, and low coverage of basic social services.

Addressing these gaps requires large-scale investments toward developing commercial hubs and a strong network of economic corridors for creating better jobs. More importantly, to meet the overall development targets, the regional disparities in infrastructure development need to be addressed. The key challenge in this regard is mobilizing private sector investments. During the 12th plan period (2012–2017), the government is aiming to mobilize nearly half of the required infrastructure investment of \$1 trillion through the private sector. This calls for enhancing institutional capacities of public institutions to attract investments and manage reforms. Above all, there is need to expand and consolidate structural reforms, including streamlining regulations and the business process for efficient infrastructure development.

The sector focus of ADB in energy, transport, finance, and urban development is well aligned with the priorities of the government. ADB will further support the government vision of faster and inclusive growth by focusing on skill enhancement and employability, and reducing the demand–supply gap of qualified

labor; enhancing environmental sustainability through investments in water resource management and green environment technologies; supporting the development of economic corridors with integrated townships and multimodal regional connectivity; and supporting the development of smart cities. About 45% of the programs target projects with potential for significant gender mainstreaming and equity, and 50% will be in the lagging states and/or in activities that support inclusive growth under the current CPS 2013–2017.

For the first time, the CPS 2013–2017 carved out a strategy for the human development sector in India. ADB entered the sector in 2013 through the \$100 million project Supporting Human Capital Development in Meghalaya. The project will enhance the employability of about 60,000 youth (40% women) in Meghalaya by improving the quality, access, and delivery of its secondary and higher secondary education, and technical and vocational skills development programs.

Other significant recent initiatives include the Rajasthan Renewable Energy Transmission Investment Program, which marks the first loan to India with a Clean Technology Fund component; Karnataka Integrated Urban Water Management Investment Program, which aims to promote climate-resilient development; and Uttarakhand Emergency Assistance Project worth \$200 million in response to the devastation caused by a cloudburst in 2013.

Apart from physical outputs, ADB operations have helped build the institutional capacities of its clients. ADB will continue its endeavor to mainstream thematic priorities, such as gender, climate change, capacity development, and promotion of private sector development. Further emphasis will be on strengthening of knowledge management to develop evidence-based products toward improved project management, better sharing of domestic and international best practices, and replication and/or upscaling of successful projects.

ADB, in sync with the government focus on expanding regional cooperation, will strengthen its

initiatives and further support special cross-border infrastructure and trade facilitation projects. To leverage upon their experiences and technical expertise, collaboration with other development partners will be strengthened, especially in lagging states.

The ultimate measure of all development collaborations lies in their ability to bring perceptible changes in the lives of people by enhancing their access to opportunities. ADB will continue to contribute to India's efforts toward meeting the needs and expectations of its people, who aspire for and strive toward more prosperous and dignified lives.

India: Development Effectiveness Brief

India-ADB: Partnering for Sustainable and Inclusive Growth

The Asian Development Bank (ADB) supports the Government of India's vision of faster, more inclusive, and sustainable growth and has been a partner in its development efforts for about 3 decades now. India is now the top borrower of ADB's loans from ordinary capital resources. Between 1986 and 2013, ADB approved 210 loans worth \$31.5 billion, largely toward developing infrastructure in the transport, energy, and urban sectors, as well as supporting the finance sector. Value addition through technical assistance, capacity building, strengthening institutions, supporting innovations, and facilitating knowledge sharing is at the core of ADB operations in India. ADB remains committed to support India's development goals by focusing on gender sensitivity, skill building, environmental sustainability, and regional cooperation.

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 approximately two-thirds of the world's poor: 1.6 billion people who live on less than \$2 a day, with 733 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, guarantees, grants, and technical assistance.

