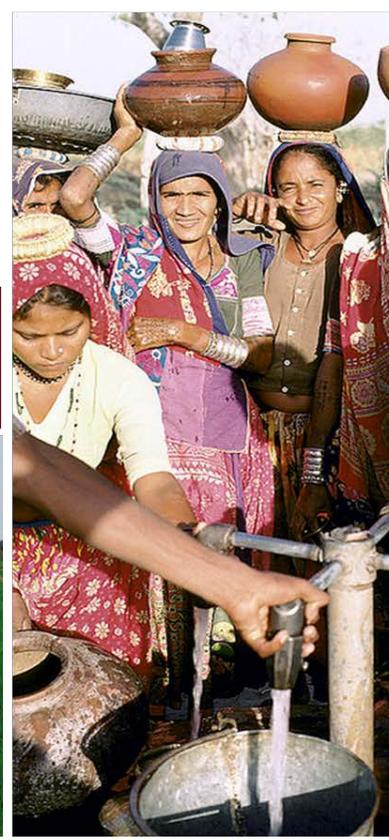
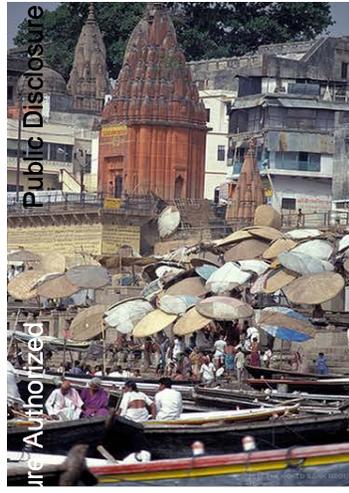


INDIA

WORLD BANK GROUP

Country Program Snapshot September 27, 2013

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WORLD BANK GROUP IN INDIA: COUNTRY PROGRAM SNAPSHOT

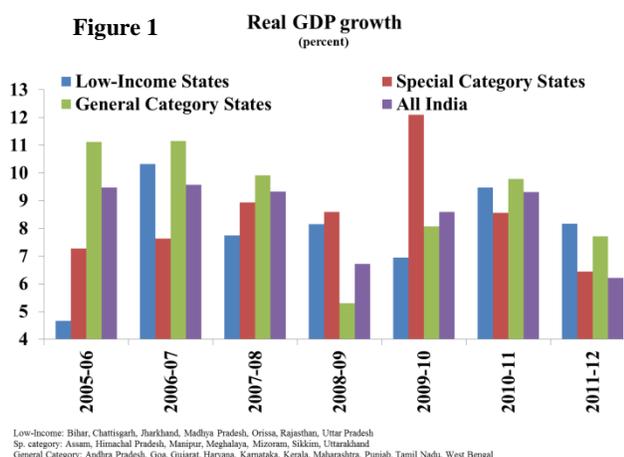
India's progress in economic and human development is one of the most significant global achievements of recent times. Between 2005 and 2010, India's share of global GDP increased from 1.8 to 2.7 percent, and 53 million people were lifted out of poverty. India is home to globally recognized companies in pharmaceuticals, steel, and space technologies, and the country is a leader in the use of information technologies for e-government purposes and public service delivery. In line with these transformations, India is now among the top 10 percentile of fast growing nations and has become a prominent global voice. Progress on human development has been remarkable: life expectancy more than doubled from 31 years in 1947 to 65 years in 2012, and adult literacy more than quadrupled from 18 percent in 1951 to 74 percent in 2011. While India has made significant progress in reducing absolute poverty, it is still home to one-third of the world's poor people. Significant development challenges remain. Helping India address these challenges is central to the World Bank Group's goal of reducing poverty and boosting shared prosperity.

RECENT ECONOMIC DEVELOPMENTS

In recent times, India's economic development has been remarkable. In the last decade, India grew faster than 89 percent of the world's nations. Real GDP expanded at an average annual rate of 7.9 percent between FY2003-04 and FY2012-13. India also weathered the 2008-09 global crises relatively well, with GDP growth slowing somewhat to 6.7 percent in FY2008-09 and rebounding strongly to an average of 9 percent in the two subsequent years.

Growth has been in double digits for some states—well above the all-India average. Under the Government's 11th Five-Year Plan (FY2007-2008 to FY2011-2012), some of India's low-income states grew at a record pace, with Bihar (one of the poorest states) outperforming even the most advanced states. Madhya Pradesh, Rajasthan, and Uttar Pradesh—all low-income and highly populous states—have also grown rapidly. The average annual growth rate in all low-income states combined was 8.1 percent during the duration of the 11th Five-Year Plan, marginally higher than the 8 percent average growth rate attained at the All-India level.

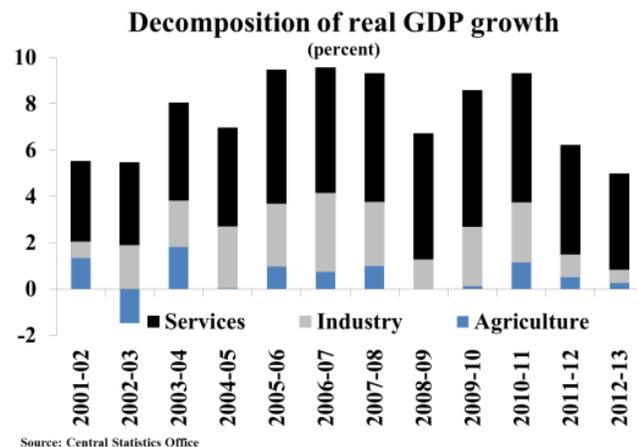
In recent years, real GDP growth has slowed considerably. In FY2012-13, the economy slowed to a ten-year low of 5 percent¹ and further to 4.4 percent in the first quarter of FY2014. Although all sectors were affected, manufacturing growth took the biggest hit and the investment rate fell below 30 percent for the first time in eight years. After widening to an all-time high of 4.8 percent of GDP in FY2012-13, the current account is now projected to improve to 4.1 percent of GDP in FY2013-14. Although the in the merchandise trade deficit worsened at the start of the current FY, imports began to contract and export performance improved.



¹ According to India's Central Statistics Office.

Budget deficits have narrowed, but the decline in the debt-to-GDP ratio has lost momentum. The FY2012/13 central government deficit – using the World Bank definition, which discounts one-time divestment proceeds from revenues – was limited to 5.1 percent of GDP, a 0.9 percent of GDP improvement over FY2011/12 and a 1.7 percent of GDP reduction from the peak of FY2009/10. However, the deficit remains well above the 3.7 percent of GDP average recorded in the mid-2000s following the adoption of the Fiscal Responsibility legislation and prior to countercyclical stimulus in response to the global crisis. The decline in the general government’s debt-to-GDP ratio – which fell by more than 10 percentage points in the second half of the 2000s, driven primarily by strong GDP growth – has come to a halt, and it is expected to remain about the same as last year at nearly 68 percent of GDP.

Even with this slowdown and with considerable downside risks going forward, India is likely to remain one of the fastest-growing economies in the world. Growth will rebound to 6.2 percent in FY2015-1. Recent reforms in diesel pricing, foreign direct investment in the retail sector, and public sector disinvestment plans may help improve the investment climate. In July 2013, the Government relaxed FDI norms in 12 sectors, including telecom, commodities exchange, insurance, and petroleum. On the fiscal front, the authorities have affirmed their commitment to fiscal consolidation and meeting the central government’s target of a 5.3 percent of GDP deficit.



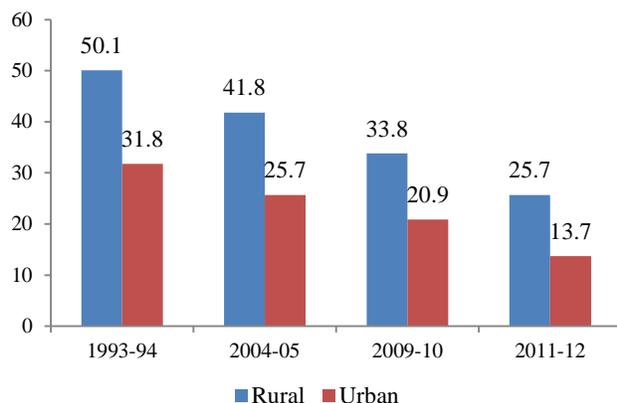
Several trends point to more robust growth in the long run. The dependency ratio will fall from 55 percent of the working-age population in 2010 to 47 percent in 2030, allowing for a higher output per capita. Savings rates are likely to rise as the relative share of the working-age group expands, allowing for faster capital accumulation. The average schooling of the population aged 25 years and above is expected to increase from 4.4 years in 2010 to 6 years in 2030. Total factor productivity has grown by around 2.5 percent per year, and this rate could increase as markets integrate further and workers shift from low- to high-productivity jobs. While less than 30 percent of the population lived in cities in 2010, that amount expected to climb to 40 percent in 2030.

The rupee stabilized in September, regaining some of the ground it had lost in previous months. In May and August 2013, the Indian rupee lost more than 18 percent in value vis-à-vis the US\$, hitting an all-time low of 68 per US\$ on fears that the US Federal Reserve quantitative easing program may be withdrawn. Similar concerns affected other emerging markets’ currencies: the Brazilian real, South African rand, and Indonesian rupiah have all depreciated against the US\$. The depreciation of the rupee at the time was sharper, because India was perceived as being more vulnerable than other emerging economies, due to its large budget and current account deficits. The gradual articulation of a clearer reformist stance by the Government and central bank, along with news that the Fed will postpone its tapering of quantitative easing, have brought a measure of tranquility to local financial markets. In early September, the rupee recovered a third of its recent losses and retreated to a 62 per US\$ range. While initial readings of the “rupee crisis” emphasized its fiscal roots, it is becoming gradually clear that a lackluster export performance and the decline in investor confidence are the main vulnerabilities of the Indian economy. With the turmoil itself being much less sizeable than originally feared, the overall impact on poverty is likely to be muted.

POVERTY AND SHARED PROSPERITY

India has made significant progress in reducing absolute poverty during the last two decades. It has already achieved the first Millennium Development Goal by halving the proportion of people whose income is less than \$1.25 a day.² The less well-off are increasingly reaping the benefits of shared prosperity, with a narrowing of the gap between average consumption growth and growth of the bottom 40 percent. Most notably, rural poverty has decreased sharply since the early 1990s, with a faster pace of decline after 2004-05 (Figure).³ The rate of decline increased between 2009-10 and 2011-12 in several low-income states, such as Bihar, Uttar Pradesh, Rajasthan, and Chhattisgarh.

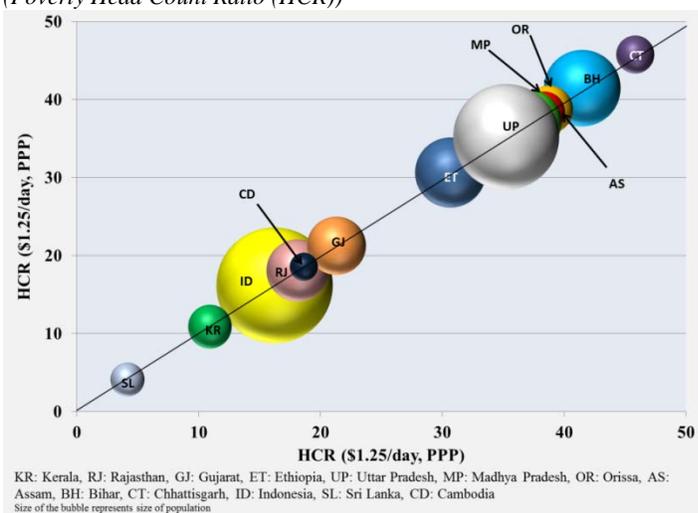
Figure 3. Rural, Urban Population below the National Poverty Line, percent



Despite these gains, the absolute number of poor is large. In 2009-10, nearly 400 million Indians still lived in poverty. Yet a preliminary assessment of 2011-12 data suggests that the pace of poverty reduction stepped up in the subsequent two years, with over a 100 million people moving above the \$1.25 a day poverty line.⁴ Poverty rates also vary significantly across and within states. Each of the seven low-income states has poverty rates that are two to three times higher than those of the more advanced states.⁵ Poverty rates—as well as a range of human development indicators—in the poorest states (which are also the most populous) are comparable to those of low-income countries in other parts of the world.

Figure 4. Comparison of select Indian States and low- and lower-middle income countries

(Poverty Head Count Ratio (HCR))



² Preliminary estimates based on the recently released household survey for 2011-12 suggest that 23 percent of people live on \$1.25 or less per day in PPP terms. This is down from 53.6 percent of the population in 1993-94.

³ Based on national poverty lines and mixed recall period consumption aggregates.

⁴ A significant decline between the two years is seen partly because 2009-10 was a drought year, whereas 2011-12 was a year with record food-grain production.

⁵ Low-Income States: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh.

India's rapid growth in the last decade has not benefited everyone uniformly. India's consumption inequality as measured by the Gini coefficient is 0.32, with widening disparities between urban and rural areas. Despite accelerated social mobility and urbanization, Indian society remains highly segmented, and income inequality alone does not reflect the depth and range of social inequities. Structural and persistent inequalities by gender, caste, and tribe persist, and indicators of poverty and human development for these groups lag behind those of the general population. Poverty rates have declined substantially for scheduled castes (29.4 percent in 2011-12 from 40.6 percent in 2009-10), but they remain stubbornly high among scheduled tribes (43 percent in 2011-12).

On a range of human development indicators, India lags behind world averages. The country ranks 134 out of 187 on the United Nation's 2011 Human Development Index. At 65.4 years, life expectancy is more than 5 years lower than the world average, and persistently high rates of malnutrition contribute to other health problems and undermine productivity. At 4.4 years, educational attainment is low, and India still accounts for one-third of the globe's illiterate people. Gender inequality remains high, with the ratio of girls to boys decreasing steadily over the last 50 years.⁶

Lifting people out of poverty is not enough. Even above the threshold for the World Bank's global indicator of shared prosperity (defined as consumption growth of the bottom 40 percent of the population), a large number of people, especially in rural areas, have consumption levels that are very close to the poverty line. These vulnerable people live on more than \$1.25 and less than \$2.50 per day, or between one and two official poverty lines.⁷ Minor shocks—illness, poor crop yields, indebtedness, high inflation—can easily push them below the poverty line. Poverty reduction efforts need to be accompanied by social protection initiatives to protect people from falling back into poverty. The end goal is to increase shared prosperity—that is, to increase the number of people who are not poor, who are socially included, and who are reasonably secure.

DEVELOPMENT PROGRESS, CHALLENGES AND WBG CONTRIBUTIONS

Despite significant development progress and poverty reduction, India's development agenda remains a complex work in progress. As detailed in the Government's 12th Five-Year Plan, the challenges are many, cutting across all sectors, all 35 union states and territories, across the rural and urban space, and impacting the lives of its 1.2 billion people. Regional disparities persist, with the seven poorest states accounting for half of India's 400 million poor people.

The WBG partnership with India is strong and enduring, spanning nearly six decades. Since its first IBRD loan to Indian Railways in 1949, WBG financing, analytical work, and advisory services have contributed to the country's development. WBG-supported activities, for example, have had a considerable impact on universalizing primary education, empowering rural communities through a series of rural livelihoods projects, revolutionizing agriculture through support of the Green—and more recently White (milk)—Revolutions, and improving health outcomes by helping to combat polio, tuberculosis, and HIV/AIDS.

The new joint WBG Country Partnership Strategy (FY2013-17) presents a program of support that aims to help India reduce poverty and boost shared prosperity. The CPS presents two long-term scenarios—a vision for India in 2030—that indicate what could be accomplished with continued strong focus on economic development and inclusive growth. For example, the number of global poor could decrease by 191 million. To help realize this vision, in the medium term, WBG support to India will focus on three broad engagement areas: 1. Integration; 2. Urban-rural Transformation; and 3. Inclusion. The environment, governance, and gender cut across all three areas. Over the next five years, the India program is expected to make two major strategic shifts: a more pronounced engagement in India's low-

⁶ The so-called child sex ratio measures the number of girls per 1,000 boys aged 0–6. In India the ratio has decreased steadily over the last three decades, from 962 in 1981 to 914 in the 2011 census.

⁷ The official poverty line for India (currently under revision) is set at the equivalent of \$1.17 per person per day in PPP terms. The unofficial lower bound of prosperity is set at two poverty lines.

income and special category states, and a focus on the rural-urban transformation, particularly on urbanization.

Integration

Enhanced efforts to increase India's market integration can significantly boost the country's economic growth. Better integration – connecting India's diverse regions and sectors – will result in more-balanced growth among Indian states, helping low-income states converge more quickly with their faster-growing neighbors.

The challenges in this area of engagement, and the WBG's program to help the Government of India address them include:

Addressing India's massive infrastructure gap. Although India's transport network is one of the most extensive in the world, accessibility and connectivity are limited. Only 20 percent of the national highway network (which carries 40 percent of traffic) is four-lane, and one-third of the rural population lacks access to an all-weather road. Ports and airports have inadequate capacity and often poor transport connectivity. Trains move very slowly, owing to poor maintenance, and the entire railway system is grappling with issues of financial sustainability.

Key WBG contributions: Support for the transport sector will focus on the reform and development of railways, highways, and rural roads, and on improving road safety and ensuring asset sustainability. Support builds on lessons learned from ongoing transformative projects and from state level interventions. Over the next five years, WBG projects will aim to improve transport connectivity by upgrading and maintaining 9,000 km of state highways and significantly increasing rail transport capacity on the Eastern Freight Corridor.

Further strengthening India's energy sector to improve the availability and reliability of power for economic development. Over the past decade, India has nearly doubled its installed generation capacity, become a global leader in renewable energy, improved its transmission network, developed electricity exchanges, and enacted major energy-related legislation. Despite these achievements, an estimated 300 million people and 40 percent of rural households do not have access to electricity, while those who are connected to the grid must cope with an unreliable supply. Rural poor households also rely heavily on traditional sources of fuel, which overtime have a negative impact on health outcomes.

Challenges include: an energy demand that far outstrips supply; below market pricing of electricity; constraints on the coal and gas supply that force generation stations to operate below capacity; and high rates of loss in distribution. At the state level, the power sector faces especially acute financial difficulties; accumulated losses in the state distribution sector amount to 1.5 percent of India's GDP. A new financial restructuring plan, approved in September 2012, is expected to put State Electricity Boards on a more financially sustainable footing.

Key WBG contributions: Interventions at the national and state levels will focus on ensuring financially sustainable access to electricity by (i) increasing access to modern energy, especially in India's low-income states; (ii) increasing the availability of power to underpin growth while



The long-term partnership between the WBG and POWERGRID has not only contributed to the improvement in technical standards and implementation of state-of-the-art technology, but also supports POWERGRID in its institutional strengthening through safeguards and fiduciary dialogue, enabling it to become a globally recognized transmission utility.

balancing sustainability and climate change concerns; and (iii) strengthening institutions and the financial sustainability of the sector. Support will aim to improve inter-regional power transmission connectivity by increasing the power exchange between regions and states by 23 percent over the next five years. An additional 300,000 poor households are expected to have access to electricity as a result of the Northeast Power Transmission project.

Improving and maintaining a healthy investment climate—with an eye to increasing private investment. In the aftermath of the global financial crisis, India’s gross domestic savings rate declined significantly to 32 percent of GDP, constraining much-needed investment to address the infrastructure gap, alleviate capacity constraints, and raise potential output. The reduced availability of domestic financing sources combined with the need to maintain high investment rates to support and accelerate economic and foreign investors. Policies that distort key markets are detrimental to India’s investment climate.

Key contributions include IFC’s efforts to expand state-level partnership programs with Rajasthan, Odisha, and other states where IFC serves as advisor to the government to improve the investment climate, and to simplify and modernize tax regimes. Overall, IFC has helped generate \$309 million of private sector investment in FY2011-13 through investment climate programs with state governments.

Job creation as an important component of poverty reduction and a cornerstone of development. Over the last two decades, 8 million people annually entered the labor force in India. Job creation, which has remained relatively flat over a long period, will continue to be a tremendous development challenge as India grapples with how best to provide opportunities to its burgeoning young workforce. At present, only 16 percent of the workforce derives its income from regular wage employment, and more than half are engaged in agriculture. At 29 percent, the female labor force remains small.⁸

WBG contributions: Manufacturing will need to be the key driver of jobs growth (the Government’s ambitious targets are to create 70-100 million jobs in the next fifteen years). The Bank has provided sustained support to the Planning Commission over eighteen months, providing input to the Manufacturing Plan, and helping to conceive and launch the India Backbone Implementation Network (IbIn) to facilitate its implementation (the “how” being a more substantial constraint than ideas for the “what” in this sector). Support has been provided for a policy dialogue between the Centre and States on the regulatory environment, as well as the specific sectors of textiles, electronics, and logistics. This work is feeding into State-level multi-sector policy dialogues, as in Odisha.

Ongoing support to rural-livelihood projects across 16 states under the National Rural Livelihood Project (NRLP), as well as state projects in Bihar, Madhya Pradesh, Rajasthan, Tamil Nadu, and four Northeastern states, help enhance rural livelihoods by: (i) improving existing livelihoods (working with farmers to help them diversify products, lower cost of production, and identify stable markets for their goods); (ii) identifying self-employment opportunities and providing both access to credit and technical assistance for business development; and (iii) developing skills that are better matched to the needs of the market. Livelihoods will continue to be a main source of off-farm job creation in rural India. By 2017, it is expected that the income of an additional half a billion poor households will increase by 20 percent as a result of these Bank-supported interventions.



30 million poor households from 90,000 villages organized into 1.2 million self-help groups.

⁸ International Labor Organization, 2010.

Meeting demands for more skilled workers across many sectors, higher rates of employment, and higher wages. The country now faces a massive shortage of skilled labor, which stymies productivity. Less than 10 percent of the working population has completed secondary education or above, and too many secondary graduates have skills and knowledge that are poorly matched to labor market needs. To sustain high economic growth and make it inclusive, India urgently needs to expand both the extent and quality of high-education opportunities. Empowering youth, especially in rural areas, with skills that are better matched to the demands of the labor market—informal or formal—will also help facilitate migration to city centers where wage jobs are more readily available.

The WBG will contribute to the 12th Plan target of providing vocational training to 500 million workers by 2022 by focusing on interventions that improve demand-driven skills for productive employment. Through the ongoing Vocational Training Improvement project, graduates of Industrial Training Institutes will have an easier time finding employment, and a job training component under the Bank-supported rural livelihoods projects will help youth (more than 50 percent of them young women) find appropriate employment often in small and medium-sized cities. An important input will be IFC's work with the National Institute of Entrepreneurship and Small Business Development to develop and deliver a country-wide program to train trainers.

India and its neighbors have not fully realized their potential for growth through further regional and global integration. Although some progress has been made, South Asia remains one of the least integrated regions in the world with regard to policy, trade, and infrastructure. This lack of integration directly affects India's economic development and hampers management of shared natural resources, such as cross-boundary river basins. It aggravates the isolation of the underdeveloped northeastern states from trade and transit routes and limits access to necessary energy resources, such as oil and power. The Government's regional integration goal is focused on seizing opportunities for increased trade and investment in South Asia, but also in emerging East Asian economies.

The WBG will promote regional integration, especially in: (i) the integrated management of natural resources and regional public goods; (ii) the pooling of power resources; (iii) trade and transport regional facilitation; and (iv) business dialogue. A new Nepal-India Power Transmission and Trade Project will finance construction of a cross-border transmission line to increase the trade of electricity (up to 150 MW) between these two neighboring countries. Analytical work will continue to underpin dialogue on critical regional issues. IFC Advisory Services on the Buddhist Circuit Program with the Ministry of Tourism and the Governments of Uttar Pradesh and Bihar will help develop an integrated Buddhist tourism trail across two states in India and with Nepal.

Rural-Urban Transformation

India is undergoing a massive rural-urban transformation—one of the largest of the 21st century. For the first time since Independence, India has seen a greater absolute growth in urban population. The number of towns increased from about 5,000 in 2001 to 8,000 in 2011, and some 53 cities now have a population exceeding 1 million. Today, 31.1 percent of the population lives in cities, and the share is expected to rise to 50 percent in the next 20 years. Accelerating urbanization is central to India's growth, development, and poverty reduction, but it cannot be done without an equally pronounced focus on rural development in a sustainable manner. Rural areas are often poorly connected to cities, resulting in weak value chains for agricultural products and slow rates of off-farm job creation.

Accommodating the needs of an additional 10 million urban dwellers each year will be a strategic policy issue for many years to come. Providing them with adequate services such as water, sewerage, drainage, and transportation, and creating opportunities for further economic development will be a challenge. The needs are particularly dire in India's growing slums. Investments—both public and private—have not kept up with demand. Weak urban planning, ineffective regulations governing land management and use, and distorted land markets hinder the development of vibrant, livable cities. Urban governance is a major issue across all states and cities, and urban service delivery institutions have limited autonomy, accountability, and incentives or client orientation.

Key WBG contributions to urban development will focus on supporting efforts at the national level, as well as state and city government efforts to improve the management and livability of second-tier (medium-sized) cities across India. Support will be in three broad areas: institutional capacity strengthening of urban government, urban transport, and water and sanitation. A series of state-level urban and municipal development lending operations will help at least 220 cities develop and implement new and/or updated urban management systems that will improve the service delivery. The Karnataka Municipal Reform Project will help another 230 cities across the state implement a new e-governance and/or GIS mapping system to drastically improve service delivery. Analytical and advisory work on urban-related issues is expected to figure prominently in the program, and will underpin future lending operations. A recently completed study on the social dimension of urbanization is meant to contribute to policy dialogue on the role social protection systems and safety nets can play in a country with a growing urban poor population.

Box 1: World Bank Institute's Capacity Building for Urban Development Over the last three years, WBI has been providing focused capacity development support for sustainable urban development, including support to the Ministry of Urban Development, Ministry of Housing and Urban Poverty Alleviation (MoHUPA), as well as training institutes and think tanks. WBI will deepen its engagement to support national and sub-national governments in formulating and implementing an urban capacity development program; build capacity for urban planning and slum rehabilitation; and scale-up training/e-learning and peer-to-peer knowledge exchanges in partnership with in-country institutions. WBI has been playing an active role to support the IBSA Human Settlement Working Group for peer exchanges, as well as dialogues on issues of informal human settlements. A new initiative to enhance capacity for developing and implementing metropolitan strategic plans will start in FY14.

Faster economic growth has accelerated degradation of the environment and depletion of scarce natural resources that are essential for sustaining growth and eliminating poverty. India's long-term growth is predicated on its ability to address environmental problems such as soil erosion, water and air pollution, growing water scarcity, and the declining quality of forests. In Northern India, the aquifers are receding by an alarming 4 cm annually. The challenge is further exacerbated by environmental stresses resulting from urbanization processes that are often chaotic, and from private sector development. The cost of environmental degradation in India was estimated in 2009 to be 6.6 percent of GDP.⁹

Key Bank contributions will be in environmental protection and biodiversity conservation. Work will focus on developing effective systems and institutions to enable more efficient environmental management and reduction of resource degradation, including interventions in three areas: (i) coastal management; (ii) industrial pollution management; and (iii) natural resources (particularly water), ecosystems and biodiversity. Efforts will intensify to integrate sustainability considerations and lower carbon approaches in project design across sectors, but especially in infrastructure. On coastal management, the Bank will support the simultaneous economic development of India's extensive coast line and preservation of its fragile ecosystems with pilots in Gujarat, Odisha, and West Bengal. The new coastal disaster risk reduction project in Puducherry and Tamil Nadu will also pilot improvements to marine fisheries, particularly in inshore coastal areas. On pollution management, the Bank's ongoing Ganga Basin Project will help build the National Ganga River Basin Authority's capacity to pilot wastewater collection and treatment, and adopt river conservation measures, which by 2017 should prevent at least 160 million liters per day of untreated wastewater from entering India's iconic river. The Capacity Building for Industrial Pollution project is helping deploy technologies and management practices for cleaning up toxic legacy sites.

Stepped-up efforts to develop agriculture are slowly yielding results, but these are still below Government targets. Between 2000-01 and 2010-11, agriculture grew at an average rate of 3.1 per annum, below the 4.0 percent target for the last two five-year plans. Stressed natural resources, poor rural infrastructure, inadequate technology, limited access to credit, underdeveloped extension and marketing services, and insufficient agricultural planning at the local level contribute to the lackluster performance. Ongoing global food security concerns, pronounced food-price volatility, and concerns about climate

⁹ World Bank estimates, 2009.

change all highlight the urgency of boosting India's agriculture productivity. Agriculture remains the main source of livelihoods for half the population.

Key WBG contributions will focus on innovative approaches and systems strengthening. Support to the National Integrated Watershed Program in eight states will contribute to overall productivity gains in a country where 65 percent of agriculture is rainfed. State-level irrigation projects will also aim to improve productivity by promoting water use efficiency, strengthening water-related institutions, and building capacity for the management of irrigation systems and decentralized management of irrigation tanks. By 2017 cereal yields in targeted states are expected to increase by close to 20 percent for paddy, wheat, and sugar as a result of WBG interventions, and state-level agricultural competitiveness projects will help translate increased demand for agricultural products into higher incomes for farmers.



Agriculture yields increased by 35-50 percent in areas supported by Bank projects in water management, while IFC's advisory support to DSCL, an Indian sugar company, led to substantial productivity gains for sugarcane farmers. The IFC program is now being replicated with six sugarcane companies involving 200,000 farmers.

Access to adequate water and sanitation is critical to improving the quality of life and economic potential of all Indians—in rural and urban settings alike. Although the government at the national and state level spends \$4 billion annually on

improving access to rural water supply and sanitation, only one-third of rural households have access to piped water and sanitation.¹⁰ The already stressed water supply and sanitation delivery system will have to be revamped to respond to the urbanization challenge—an additional 250 million people will migrate to cities in the next 20 years. Although more than 70 percent of the urban population has access to tap water and more than 80 percent to basic sanitation, piped water is only available for a few hours per day and raw sewage often overflows into open drains. The economic impact of inadequate sanitation in India is estimated at \$54 billion or 6.4 percent of GDP in 2006. Most of that cost is attributed to premature mortality and health-related costs.



Through WBG interventions in the states of Kerala, Maharashtra, Karnataka, Uttarakhand, and Punjab an additional 24 million rural residents have access to improved water supply services, and 17 million have benefitted from improved sanitation programs. More than 13,000 Nirmal Gram Panchayat (open-defecation free) awards have been received by Bank-supported States.

Key WBG contributions, spanning two decades and three generations of Rural Water Supply and Sanitation (RWSS) projects, focus on strengthening governance and institutional arrangements for water supply and sanitation services; piloting service delivery models that are efficient, accountable, and customer-oriented; and improving the financial sustainability of providers. Going forward, engagement in rural areas will include the Maharashtra RWSS Project using the new performance for results instrument, and a multistate RWSS project focused on low-income states. A successful 24-7 water supply pilot will be scaled up in three cities in Karnataka. IFC will help address efficiency and conservation issues in municipal, agricultural, and industrial water. A new program, for example, will focus on water-use efficiency in major water-intensive commodities, and will also help private sector partners adopt water-efficient technologies. IFC's Advisory Services is also helping India and more broadly South Asia

¹⁰ Indian National Census, 2011.

to become a global leader in water sustainability in private sector operations. WBG interventions are expected to result in an additional 34 million people gaining access to improved water sources and additional 12 million to improved sanitation.

Inclusion

Inclusive growth is a key priority for the Government's 12th Five-Year Plan. Inclusion is about ensuring that everyone benefits from faster economic growth, regardless of social grouping, age, gender, or place of residence. This will require significant improvements in the social sectors of education and health (notably progress toward universal health coverage), better access to safe water and electrical power, and creating meaningful employment and livelihoods opportunities. Economic integration and rural-urban transformation can benefit a large share of India's population, but only if there is a stronger focus on human development and on policies that help make growth inclusive. For example, a growth strategy that focuses on labor-intensive sectors, rather than on skill- and capital-intensive ones, and on the development of small and medium-size enterprises will help create productive employment opportunities for India's poor people and make growth more inclusive.

Although India's health indicators have continued to improve, progress has not matched the country's economic growth over the past decade. Maternal and child mortality rates – despite increasing rates of decline – remain on par with those in much poorer countries. India faces an unfinished agenda of tackling childhood and infectious diseases and malnutrition, as well as an emerging and rising burden of non-communicable and chronic diseases (India and China vie for the largest number of diabetics in the world). Progress on tackling communicable diseases such as AIDS, tuberculosis, and polio has been significant, but continued attention is needed to secure the gains. Poor people are highly vulnerable to health shocks, with medical expenses contributing to household poverty and compromising efforts to improve health outcomes.

Despite the central government's increased focus on and financial commitment to health issues, a major challenge is to implement the funding effectively. Although public financing for health is expected to double under the 12th Plan, increased public funding is not enough; it must be accompanied by improved effectiveness of spending at all levels, greater access to quality health care, and more effective delivery of health services. The many systemic constraints include weak accountability arrangements and incentives for performance, weak quality assurance, a largely unregulated private health care sector, limited mechanisms for financial protection, and weak information and surveillance systems, combined with inadequate use of evidence-based planning, programming, and management. Out-of-pocket health expenses are high (on average accounting for 70 percent of total health spending) and affect poor households disproportionately.

The WBG will contribute to improvements in the health sector (public and private) with interventions, mostly at the state level, focusing on strengthening institutions and accountability, developing local systems and capacities, and addressing government and market failures. Financing, advisory services, and capacity building initiatives will almost double the number of poor and vulnerable households covered under the Government Sponsored Health Insurance Schemes, and IFC's investment will allow close to 10 million patients to have access to private health facilities. A joint World Bank-IFC initiative will focus on improving poor people's access to quality health care and reducing out-of-pocket expenditures in two low-income states.

Improving the nutritional status of India's children is particularly important. Child malnutrition remains high, and widespread. India accounts for 40 percent (217 million) of the world's malnourished children. Despite India's impressive economic growth in the past decade, malnutrition has declined very little. Stunting rates in India are two to seven times higher than those in other BRICS countries. While nutrition has recently received increased attention with the restructuring of the Integrated Child Development Services (ICDS) scheme, there remain very significant programmatic, institutional, technical, implementation, and capacity constraints.

The Bank's financial, analytical, and technical support at both the national and state levels will focus on strengthening the nutrition policy framework as well as systems and capacities to improve nutrition. Interventions in this area will be mostly through the newly restructured ICDS and increasingly through

multi-sectoral actions, using Government and Bank operations as platforms. The Bank-supported National Rural Livelihoods, for example, aims to contribute to efforts to combat high malnutrition by setting up a network of nutrition centers that cater to pregnant women and children up to five years of age.

India's efforts to improve access, equity, and quality of education at the primary, secondary, and tertiary levels remains a work in progress.

Now that access to primary education has been largely universalized, the challenge ahead is to improve quality, learning outcomes, retention, and access to education by underprivileged children, often in very remote areas. As the success of elementary education has resulted in demand for education beyond elementary level, there is increasing focus on improving access to secondary education. Of those children who finish primary education, 83 percent transition to the next level. Enrolment rates for grades 9–12 are just 40 percent, and of those enrolled, approximately 15 percent drop out and one-third fail their examinations. While inequities are declining in terms of access and participation at all levels of education for all socioeconomic and ethnic groups, manifold inequities persist in the type of education facilities and exposure to and availability of modern education techniques. Girls make up 45.6 percent of secondary students.



WBG support to Sarva Shiksha Abhiyan, the national Education for All program helped increase enrollment of girls in public elementary schools.

Key WBG contribution: The focus will be on improving secondary and tertiary education, with greater emphasis on educational quality. The implementation of the Bank-supported Rashtriya Madhyamik Shiksha Abhiyan will contribute to the universalization of secondary education. It is expected secondary enrollment will increase from 28 million in 2012 to 40 million by 2017. Greater attention will be paid to teacher training, performance, and accountability—key determinants of quality. Interventions will also help improve labor market entry for young adults.

Developing an inclusive financial sector remains a key development challenge in India. With economic slowdown, there is a greater risk that financial inclusion is de-prioritized – as it was in 2008-09. This poses risks for inclusive growth. Although reforms during the last two decades have improved financial access, 100 million households still lack adequate access to financial services, especially in rural areas. Increasing household access to finance (especially for the very poor) is crucial for economic growth and poverty reduction. Similarly, access to finance for India's SMEs – which account for over 40 percent of the country's exports and manufacturing output – is critical to provide the working and long term capital to grow businesses and generate employment, and thus crucial to absorb the millions transitioning out of agriculture.

India's efforts to enhance access to deposit services have received a boost through the banking correspondent channel which has helped create over 100 million no-frills accounts. Finding a viable business volume, however, that enables easy access for deposits and withdrawals, is proving difficult and transaction volumes remain extremely low. Although overall access to credit has increased, a lot remains to be done. For instance, more than half of India's farmers do not have access to formal credit. The situation is worse with respect to other financial services. Only 20 percent have access to crop insurance, and, given the high dependence on weather, are exposed to the vagaries of nature. Efforts to scale-up new products to support firm financing, including for India's SME exporters, such as export finance, receivable finance, and factoring products, could help support a faster recovery from the current slowdown gripping the country.

Key WBG contribution: The WBG has had substantive engagement supporting projects in agriculture finance and rural cooperatives, microfinance, livelihoods promotion, and SME Financing with a financial inclusion component of over US\$2 billion. These projects have had positive impact and leveraged resources – for example the Bank’s microfinance project-supported partners in low-income states (LIS) leveraged Bank resources over ten-fold to lend US\$1.3 billion to LIS in FY13. The WBG program promotes integrated approaches to financial inclusion by facilitating access to credit and other financial services to farmers and households. Projects on rural livelihoods projects (at the state and national levels), sustainable and responsible microfinance, low-income housing finance, and agriculture insurance (under preparation) will be central to the Bank’s response in this area. The Bank will seek to leverage its resources and support new products (such as insurance) and use of technology (such as Unique Identification-enabled financial service provision), focusing on LIS. IFC’s key objective is to improve the depth and quality of financial services, through: (i) financial product diversification; (ii) responsible finance (i.e. promoting financial awareness among clients and transparent reporting by financial institutions); and (iii) supporting delivery channels using new technology and agents. New approaches to delivery of financial services will be key in coming years to expand reach. IFC has already begun work in this regard with Government-to-Person payments, and will continue to work on innovation in payments systems, alternative delivery channels, remittances, and government payments. By 2017, it is expected that an additional one million households will have access to formal financial services as a result of WBG interventions, and an additional 20 million loans will be made to micro, small, and medium enterprises.



In 2013, IFC received the Skoch Financial Inclusion Award for its innovative advocacy work to promote responsible finance, risk management, and consumer protection principles in India. Since FY08, IFC investments and advisory services to India’s micro, and small- and medium-sized enterprises have helped over 48 million people access to financial services.

With more than 90 percent of India’s labor force in the informal sector, social protection systems to help people, especially the very poor, absorb and manage economic risks and shocks are critical to India’s development. Under the 12th Five-Year Plan, the Government aims to overhaul the sector by introducing a direct cash transfer system—the Direct Benefits Transfer (DBT) initiative—for major subsidies and welfare-related beneficiary payments. Launched at the beginning of 2013, DBT is expected to reduce India’s welfare program expenditures, prevent leakages, and decrease corruption. (At 2 percent of GDP per year, welfare spending on large centrally-sponsored schemes in India is very high compared to that of its East Asian neighbors, Indonesia and China.) DBT represents a fundamental shift in Indian welfare policy and is seen by some as a vehicle to lift millions of people out of poverty. To roll out the program successfully, the capacity of institutions at the state level has to be strengthened. Social protection coverage expanded substantially with the recent passing of the National food Security Act, making access to food a legal right. The Act entitles two-thirds of the population to subsidized food grains. *Key Bank contributions will focus on enhancing social protection coverage, including for health and disability insurance, job transition insurance, and protection in old age. Because many programs do not reach all of their intended beneficiaries, with significant variation, particularly in low-income states, the Bank will work with states to expand coverage. Increased use of ICTs in program delivery and management will form a cornerstone of this work, together with capacity building and enhancement of human resources at local levels. Ongoing non-lending technical assistance supports the Government’s efforts to convert many in-kind subsidies and support programs to cash assistance through its new Direct Benefits Transfer initiative.*

India is highly vulnerable to climate change because of high levels of poverty, high population density, heavy reliance on natural resources, and an environment already under stress. Under a moderate climate-change scenario (an increase in mean annual temperatures of 1.1 to 2.3° Celsius), the

risk of increased frequency and severity of natural hazards is likely to increase, and densely populated cities will be at extreme risk. Kolkata is among the six fastest-growing cities worldwide that are classified to be at extreme risk, whereas Mumbai, Delhi, and Chennai are among the ten that are classified as high risk. Overall, India is ranked the second most vulnerable country in the world.¹¹ Institutions and mechanisms for enhanced disaster risk management and climate resilience, especially in agriculture and water-intensive sectors, are either weak or nonexistent.

The Bank's key contributions will help build institutional capacity to prepare for and manage the impact of natural disasters, and help people protect themselves from natural disasters and recover from them quickly. The National Cyclone Risk Mitigation Project helps strengthen the capacity of state disaster-management agencies to mitigate the impact of and respond to cyclones in vulnerable coastal states. The second phase of the project will focus on Gujarat, Kerala, Maharashtra, and West Bengal. Technical assistance helps build Government capacity to conduct risk assessments for geophysical hazards and vulnerabilities, establish building and planning standards, and pilot innovative approaches to risk mitigation. To mitigate risks of and vulnerability to natural disasters, especially in coastal areas, the Bank focuses on access to emergency shelter and on evacuation and protection against wind storms, flooding, and storm surges in high-risk areas. By 2017, it is expected that 400 cyclone shelters will be completed in targeted coastal areas and at least three states will have installed an Early Warning Dissemination System, which in turn will help save lives and livelihoods. The World Bank, together with the Asian Development Bank, is also supporting emergency reconstruction and mitigation programs to response to the floods in the state of Uttarakhand.

WORLD BANK GROUP PARTNERSHIP WITH INDIA

The [Country Partnership Strategy for India \(FY2013-2017\)](#) was discussed by the WBG Board of Executive Directors on April 11, 2013. Its overarching goals are accelerating poverty reduction and boosting shared prosperity. To make a meaningful contribution on both these fronts, especially in India's low-income states which together account for half of India's 400 million poor people, the volume of financing support from the WBG should reach \$5 billion per year over the next five years. This includes financing from the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), and International Finance Corporation (IFC). Guided by the Government of India's "Innovation Impulse with Investment" approach toward working with multilaterals, and to respond to India's many challenges, the strategy proposes deepening and strengthening WBG engagement in three broad areas: 1. Integration; 2. Rural-Urban Transformation; and, 3. Inclusion.

The CPS calls for a more pronounced engagement in India's low-income and special category states. Over the next five years, the Bank will work with the Government to rebalance the portfolio, so that 30 percent of all IBRD/IDA lending will be directed to 14 low-income and special category states.¹² Combined these states are home to 200 million poor people, have gross state domestic products (GSDP) that lag far behind the all India average, and struggle with low human development indicators that are comparable to some of the poorest countries in the world. The current IBRD/IDA portfolio includes 17 lending operations to these states, amounting to 13 percent of total commitments. IFC's has also intensified its program in LISs; annual commitments have steadily increased, more than quadrupled over the last five FYs, from \$60 million in FY09 to \$273 million in FY13 (see Figure 7).

The strategy builds on a large current portfolio, which will be the main source of development results under this CPS. As of end FY13, the IBRD/IDA portfolio includes net commitments of \$22.4 billion across 78 projects. Of that amount, \$16.3 billion is undisbursed. It is a relatively young portfolio with 32 projects (40 percent) added in the last 3 years amounting to \$9.9 billion of the total net commitments. The portfolio supports a range of sectors (see Figure 5), with transport (22 percent),

¹¹ Maplecroft's Climate Change Risk Atlas, 2011. Available on www.maplecroft.com

¹² Low-income and special category states include: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, and eight northeast states (Assam, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, and Uttarakhand). IFC also includes West Bengal, but excludes Himachal Pradesh and Uttarakhand.

agriculture and rural development (18 percent), and energy (15 percent) having the largest shares of commitments. In terms of engagement areas, \$9.6 billion (41 percent) of the current lending portfolio is committed in areas aimed to increase India’s domestic and regional integration, \$7.5 billion (33 percent) to support the ongoing massive rural urban transition, and \$6.0 billion (26 percent) on projects aimed at making growth more inclusive. It is expected that operations related to urban development will increase over time.

Figure 5: IBRD/IDA Portfolio by Sector

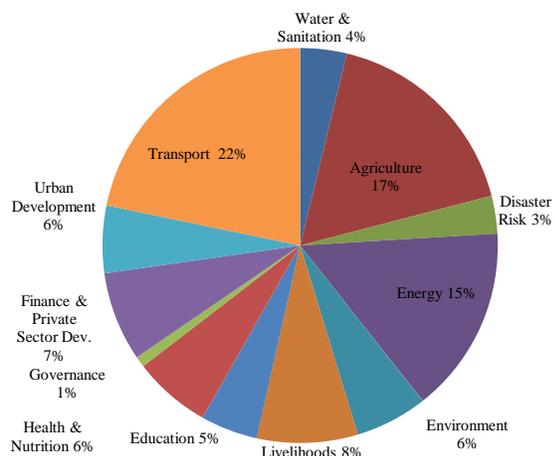
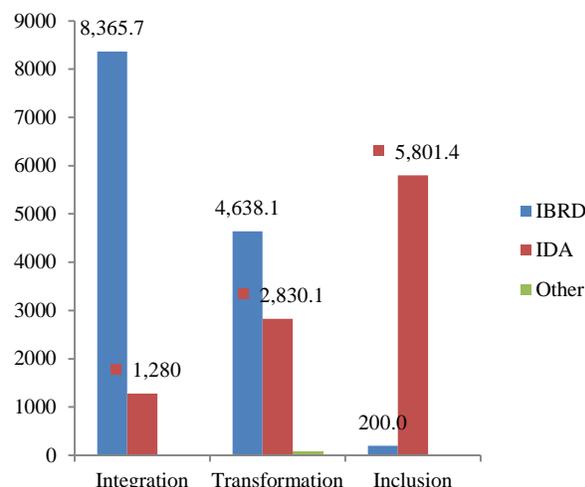


Figure 6: IBRD/IDA Portfolio by Engagement Area, in US\$ millions (as of June 30, 2013)



Under the previous Country Strategy, IFC delivered a strong program. At the end of June 2013, IFC’s committed portfolio contained 230 projects amounting to \$5 billion, including \$583 million syndications. In FY2013, IFC committed \$1.4 billion to 39 projects in India. IFC’s India portfolio is performing well. During FY2009-13, IFC committed \$5.8 billion in total financing (including its own account and mobilized funds), with nearly 34 percent supporting infrastructure. IFC commitments in climate change and low-income states—two strategic priorities has increased steadily. In FY2013, IFC committed \$273 million in investments in low-income states and \$360 million to climate change projects (renewable energy, energy efficiency, and clean technology). The advisory portfolio has grown from \$30 million supporting 42 projects in FY2009 to \$51 million supporting 66 projects as of end-July 2013 (Table 8).

Figure 7. IFC’s Annual Commitments, Two Strategic Priorities, US\$ million

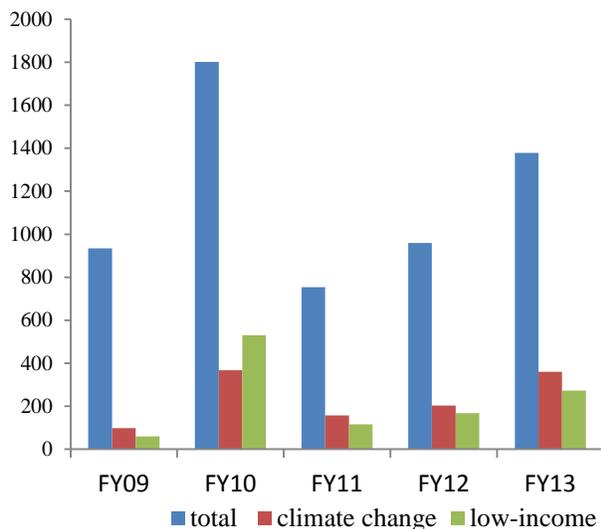
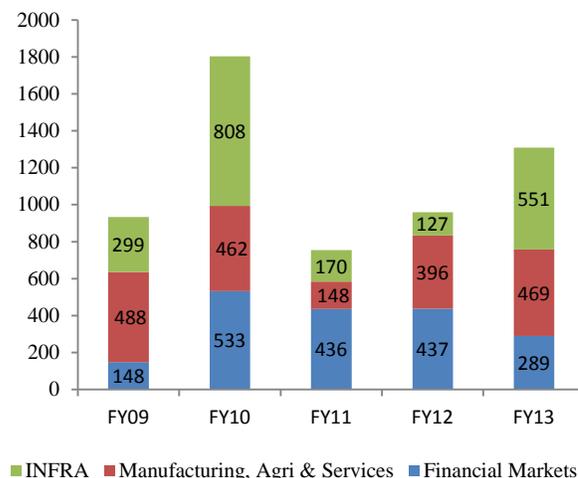


Figure 8. IFC’s Annual Commitments, US\$ millions



The WBG’s knowledge portfolio complements and underpins investment operations. The WBG knowledge agenda under the new CPS will (i) focus on in-depth analytical work on a few key cross-sectoral questions; (ii) inform design and implementation of future interventions by drawing on impact evaluations; (iii) respond quickly and flexibly with demand-driven technical assistance and just-in-time knowledge support to help reform and implementation; (iv) broker South-South and across-state knowledge exchanges; (v) develop flexible programmatic approaches to develop analytic and advisory activities; and (vi) scale-up training capacity. Central to the knowledge program will be analytical products that aim to inform public debate around key reforms critical to India’s continued high economic growth, poverty reduction, and increased prosperity. To better exploit synergies across the whole program, more multi-sectoral Analytical Advisory Activities are planned to address pressing development challenges including issues related to water, urban development, service delivery, human development determinants, and PPPs. Continued support to the Development Marketplace will help scale-up and replication sustainable business models to deliver public services and livelihood opportunities to poor people in India’s low-incomes states.

The Advisory Services program in India aims to increase IFC’s reach and development impact and works closely with IFC’s investment services. The strategic focus of the advisory programs in India is aligned with the regional strategy on inclusion (facilitating access to services for base of pyramid populations, and expanding the private sector’s footprint in low-income states), climate change, and global integration. Currently, IFC is working on 66 advisory projects in India, with over 2/3rd of the projects in the low-income states. As of FY13, the total portfolio of advisory projects in India is \$51 million (see Figure 9). In FY2013, the annual program size was \$16.3 million, tripling from \$5.7 million in FY2011. IFC provides advice on designing and implementing PPPs to India to improve infrastructure and access to basic services such as water, power, health and education. At the end of FY13, IFC’s active portfolio included 22 PPP projects, valued at \$8.1 million, across a range of sectors.

Box 2: IFC Facilitating PPPs to Address India’s Development Challenges

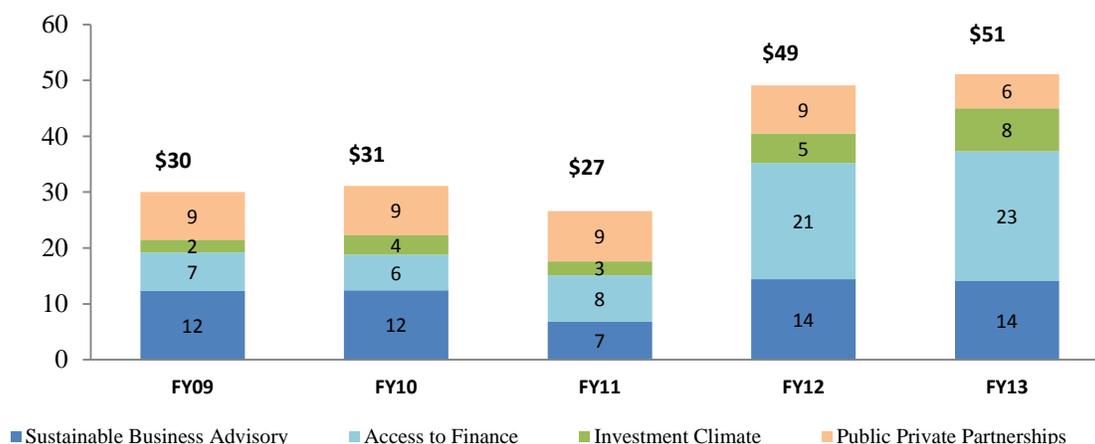
In health and education, IFC assisted the Government of Andhra Pradesh to improve access to advanced diagnostics services by helping to structure a novel PPP for upgrading radiology services at four medical teaching hospitals. The project will provide diagnostic radiology services to 100,000, mostly poor patients. In Meghalaya, IFC’s support helped attract private sector firms to bid on the construction of 100-seat medical college and 500-bed teaching hospital, benefiting 240,000 low-income patients and training 100 doctors annually.

In social protection, a joint IFC-Bank PPP project supported the Government of Meghalaya to expand health insurance to the state’s entire population. Support ensured that the new and expanded system builds on the state’s existing healthcare system, while strengthening the state’s institutional capacity for healthcare delivery.

In energy, support to the Government of Gujarat on an innovative 5 MW solar rooftop PPP project will help add power generating capacity, develop contractual models for other solar projects, and demonstrate the technical and economic feasibility of rooftop-based solar power. The project aims to reduce carbon emissions by 6,000 tons annually and 12,000 people will benefit from improved energy services at affordable prices with virtually no state subsidies.

In agriculture, IFC is helping Punjab, India’s leading agricultural state, to improve the capacity and facilities to store grain safely, preventing excessive losses due to exposure, deterioration and pests. Support resulted in a concession—the first of its kind in India at the state level—that allowed a private firm to build, own and operate a 50,000 metric ton storage facility, using modern technology and inventory management methods. The project is being replicated on a larger scale in Pakistan.

Figure 9. IFC Advisory Services Portfolio, Funds Managed by IFC, US\$ millions



The WBG India program has benefited from trust funds. Trust funds focusing on global partnerships and public goods have supported many activities in India, most prominently in health. The Global Fund for AIDS, Tuberculosis, and Malaria has disbursed almost \$800 million in India since its inception in 2003. Two donor trust funds—from DFID and AusAid—have supported analytical work and capacity building efforts. In 2009, DFID renewed its support, with a contribution of £20 million, and increased that by £6.5 million in 2012. Funding has helped leverage the World Bank’s support to improve service delivery, address climate change, and promote inclusive growth and governance in low income states such as Bihar, Chhattisgarh, Jharkhand, and Odisha. AusAid is providing US \$3.4 million through its South Asia Region Infrastructure for Growth trust fund to support project preparation. Sixty percent of IFC’s advisory program in India is supported by donor trust funds. IFC’s donor partners in the region include Australia, Austria, Canada, Denmark, the European Union, Finland, Germany, Italy, Japan, the Netherlands, Norway, South Korea, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The US Department of State and Government of Italy, for example, contributed a total of \$4 million to the “Lighting Asia India Program.” In an effort to diversify funding sources, IFC advisory is working to engage with new partners such as the Gates Foundation on improving health services and promoting financial inclusion in Bihar.

ANNEXES

The annexes present short summaries of ongoing World Bank Group projects, organized by three strategic engagement areas: 1. Integration; 2. Rural-Urban Transformation; and 3. Inclusion. While all 78 projects currently in the World Bank portfolio are included, only a small subset of IFC committed investments are included. For additional information on each World Bank project, please see the most recent Implementation Status and Results Report (the relevant link is provided on each project description page). Reports can also be accessed on www.worldbank.org/projects

Annex 1: Integration

Eastern Dedicated Freight Corridor I
PMGSY Rural Roads
Andhra Pradesh Road Sector
Assam State Roads
Punjab State Road Sector
Himachal Pradesh State Roads
Orissa State Roads
Kerala State Transport Project II
National Highway Authority of India Technical Assistance
Karnataka State Highway Improvement II
Fourth Power System Development
Fifth Power System Development
Vishnugad Pipalkoti Hydroelectric Power
Haryana Power System Improvement
Coal-Fired Generation Rehabilitation
Rampur Hydropower
Second Hydrology
Financing Public-Private Partnerships in Infrastructure through Supporting the India Infrastructure Finance Company (IIFCL)
Vocational Training Improvement
OCL II India Ltd. (IFC)

INDIA: Eastern Dedicated Freight Corridor Project I

Key Dates:

Approved: May 31, 2011
 Effective: December 30, 2011
 Closing: June 30, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|----------------|-----------|-------------|
| IBRD | 975.00 | 23.02 | 951.98 |
| Government of India | 483.44 | - | - |
| Total Project Cost | 1458.44 | - | - |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objectives: Indian Railways (IR) operates a national rail network of about 64,600 route-kilometers. In 2011-12, it carried 8.2 billion passengers and 969 million tonnes of freight. Despite strong growth in its freight business, IR has been losing market share to road haulage, due partly to insufficient physical capacity and poor service quality exacerbated by the need to fit freight train movements into a busy passenger service schedule. Without additional rail network capacity, much of the traffic for which rail should have competitive advantage would be forced to use road haulage or be suppressed, in both cases at a cost to the economy and in the former case at an environmental cost as well. Over the last decade, IR has successfully adopted many management measures to squeeze more capacity from its existing assets; average trainload, equipment utilization and railway labor productivity have all been greatly improved. Physical capacity on key corridors is now the most pressing constraint.

The Dedicated Freight Corridor (DFC) project is a strategic response to network constraints on critical freight routes in India that form a quadrilateral, connecting the Delhi, Mumbai, Chennai, and Kolkata. The rail network between these cities accounts for just 16 percent of IR's route network by length, but carries more than 60 percent of its freight traffic. With India's freight traffic projected to grow at more than 7 percent annually, the DFC program will add dedicated freight-only lines, mostly parallel to the existing routes, built at higher loading standards to permit the operation of larger and heavier axle-load trains. This will not only double the overall rail capacity in the corridors, but also significantly reduce train operating costs per unit of freight. The current DFC program includes the Western Corridor (Delhi-Mumbai) and the Eastern Corridor (Ludhiana-Delhi-Kolkata). The Ministry of Railways (MoR) is the designated responsible Ministry and the shareholder of the Dedicated Freight Corridor Corporation of India Limited (DFCCIL).

The World Bank is supporting implementation of a substantial portion of the Eastern DFC under a three phased Adaptable Program Loan (APL). The APL-I is for a 343 km section from Khurja to Kanpur, entirely in the state of Uttar Pradesh. APL-II, currently under preparation, will cover about 390 km from Kanpur to Mughal Sarai, again entirely in Uttar Pradesh. The development objectives of the APL-I are to: (a) provide additional rail transport capacity, improved service quality, and higher freight throughput on the 343 km Khurja to Kanpur section of the Eastern rail corridor; and (b) develop the institutional capacity of DFCCIL to build and operate the DFC network. The APL Phase 1 Project consists of two components:

- **Design, construction, and commissioning of the Khurja-Kanpur section:** Supports the construction of 343 km of double track electrified railway capable of freight train operation with 25 ton axle loads at 100 km/h.
- **Institutional Development:** Supports (a) institutional strengthening of DFCCIL; and (b) Heavy Haul Freight systems development.

Key Results Expected:

- ✓ Additional freight train paths on the DFC will increase by 100 pairs per day.
- ✓ Average speed of freight trains on the DFC will increase from a baseline of 25 in 2011 to 60 km per hour by the end of the project.
- ✓ Rail transport capacity on the DFC will increase from 18 to 29.5 NTKM bn ton-km.
- ✓ DFCCIL institutional capacity will increase with the addition of 9,800 staff, of which 1,210 will be from the Officer Cadre.

Additional targets will be set during the Mid-term Review of this Project and the preparation on Phase I and Phase II.

Key Partners: Dedicated Freight Corridor Corporation of India Ltd (DFCCIL), Ministry of Railways (MOR), and Department of Economic Affairs (DEA).

INDIA: PMGSY Rural Roads Project

Key Dates:

Approved: December 20, 2010

Effective: February 18, 2011

Closing: November 30, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|-------------|---------------|----------------|
| IBRD | 500.00 | 1.25 | 498.75 |
| IDA (4849-IN) | 620.60 | 350.25 | 251.91 |
| IDA (4848-IN) | 379.40 | 0.0 | 379.40 |
| Total Project Cost | 1500 | 351.50 | 1148.50 |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objectives: Established in 2000, the Pradhan Mantri Gram Sadak Yojana (PMGSY)—also known as the Prime Minister’s Rural Roads Program—addresses poor rural connectivity. The Program originally sought to provide all-season road access for every community with a population greater than 1,000 by 2003, and all villages with populations greater than 500 by the end of the Tenth Five-Year Plan in 2007. The time frame for the program has now been extended, and the length of the new and improved rural road network increased to 274,000 km. As a result, 70,500 habitations are now connected. The Program’s implementation capacity has been enhanced significantly, with over 50,000 km of road being completed annually, compared to just 15,500 km at the beginning of the program. Despite these dramatic improvements in rural connectivity over the last decade, 25 percent of India’s villages still lack access to all-season roads. The Bank’s \$1.5 billion PMGSY Rural Roads Project covers a mixture of low-income states (Jharkhand, Rajasthan, and Uttar Pradesh), small special category upland states (Himachal Pradesh, Meghalaya, and Uttarakhand), and the middle-income state of Punjab.

The Project development objective is to support strengthening the systems and processes of the national PMGSY rural roads program to expand and maintain all-season rural access roads, resulting in enhanced road connectivity to economic opportunities and social services for beneficiary communities in the participating states. The project is structured around two components:

- **PMGSY program financing** contributes finances to cover civil works expenditures in the seven participating states associated with providing new all-season access to unconnected habitations and upgrading important link routes in rural areas. The project will strengthen implementation efficiency and the sustainability of program roads through improved maintenance.
- **Institutional strengthening** supports technical assistance to strengthen the capacity of relevant agencies to implement the program, including support for further enhancements to the On-line Management, Monitoring, and Accounting System to produce customized performance reporting at the national, state, and district levels. The reports will incorporate improved safeguards monitoring information and vulnerability-disaggregated data (including by gender), as well as data derived from third-party monitoring.

Key Expected Results:

- ✓ The share of rural population with access to all-season roads in participating states is expected to increase from 67 percent in 2011 to 72 percent by 2015.
- ✓ The condition of PMGSY roads will improve. Road condition is measured through a Pavement Condition Index (PCI) which is a five point scale where a number of 2 or lower is considered a satisfactory condition. Currently, 12 to 80 percent of the road networks in the participating states, where there is information, have PCI levels less than 2. The project target is to have accurate condition data for all project states, and an average of 55 percent of the road network with a PCI of less than 2.

Implementing Agency: Ministry of Rural Development, Government of India, and National Rural Roads Development Agency.

INDIA: Andhra Pradesh Road Sector Project

Key Dates:

Approved: October 15, 2009

Effective: March 23, 2010

Closing: June 30, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|------------------------------|------------|-----------|-------------|
| IBRD | 320 | 78.1 | 241 |
| Government of Andhra Pradesh | 326 | | |
| Total Project Cost | 646 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Andhra Pradesh is one of India's most progressive states. Its economic, social, health, and education indicators are better than the national average, and on par with its neighboring states of Karnataka, Kerala, and Tamil Nadu. Road transport accounts for more than 80 percent of the state's freight and passenger traffic. The Government's Vision 2020 strategy recognizes that an efficient transport system is a necessary foundation for agricultural and industrial growth, and consequently for achieving its economic growth and poverty reduction goals. The capacity and quality of the state's core road network has improved considerably in recent years, and although maintenance spending has increased, it is still not adequate. In 2004-05, the Government spent about Rs.3.7 billion on maintaining existing road assets, significantly short of the Finance Commission's standard of Rs.5.68 billion for road maintenance.

The Project development objective is to provide better quality, capacity, and safe roads to users in a sustainable manner by enhancing the institutional capacity of the Andhra Pradesh government in the road sector. The project consists of four components:

- **Road Improvement** includes two activities to upgrade and maintain the state's Core Road Network (CRN).
- **PPP Facilitation Support** will strengthen the capacity of the Government of Andhra Pradesh to develop selected high density traffic corridors under Public-Private Partnership arrangement, via toll revenues and viability gap support from the central and state governments.
- **Institutional Strengthening** will provide technical assistance, training, and advisory services for (a) operationalization of Andhra Pradesh Road Development Corporation (RDC); and (b) project implementation including asset management, Governance and Accountability Action Plan (GAAP), and Institutional Strengthening Action Plan (ISAP).
- **Road Safety** will help the Government of Andhra Pradesh develop safer road corridors by initiating measures to reduce road accidents. The Bank will help agencies undertake 'demonstration projects' on selected core road network corridors; carryout an extended black-spot improvement program (geometric improvement of stretches with high incidence of accidents); and implement institutional and policy actions plans for improving the state's road safety responsibility framework and capacities.

Key Expected Results: Under the project, 429 km of roads will be upgraded and 6,241 km of roads will be maintained under Long-term Performance-based Maintenance Contracts. More specific expected results include:

- ✓ Share of the CRN in good condition increased from the baseline of 40 percent (2009) to 56 percent. This improvement is attributable, to a substantial extent, to the Long-Term Performance Based Contracts for maintenance - under the Road Improvement component - with 80:20 contribution from GOAP and the Bank.
- ✓ **Expected:** (a) Further improvement in the share of CRN in good condition (target – 80 percent); full operationalization of the RDC with adequate financial and human resources to manage the CRN; (c) In upgraded roads, reduction in vehicle operating cost, travel time, and fatality rates per vehicle miles travelled; (d) Improvement in road safety in two model/demonstration corridors.

Implementing Agency: Andhra Pradesh Road Development Corporation (APRDC), Government of Andhra Pradesh.

INDIA: Assam State Roads Project

Key Dates:

Approved: March 13, 2012

Effective: January 25, 2013

Closing: March 31, 2018

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|--------------|---------------|
| IBRD | 320 | 10.62 | 309.4 |
| Government of Assam | 80 | | |
| Total Project Cost | 400 | 10.62 | 309.48 |
| Trust Fund | 1.75 | 0.30 | 1.45 |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objectives: Assam is one of the lower income states of India, and the gateway to the landlocked northeast region of the country. Its road network therefore has significant strategic importance for the economic integration of the lagging northeast with the rest of the country. About 60 percent Assam's 38,000 km state road network, managed by its Public Works Roads Department (PWRD), is in poor condition due to years of low investment and lack of maintenance. Overall weak sector management has further aggravated the impact of sector underfunding. The PWRD needs substantial enhancements and revisions in its traditional way of doing business to improve its relatively low performance and institutional effectiveness. The Assam State Roads Project will carry forward and build on many sector reforms already introduced in the PWRD since 2000 through Bank-funded Rural Development Projects.

The project's development objective is to enhance the road connectivity of Assam by assisting the PWRD in improving and effectively managing its road network. The project has three components:

- **Road Improvement:** to improve 500 km of priority sections of the secondary roads to improve state connectivity and facilitate regional integration. This includes a demonstration of new technologies to promote cost effective, climate resilient, and environmentally friendly road construction, including innovative bridges.
- **Road Sector Modernization and Performance Enhancement:** to support the implementation of a Road Sector Modernization Plan covering: (i) modernization of policies, engineering practices, and business procedures; (ii) asset management and maintenance; (iii) Institutional and Human Resource Development including development of local construction industry; and (iv) Streamlining, Standardizing, and Computerizing PWRD key business processes.
- **Road Safety Management:** to support building the road safety management capacity of related agencies through the development and implementation of a multi-sector road safety strategy.

The project seeks to complement traditional road investments with technical assistance and knowledge to improve overall road sector management in Assam. This will help transform the PWRD into a modern road agency that adopts good practices in sector policies, strategic planning, and project and asset management. Bank support will leverage more than 10 ongoing road development programs; by addressing key sector issues such as maintenance, it will increase the impact of investments made under other road programs.

Key Expected Results: The project will help the Government of Assam bring better roads to 4.5 million rural people, mostly marginal and small farmers. It will also bring direct local employment for about 20 million person days. Key expected results include:

- ✓ An improved maintenance system and an additional \$50 million of funding per annum through the Road Maintenance Fund, which will help reduce the maintenance backlog significantly.
- ✓ Expected savings of about \$100 million per annum on fuel for the state, and avoidance of a potential loss of about \$500 million annually in road asset value through effective asset management.
- ✓ Helping the PWRD computerize business processes, improve corporate governance, introduce innovative bridge designs to replace 3,000 old bridges, and implement a comprehensive professional development strategy for its staff through a Road Research and Training Institute established under the project.
- ✓ An increase in the percentage of secondary road network in good and fair condition from 25 percent in 2012 to 40 percent in 2018.
- ✓ A 20 percent reduction in travel time on the project corridors.
- ✓ An increase in the safety rating of the project corridors from 10 percent in 2012 to 40 percent in 2018.
- ✓ Improved Asset Management will be introduced 50 percent districts.

Implementing Agency: Public Works Roads Department, Government of Assam.

INDIA: Punjab State Road Sector Project

Key Dates:

Approved: December 5, 2006

Effective: April 2, 2007

Closing: June 5, 2017



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IBRD | 250 | 163.7 | 86.3 |
| Government of India | 150 | | |
| Total Project Cost | 400 | | |

*US\$ million; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objective: Punjab, located in the northwest, is one of India's most prosperous states. The agricultural revolution in the 1960s and 1970s and resulting high economic growth substantially improved Punjab's poverty and social indicators. Punjab is rural and landlocked. Two-thirds of its 25 million people live in villages, and agriculture, directly or indirectly, accounts for 40 percent of the economy, substantially above the Indian average of 24 percent. Better roads, lower transport costs, and higher transport service standards have been identified in the Government of Punjab's 10th Five-Year Plan as core elements of an enabling investment climate and a prerequisite for economic diversification and accelerated economic growth. While maintenance funding for national highways by the Government of India and for village roads through crop tax is sufficient, funding for the State Highways has been grossly inadequate. (Until recently, funding for maintenance for Plans Roads was only 25 percent of that required). While funding for maintenance appears assured in the short term, the consequences from the previous inadequate maintenance funding and lack of capacity expansion can be only partially remediated. The Bank is supporting the road sector in Punjab because of the need to address the increasingly serious capacity constraints and to assist the Government of Punjab in strengthening its road maintenance management of the state highways.

The Project development objective is to improve operating conditions of State roads for road users, in a sustainable way, thus helping to provide the business enabling environment necessary to support Punjab's economic development strategy. The project has two components:

- **Road Upgrading, Rehabilitation, and Maintenance:** finances civil works along plan roads comprising upgrading, rehabilitation, and maintenance of about 1,000 kms of roads; technical assistance; land acquisition; and the required pre-construction activities.
- **Institutional Strengthening:** funds measures for sector modernization and for improving sector efficiency, as well as for road safety and HIV/AIDS.

Key Expected Results:

- ✓ 30 percent increase in the average speed of the network.
- ✓ 20 percent reduction in Vehicle Operating Costs.
- ✓ Improved road safety resulting in fewer fatal accidents.

Implementing Agency: Punjab Roads and Bridges Development Board.

INDIA: Himachal Pradesh State Roads Project

Key Dates:

Approved: June 5, 2007
 Effective: October 5, 2007
 Closing: June 30, 2016



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IBRD | 281.7 | 149.8 | 132 |
| Government of India | 118.93 | 64.28 | 54.65 |
| Total Project Cost | 400.63 | | |

*US\$ million; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Himachal Pradesh is a relatively small state in India both in terms of area and population. The development strategy of the Government of Himachal Pradesh (GOHP) aims to raise progressively the standard of living, correct the fiscal imbalance, and stimulate growth. An efficient transport system is necessary to allow for the state's planned growth. With hardly any rail, no waterways, and only three small domestic airports, the state relies almost exclusively on its road network for transport. The total road network in the state is about 28,000 km, comprising 2,000 km of national highways border roads financed by the Government of India, 2,160 km of state highways, 2,240 km of major district roads, and the balance being rural roads. Yet the quality and extent of this road network is inadequate to meet the social and economic needs of the state: only half of all roads are surfaced, 90 percent of the highway network is single lane, and fewer than half of all villages are deemed connected. The road sector suffers as a result of a history of low level of investment. Funding for maintenance has historically been a problem.

The project development objective is to reduce transport costs and improve traffic flows on priority segments of the core road network of Himachal Pradesh for the road users in the state. It has two components:

- **Core Network Improvement:** Upgrading of roads in the Core Road Network, including widening of formation, realignment, new structures, and pavement strengthening of about 450 km of roads.
- **Core Network Maintenance and Management:** Periodic maintenance and minor rehabilitation of about 2,000 km of the Core Road Network, in accordance with the agreed environmental measures set forth in the Component 2 EMP; (b) piloting performance-based maintenance contracts; (c) accident black spot improvements; (d) pre-investment studies for road network improvement and maintenance; and (e) capacity enhancement in road maintenance, financing, and management.

Key Achieved and Expected Results:

- ✓ Decrease the percentage of the core network of roads in poor condition from the baseline of 40 percent in 2007 to less than 10 percent by the end of the project.
- ✓ Increase the speeds on the World Bank-financed roads by 25 percent. On the 274 km of already upgraded roads, the speed has increased by a bit less than 25 percent.
- ✓ Reduce the fatal accident rate on the core network, which in 2007 was two deaths involved in traffic accidents per 1,000 vehicles. As of May 2013, the rate was 0.32 per 1,000 vehicles.
- ✓ Level of road user satisfaction on the core network more than doubled (from 1.5 in 2007 to 3.9 in 2013), surpassing the end of project target of 3.0 (Note: using a 1-5 index)

Implementing Agency: Himachal Pradesh Road and Other Infrastructure Development Corporation.

INDIA: Orissa State Roads

Key Dates:

Approved: September 30, 2008

Effective: April 15, 2009

Closing: June 30, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IBRD | 250 | 28.4 | 167.6 |
| Government of India | 72.5 | | |
| Total Project Cost | 322.5 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objective: Orissa's 239,000 km road network is second only to Uttar Pradesh in terms of length. However, in terms of quality, Orissa's road network ranks among the lowest—only 22 percent is paved, significantly below India's average of 58 percent. The rationale for Bank support in Orissa's road sector is a logical extension of the Bank's earlier engagement in the state under the Orissa Socioeconomic Development Program (OSED), as well as the Bank's continued support to modernize India's road sector. The reforms implemented under the OSED have created substantial fiscal space for the state to undertake productive investments in social and infrastructure sectors. However, despite the improved fiscal space, Orissa has not been able to meet its own targets for increasing capital investment to three percent (currently hovering around two percent) of Gross State Domestic Product (GSDP). The project aims to assist Orissa in meeting the capital investment goals in a sector that is crucial for the state's overall economic growth and poverty reduction goals. In addition, the project would support the state government in implementing institutional and governance reforms in the road sector, thus enhancing the efficacy of public sector expenditure.

The Project development objective is to remove transport bottlenecks in targeted transport corridors for greater investment and economic and social development activities in the State of Orissa. The proposed project has two components:

- **Road Corridor Improvement:** supports the widening, strengthening, and selective realignment of 461 km of existing roads to double-lane standards.
- **PPP Enabling Support, Sector Policy and Institutional Development, and Implementation Support:** assists the Government of Orissa in introducing private sector participation in financing and management in the road sector, modernizing the Orissa Works Department (OWD) organization and capacity; improving the policy, institutional, and legal framework of the State road sector; and implementing and monitoring the project.

Key Expected Results: By project completion, businesses and households in project areas will enjoy a significant reduction in generalized transport cost, and the OWD will improve its capacity and efficiency to provide sustainable road infrastructure service to users. The outcome will be monitored by the following indicators:

- Vehicle operating costs in project corridors reduced by 15 percent.
- Vehicle speed in project corridors increased from 40 to 55 km per hour.
- Favorable survey response by businesses and road users indicating that condition of the transport corridors improved.

Due to termination of all phase-I contracts and implementation delays, achievement of these results has been delayed but is likely.

It is expected that the efficiency and transparency of the OWD—the implementing agency for this project—will improve as soon as the operation and maintenance arrangement for the Core Road Network is put in place; the core business functions are fully operational; the OWD meets Right to Information disclosure requirements and implements the Governance and Accountability Action Plan; and a road safety action plan is put in place. Consultants to provide technical assistance in these matters are on board and it is expected that actions in institutional strengthening component will soon begin.

Implementing Agency: Orissa Works Department, Government of Orissa.

INDIA: Kerala State Transport Project II

Key Dates:

Approved: May 14, 2013
Effective: Not yet effective
Closing: April 30, 2019

| Financier | Financing* | Disbursed | Undisbursed |
|----------------------|------------|-----------|-------------|
| IBRD | 216 | 0 | 216 |
| Government of Kerala | 229 | | |
| Total Project Cost | 445 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



A road completed under the first Kerala State Roads Project

Background and Objectives: Kerala has the highest human development outcomes in India, with 99 percent literacy, the highest life expectancy, and the lowest rates of infant mortality. Despite India's recent economic slowdown as a result of the global downturn, Kerala's economy preformed much better than expected (GSDP USD 59.4 billion: FY 11-12). Nonetheless, Kerala has not been spared from the slowdown in the global economy; low capital investment in economic infrastructure has been an unfortunate consequence of fiscal constraints and high revenue expenditures. Kerala's draft Road Development Policy estimates that improving existing roads to match the economic aspirations of the state will require an annual investment of \$885 million over the next 10 years.

The main goal of the Kerala State Transport Project II (KSTP II), which follows the first KSTP which ended in 2010, is to support the state in upgrading the most critical and strategically important state highways and building sustainable institutions. On a pilot basis, a Public-Private Partnership (PPP) between the State's Public Works Department and a private concessionaire—one of the first of its kind in India—will be established to deliver a specific road section. The Bank's technical assistance is aimed at helping the state attract much needed private sector investment, and innovation to the road sector. The project also seeks to support efforts by the government to reverse the trend in road accidents and deaths. While the number of road crashes in Kerala declined by 17 percent between 2005 and 2011, the number of traffic fatalities has increased by 27 percent during the same period, from 3,200 to 4,100. The project will pilot the concept of road safety demonstration corridors and increase local participation through a 'road safety challenge fund'.

The Project's development objective is to improve conditions, traffic flow, and road safety, with a focus on vulnerable road users, on selected roads in Kerala. The Project has three components:

- **Road Network Upgrading and Safety Improvement:** includes upgrading (widening to full two lane standard) 363 km of strategically important State Highways to complete network connectivity in the state.
- **Road Safety Management:** supports the strengthening of the road safety management systems in Kerala with the objective of arresting the increase of crash fatalities in the state, with a particular focus on vulnerable road users (pedestrians, cyclists, and motorcyclists).
- **Institutional Strengthening:** improves the sustainability of Kerala's state road network with respect to its functional adequacy, financial viability, and capacity of key state road sector institutions to deliver road infrastructure and services that are responsive to road user needs.

Key Expected Results: The project will enhance connectivity between key socio-economic centers and reduce travel times between the main engines of economic activity in the state. Improved roads under the project will impact the lives of countless people in the states. It is expected that the project will reach 13.4 million direct beneficiaries, more than half of whom are women. Travel time on the improved roads should decrease by 20 percent. Approximately 350 km of improved roads will have significantly improved capacity and roughness. The road safety emphasis of the projects should help reduce the number of fatalities by 20 percent on the safe road demonstration corridor.

Implementing Agency: Public Works Department, Government of Kerala.

INDIA: National Highway Authority of India Technical Assistance Project

Key Dates:

Approved: November 30, 2010

Effective: March 21, 2011

Closing: July 31, 2016



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IBRD | 45 | 4.6 | 40.4 |
| Government of India | 10 | | |
| Total Project Cost | 55 | | |

*US\$ millions, as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: The total road network in India is about 3.3 million km, of which about 2 percent are National Highways and Expressways carrying about 40 percent of total road traffic. Recognizing that the poor condition of national highways could impede high economic growth, in 2000 the Government of India launched the National Highway Development Project (NHDP), the largest highway project ever undertaken in the country. The responsibility for implementation was entrusted to the National Highways Authority of India (NHAI). The prime objective of the NHDP was to undertake widening of strategic NH corridors. Prior to implementation of NHDP, the road sector faced persistent underfunding and grappled with poor institutional capacity to manage its network and programs. The existing network was neglected and the sector experienced a trend of “build-neglect-re-build”. With the launch of NHDP, the road sector could attract considerable private financing in addition to public funding through levying additional taxes on fuel. However, in recent times there have been difficulties in attracting private financing and new areas of concerns have emerged: weaknesses in project preparation; delays in land acquisition; large variations during construction; ineffective contract administration resulting in high number of contractual disputes; human resource constraints; and lack of safety awareness. The Government of India is keen to address these challenges by improving NHAI’s program management and operational efficiency.

The Project development objective is to assist NHAI in adopting appropriate practices that would enhance its program management and operational efficiency. The project focuses on Institutional Strengthening and Capacity Building of NHAI through technical assistance in project preparation and management, research, training and capacity building, asset management and resource planning, Public Private Partnerships (PPP), socioeconomic and environment impact evaluation, safety, HIV/AIDS prevention, and governance by adopting appropriate approaches and practices.

Key Achieved and Expected Results:

- ✓ Implementation of Enterprise Resource Planning (ERP) to computerize NHAI portfolio – the bidding process to engage System Integrator is ongoing.
- ✓ Strengthening Design Review Process – consultants have been engaged.
- ✓ System of third party quality audit established in NHAI – consultants to review the current system and propose new system are on board.
- ✓ Implementation of Asset Management System – NHAI is in the process of engaging consultants.
- ✓ Corporate Governance Assessment of NHAI is being carried out by a consultant.
- ✓ NHAI is in the process of engaging a Road Safety Advisor.
- ✓ NHAI is in the process of establishing a performance monitoring system for its developers, contractors, and consultants.

Implementing Agency: National Highways Authority of India.

INDIA: Karnataka State Highway Improvement Project II

Key Dates:

Approved: March 24, 2011

Effective: July 19, 2011

Closing: December 31, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|--------------------------|------------|-----------|-------------|
| IBRD | 350 | 38.2 | 311.8 |
| Government of Karnataka | 155 | | |
| Private Sector Developer | 500 | | |
| Total Project Cost | 1005 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Karnataka, located in the southwest of India, is the eighth largest state in the country, with a population of about 57 million. With 34 percent of the people living in urban centers, Karnataka is the fifth most urbanized state in India. Although considered to be a middle-income state and growing at or above the all-India economic rate of growth, Karnataka has wide regional development disparities, posing risks for sustaining high growth and making it more inclusive. Improving infrastructure, including road transport, is a key component of the Government of Karnataka's development strategy to sustain growth and bridge regional disparities. Within the state's relatively extensive road network of 208,262 km, the Department of Public Works, Ports, and Inland Water Transport is responsible for managing 22,078 km of state highways and 50,037 km of major district roads. The Department faces two notable challenges: a significant paucity of resources for improving the quality and standards of transport infrastructure, and worsening road safety (in 2009, the state accounted for 10 percent of road accidents and 7 percent of road fatalities in all of India). The Bank-supported Karnataka State Highway Improvement Project aims to support the Government of Karnataka in two areas of highway development: (a) achieving more diversified sector financing, building upon India's experience in extensive use of PPPs for the development of National Highways; and (b) improving road safety design, management, and enforcement to reduce road fatalities and major injuries.

The Project development objective is to accelerate the development of the Core Road Network through leveraging public sector outlays with private sector financing and improving the institutional effectiveness of the road sector agencies to deliver effective and safe roads to users. The project has four components:

- **Road Improvement Works** supports capital improvement and maintenance works of Core Road Network through a combination of traditional contracts and PPP concessions.
- **Highway Financing Modernization** assists the Karnataka Road Development Corporation Limited in implementing the concept of co-financing with private financial institutions through technical assistance and pilot transactions.
- **Road Safety Improvement** assists the Government of Karnataka to respond to the growing road safety problems in the state with comprehensive strategic and institutional measures, consistent with the main thrusts of the 2007 Sundar Committee report and the findings of the road safety management capacity review.
- **Road Sector Policy and Institutional Development** support implementation of a new medium-term Institutional Development and Strengthening Action Plan for 2010-2016.

Key Expected Results:

- ✓ The Government of Karnataka is expected to generate at least US\$500 million in new private sector capital for Core Road Network improvement and management by 2016.
- ✓ Share of Core Road Network in good condition increases from 50 to 65 percent by 2016.
- ✓ Vehicle operating costs are targeted to decrease by 15 percent, and travel time cost on project corridors is targeted to decrease by 25 percent by 2016.
- ✓ Road accident-related fatalities on safe corridor pilots should decrease by 30 percent by 2016.

Implementing Agency: Department of Public Work, Ports, and Inland Waterways, Government of Karnataka, in partnership with the Karnataka Road Development Corporation Limited.

India: Fourth Power System Development Project

Key Dates:

Approved: March 18, 2008
 Effective: May 16, 2008
 Closing: July 31, 2013
 Revised Closing: July 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 1,000.00 | 884.80 | 115.20 |
| POWERGRID | 602.00 | - | - |
| Other | 512.00 | - | - |
| Total Project Cost | 2,114.00 | - | - |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Recurrent and severe electricity shortages (peak power deficit of 10.3 percent and energy deficit of 8.5 percent in 2012) have imposed high costs on the Indian economy. Because of inadequate and poor quality of supply, 60 percent of Indian firms rely on captive and back-up generation to meet their electricity needs, and the poor technical and commercial performance of most of the state electricity providers has led to a loss of US\$20 billion during 2011-12. More than 350 million people in India today still lack access to electricity, impeding their ability to fully benefit from a high growing economy. India's power sector also relies heavily on fossil fuels (primarily coal), and the country is currently the world's fourth largest GHG emitter. To address these issues, the Government of India plans to: (i) expand generation by using renewable energy sources whenever feasible and strengthen the central transmission network to facilitate energy exchange across regions; (ii) improve energy efficiency and performance of institutions in the power sector; and (iii) expand access for rural and peri-urban populations.

In 1989, the World Bank partnered with the Government of India to create a Central Transmission Utility, Power Grid Corporation of India Limited (POWERGRID). Since 1993, the Bank has made three direct loans to POWERGRID, totaling US\$1 billion. With the Bank's technical and financial support, POWERGRID has evolved into one of the largest transmission utilities in the world, and has made great strides towards achieving world-class operations and systems management. POWERGRID now generates 50 percent of the total power in the country. The fourth Power System Development Project (PSDP-IV) supports additional transmission investments initiated under the ongoing PSDP-III project to scale-up the project's impact and development effectiveness. The development objective of the Project is to strengthen India's electricity transmission system in order to increase reliable power exchange between regions and states, as well as the efficient operation of one of the largest transmission networks in the world.

Key Achieved And Expected Results: More than US\$4 billion of IFC and IBRD financing and capacity building support has helped POWERGRID evolve into the world's third largest utility. The two ongoing Projects (PSDP-IV and PDSP-V) are expected to result in reduced transmission losses and lower cost of energy. They will contribute to the clean energy initiative by enabling the transfer of surplus hydro energy from resource rich regions to power deficit regions in India, and by avoiding building new (and costly) generation facilities. Progress includes:

- ✓ Expansion of the power transmission capacity across five regional transmission grids to reach 66 billion kilowatt-hours, outperforming end of project targets.
- ✓ Since 2008-09, the transmission capacity of the Central Transmission Utility of India has increased to more than 100,000 circuit km, adding about 28,000 ckm of new transmission lines, outperforming end of project targets.
- ✓ The transformation capacity has doubled to more than 160,000 MVA over the same period, outperforming end of project targets.
- ✓ The inter-regional electric power transfer capacity increased from less than 21 to 30 gigawatts since 2008-09.

In addition to improvements in technical standards and implementation of state-of-the-art technology, the long-lasting partnership with POWERGRID has helped bolster the institutional capabilities of the company. Best practices achieved include:

- ✓ POWERGRID has a fully automated National Load Dispatch Center, a four-tier system that is a complex and globally unique mode of grid operation. It minimizes grid disturbances and facilitates quick restoration in case of failure.
- ✓ POWERGRID developed a Corporate Social Responsibility Policy and shared it with the Bank.

Key Partners: Power Grid Corporation of India Limited (POWERGRID).

INDIA: Fifth Power System Development Project

Key Dates:

Approved: September 22, 2009

Effective: January 8, 2010

Closing: June 30, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 1,000.0 | 340.4 | 659.6 |
| POWERGRID | 562.0 | - | - |
| Total Project Cost | 1,562.0 | - | - |

*US millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Recurrent and severe electricity shortages (peak power deficit of 10.3 percent and energy deficit of 8.5 percent in 2012) have imposed high costs on the Indian economy. Because of inadequate and poor quality of supply 60 percent of Indian firms rely on captive and back-up generation to meet their electricity needs, and the poor technical and commercial performance of most of the state electricity providers has led to a loss of US\$20 billion during 2011-12. More than 350 million people in India today still lack access to electricity, impeding their ability to fully benefit from a high growing economy. India's power sector also relies heavily on fossil fuels (primarily coal), and the country is currently the world's fourth largest GHG emitter. To address these issues, the Government of India plans to: (i) expand generation by using renewable energy sources whenever feasible and strengthen the central transmission network to facilitate energy exchange across regions; (ii) improve energy efficiency and performance of institutions in the power sector; and (iii) expand access for rural and peri-urban populations.

The Fifth Power System Project builds on a successful partnership with Power Grid Corporation of India Limited (POWERGRID), the national electricity transmission company that is vital to the development of India's power sector. Not only has the WBG financed POWERGRID's investment programs (through four direct loans), but it has also supported its ongoing efforts to achieve world class operations and management, and to leverage private participation (including with IFC financing of the Bhutan-India Tala transmission system). WBG's support to this Project came in the wake of the 2008 global financial crisis, when both international and domestic credit markets in India the cost of debt for domestic investors increased by at least 20-30 percent, and the availability of both debt and risk capital for infrastructure projects decreased. Additional financing to POWERGRID was also part of broader efforts to scale-up IBRD financing in response to the financial crisis.

The Project's development objective is to strengthen India's electricity transmission system in the western, northern, and southern regions to increase reliable power exchange between regions and states. Investments under the project will help improve POWERGRID's service delivery by facilitating more economic use of generation resources; providing greater grid stability; and facilitating development of a power trading regime within the country and with India's neighbors. The Government is also encouraging private financing in the sector. To this end, the WBG has been working with POWERGRID to explore options for leveraging finance from international markets, with the deployment of IFC-syndicated loan instruments (transaction completed in June 2012), and the possible use of an IBRD Partial Credit Guarantee whereby POWERGRID will access the international loan markets for the first time and on its own credit.

Key Achieved and Expected Results:

- ✓ Expansion of the country's power transmission capacity across its five regional transmission grids to reach 66 billion kilowatt-hours, outperforming end of project target of 60 billion kWh.
- ✓ Since 2008-09, the transmission capacity of the Central Transmission Utility of India has increased to more than 100,000 circuit km, adding about 28,000 ckm of new transmission lines, outperforming end of project targets.
- ✓ Transformation capacity has doubled to more than 160,000 MVA over the same period, outperforming the end of project targets.
- ✓ The inter-regional electric power transfer capacity increased from less than 21 to about 30 gigawatts since 2008-09.

Key Partners: Power Grid Corporation of India Limited (POWERGRID).

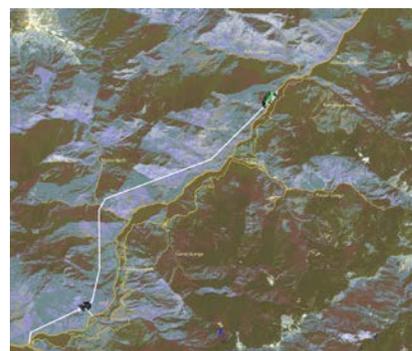
INDIA: Vishnugad Pipalkoti Hydroelectric Power Project

Key Dates:

Approved: June 30, 2011

Effective: November 7, 2011

Closing: December 31, 2017



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 648.0 | 1.6 | 646.4 |
| THDCIL | 274.0 | - | - |
| Total Project Cost | 922.0 | - | - |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Recurrent and severe electricity shortages (peak power deficit of 10.3 percent and energy deficit of 8.5 percent in 2012) have imposed high costs on the Indian economy. Because of inadequate and poor quality of supply, 60 percent of Indian firms rely on captive and back-up generation to meet their electricity needs, and the poor technical and commercial performance of most of the state electricity providers has led to a loss of US\$20 billion during 2011-12. More than 350 million people in India today still lack access to electricity, impeding their ability to fully benefit from a high growing economy. India's power sector also relies heavily on fossil fuels (primarily coal), and the country is currently the world's fourth largest GHG emitter. To address these issues, the Government of India plans to: (i) expand generation by using renewable energy sources whenever feasible and strengthen the central transmission network to facilitate energy exchange across regions; (ii) improve energy efficiency and performance of institutions in the power sector; and (iii) expand access for rural and peri-urban populations.

The Vishnugad Pipalkoti Hydroelectric Power Project (VPHEP) is an important part of the World Bank's commitment to helping improve the performance and sustainability of the hydropower sector in India and sustain the country's economic growth. In line with the Ministry of Power's desire to develop public sector hydro companies into top-performing public companies in the power sector, like POWERGRID and NTPC Limited, the Bank is supporting THDC India Limited (THDCIL) to strengthen its capacity and systems to become a leading hydropower company. The Project, which supports activities on the Alaknanda River in Uttarakhand and Rampur Hydroelectric Project on the Sulej River in neighboring Himachal Pradesh, provides an opportunity to inform the hydro policy dialogue and practice in these two Himalayan states that are expected play a critical role in India's hydropower development in the future. Building on lessons learned in other countries, the Project will help create effective project execution for cascaded hydropower systems and foster a coordinated approach to river basin planning and development. HPHEP will also help increase generating capacity to complement the Government of India's efforts to improve the performance of the country's distribution and transmission networks.

The project development objective is to increase the supply of electricity to India's national grid through the addition of renewable, low-carbon energy; and strengthen THDCIL's institutional capacity with respect to the preparation and implementation of economically, environmentally, and socially sustainable hydropower projects. It has two components:

- Construction of the 444 MW Vishnugad Pipalkoti Hydro Electric Project in Chamoli District, Uttarakhand, India; and
- Support to capacity building and institutional strengthening at THDC India Limited, the project developer.

Key Expected Results:

- ✓ Addition of 444 MW of renewable energy (hydropower) generation capacity.
- ✓ The strengthening of the institutional capacity of THDCIL through the development and implementation of a capacity building and institutional strengthening plan.

Implementing Agency: THDC India Limited (THDCIL).

INDIA: Haryana Power System Improvement Project

Key Dates:

Approved: August 4, 2009
 Effective: October 15, 2009
 Closing: December 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|---------------|---------------|
| IBRD | 330.00 | 132.72 | 197.28 |
| Government of Haryana | 80.00 | 32.18 | 47.82 |
| Total Project Cost | 410.00 | 164.89 | 245.10 |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objective: The major remaining obstacles to making India's power sector responsive to the demands of consumers and a modernizing economy are at the state level, predominantly in electricity distribution and transmission. By using investment lending to alleviate the infrastructure deficit in a rapidly growing state that also has pockets of poverty, the World Bank is also drawing on global experience in institutional reform to support electricity improvements in the north Indian state of Haryana.

The project development objective is to improve the availability, efficiency, and accountability of electricity supply in the state of Haryana through strengthening the transmission and distribution systems. The project supports HVPN, a transmission company, and DHBVN, a distribution company. It has three components:

- **Transmission System Strengthening** involves priority investments in sub-stations together with transmission lines for system augmentation.
- **Urban Distribution System Strengthening** focuses on improving operational efficiency and enhanced customer service.
- **Technical Assistance and Capacity Building** of transmission and distribution companies.

Key Expected and Achieved Results:

- ✓ The transmission company's (HVPN) transformation capacity has increased from baseline 9,700 kVA to about 18,000 kVA, beyond the project end target of 16,000 kVA.
- ✓ Under the project, the corporate governance and financial accountability (CGFA) action plan is modeled on best practice in financial management for public sector undertakings in India. The CGFA covers accounting, auditing, internal control, budgeting, and reporting, and is currently under implementation in both companies.
- ✓ Building overall capacity of the Government of Haryana to develop and implement its institutional building agenda—one that focuses on internal transformation through process improvements, use of technology, and organizational change—is the most critical part of this project. The implementation strategy aims to increase accountability at all levels of government, and increase efficiency and performance through the formulation of Key Performance Indicators and a new Performance Management System.
- ✓ More than 60 percent of the distribution company's (DHBVN) revenue comes from 3.75 percent (90,623) of consumers who have loads of more than 10kW. The project provides Automated Meter Readings to 87,000 of these consumers. Automatic Meter Readings will ensure better revenue and helps detect tempering and theft.
- ✓ Consultancy support to the Haryana Electricity Regulatory Commission (HERC) has helped mainstream safeguard policies and introduced the use of third-party quality assurance consultants, resulting in improved flow of information on good practices in project management, as well as supporting accountability and transparency in transactions.

Implementing Agencies: Regulatory Commission, Government of Haryana, and state utilities.

INDIA: Coal Fired Generation Rehabilitation Project

Key Dates:

Approved: June 18, 2009

Effective: March 19, 2010

Closing: November 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|-----------------------------------|--------------|-----------|-------------|
| IBRD | 180.0 | 7.0 | 173.0 |
| MSPGCL/WBPDCL | 78.0 | - | - |
| Global Environment Facility (GEF) | 45.4 | 2.2 | 43.2 |
| Total Project Cost | 303.4 | - | - |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objectives: India's current installed power generation capacity stands at more than 223 GW. Fifty-eight percent (130 GW) is coal fired, and contributes to about 83 percent of the total actual generation. In the 12th Five-Year Plan of the Government of India, over 80 percent of the generation addition is planned to come under coal-based power plants. According to the Planning Commission's Integrated Energy Policy, coal will remain India's primary energy source, accounting for nearly 42 percent of total energy consumption and 65 percent of electricity generation in the next 25 years. Many coal-fired power plants, however, do not operate efficiently, and India's renovation and modernization investments have not kept pace with targets; plants that account for almost 27 GW of capacity urgently need to be renovated and modernized. Focusing on existing plants rather than building new ones is a good opportunity to add low-cost power to India's starving grid, while improving operational efficiencies relatively quickly. The approach also means dealing with fewer challenges such as availability of land, existence of transmission lines, and availability of fuel and water linkages.

The Bank-supported Coal Fired Generation Rehabilitation Project is helping the Government of India design and implement an appropriately sequenced program to scale-up the Energy-Efficient Renovation and Modernization (EE R&M) of its old, inefficient, and polluting coal-fired power generation capacity. This would help put the sector on a lower carbon path than continuing to operate these plants at their present efficiency levels, while also bridging the power demand-supply gap. Recognizing the large carbon emission reduction potential of this Project, the Global Environment Facility (GEF) has provided a US\$45.4 million grant.

The Project's development objective is to improve energy efficiency of selected coal-fired power generation units through renovation and modernization and improved operations and maintenance. The project's two components focus on:

- **Energy Efficient Renovation and Modernization Pilots** to renovate and modernize 640 MW of old coal-fired power generation capacity to demonstrate energy-efficient rehabilitation approaches.
- **Technical Assistance** to support the implementation of pilots, develop a pipeline of pilot interventions, address barriers to energy efficient renovation and modernization projects, and strengthen institutional capacities of implementing agencies.

Key Expected Results: While this pilot project is targeting 640 MW for EE R&M, its success could result in the Government of India and various states rehabilitating capacity of identified similar plants. The IBRD-GEF involvement is expected to have an impact on:

- ✓ **Barrier Reduction Strategy for Wider Replication of Rehabilitation Projects:** This attempts to address barriers to rehabilitation in the selected pilot states through studies backed with international experiences, policy/regulatory dialogue, and strengthening of institutional capacity. In addition, the project has also helped mobilize qualified contractors to bid on India's EE R&M opportunities and will demonstrate effective R&M approaches which can be replicated across the country (and possibly elsewhere) once completed successfully.
- ✓ **Quick and Low Cost Option for Augmentation of Power Supply:** Given the significant gap between demand and supply of power in India, these pilots will demonstrate whether and how the rehabilitation of old coal-fired power plants can augment availability of power on competitive terms.
- ✓ **Strengthening Institutional Capacity of Utilities:** The engagement with selected state utilities is helping them build institutional capacity, especially in the areas of design and execution of R&M projects, and efficient operation and management (O&M) of plants.
- ✓ **Improving Environmental Performance of the Plants:** In addition to reducing carbon emissions from power plants, the project would also support improving the overall environmental performance of these plants, including particulates emission, water treatment, ash disposal, and overall safeguards practices and policies in the plant – areas which sometimes do not attract adequate the attention of the utility.

Implementing Agencies: West Bengal Power Development Corporation Limited (WBPDCL), Maharashtra State Power Generation Company Limited (MSPGCL / Mahagenco), Haryana Power Generation Company Limited (HPGCL), Central Electricity Authority (CEA).

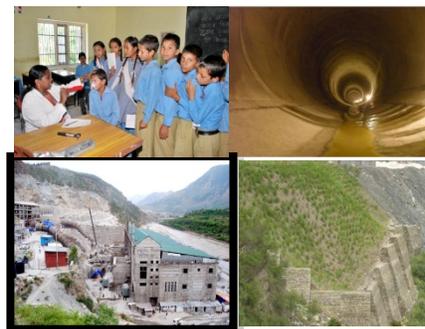
INDIA: Rampur Hydropower Project

Key Dates:

Approved: September 13, 2007

Effective: April 14, 2008

Closing: December 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 400.0 | 364.3 | 35.7 |
| SJVNL | 297.0 | - | - |
| Total Project Cost | 697.0 | - | - |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: With more than 350 million people in India still without access to electricity, and the existing supply characterized by peak and energy deficits, increasing power supply and ensuring universal access to electricity are among the Government of India (GoI)'s top development priorities. With a total potential of around 150 GW, hydropower remains one of the critical options to address the energy/peak shortages and limit the carbon intensity of the coal-dominated power sector.

The growth of hydropower in the country has not only been slow but also decelerating. The share of hydropower has decreased from 40 percent in 1970 to less than 19 percent by 2013. The GoI has sought to leverage the Bank's engagement to create opportunities to implement good technical, environmental, and social practices through a long-term partnership with a few developers in specific states in the Himalayan region.

The Rampur Hydropower Project (RHP) is a 412 MW run-of-the river hydropower project on river Satluj in the state of Himachal Pradesh in India, and is being implemented by publicly-owned SJVNL. The Bank had been involved in financing SJVNL's first hydropower project (1500 MW Nathpa Jhakri Hydro Electric Project – currently in operation). The Bank's support for the RHP is the first step in its reengagement in the hydropower sector in India after almost a decade of absence. The engagement also complements the Bank and GoI's efforts to strengthen the capacity of Himachal Pradesh to manage its hydropower program in a more sustainable manner through a series of policy level engagements.

The development objective of the project is: (i) to improve the reliability of India's Northern Electricity Grid through the addition of renewable, low carbon energy; and (ii) to improve the effectiveness of the developer, SJVNL, with respect to the preparation and safe implementation of economically, environmentally, and socially sustainable hydropower projects. The project consists of three components:

- **Construction of the 412 MW Rampur run-of-river hydroelectric scheme;**
- **Investment support** to implement measures for ensuring higher availability of the existing upstream Nathpa Jhakri hydropower project; and
- **Technical assistance** for institutional reform and capacity building.

Key Results Achieved:

- ✓ Adoption of Corporate Resettlement and Rehabilitation (R&R) Policy by SJVNL in 2010, based on RHP experience;
- ✓ Inclusion of project-affected people in community development initiatives: health services extended to more than 50,000 people by operating a mobile health van in affected villages; sponsorship of 195 local students (including 31 girls) for technical education; merit scholarships awarded to 74 students and on-the-job training program to 31 candidates (including five women); small contracts worth US\$3 million awarded to local people.
- ✓ Strengthened contracts' management practices through the timely issue of variance orders and the formation of a dispute resolution board for the settlement of claims;
- ✓ Successful implementation of a pilot project for the remediation of muck dumping sites through the use of a geo green blanket, which is being scaled up and replicated gradually across all the muck dumping sites;
- ✓ Successful completion of a land acquisition and compensation payment process prior to the award of a civil works contract by adopting innovative approaches such as a direct purchase method through negotiations, and lease agreement.

Implementing Agency: SJVNL (Satluj Jal Vidyut Nigam Limited)

INDIA: Second Hydrology Project

Key Dates:

Approved: August 24, 2004

Effective: April 5, 2006

Closing: May 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IBRD | 104.98 | 73.32 | 31.65 |
| Borrower | 29.54 | | |
| Total Project Cost | 134.52 | | |

*US\$ million; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objectives: Water-related data, information, and tools are a pre-requisite for sound water resources development, planning, and management. This is the cornerstone of any large investment program in the water sector. The Government of India's National Action Plan on Climate Change also stresses that building sound and reliable hydro-met systems is crucial in managing and preparing for future climate risks, including floods, droughts, and cyclones.

The multi-state Hydrology 2 Project aims to support the modernization of hydrologic and climatologic information systems (HIS) and monitoring networks, and the promotion of sustained and effective use of these systems by all users for planning and development purposes. This Project compliments ongoing programs in the water sector in India (e.g. Maharashtra Water Sector Restructuring Project, National Ganga Program). The project supports surface and groundwater agencies for 13 states and 8 central agencies. It has three main components:

- **Institutional Strengthening:** aims to consolidate the activities from the HP-1 program, with a focus on raising awareness, and disseminating and sharing knowledge, and to provide broad implementation support.
- **Vertical Extension:** encompasses all activities focused on enhancing the use of HIS to demonstrate real hydrological data applications and decision making.
- **Horizontal Expansion:** focuses on four new States and the establishment of a broad-based HIS.

Key Results Achieved:

- ✓ Modernization of hydro-met networks including meteorology, surface water, and groundwater (e.g. digital water level recorders, automatic weather stations, use of real-time telemetry, acoustic doppler current meters, digital flow meters, water quality labs equipped with modern setup).
- ✓ Real-time data acquisition systems for flood forecasting and operation support to reservoirs with the Bhakra Beas Management Board and in Maharashtra.
- ✓ Building of State-wide hydro-met data centers (in Goa, Punjab, Himachal Pradesh, and Pondicherry) to provide access to information to a variety of stakeholders (e.g. universities, local departments, water users associations).
- ✓ Major effort to enhance mapping of aquifers throughout India using advanced geophysical techniques.
- ✓ Development of decision support tools and models to aid the management and planning of water resources, and improve the operations of complex water systems (covering 9 states in India). These tools support flood and drought management, conjunctive use, reservoir operations, and overall water resource planning.
- ✓ Development of design aids for the Central Water Commission to help in the design of water-related investments.
- ✓ Modernization of database systems to store historical hydrologic and climatologic information and visualization/dissemination platforms (e.g. GIS, department websites).
- ✓ Special research studies on a wide range of water-related problems (e.g. water quality atlas for Kerala, Punjab groundwater isotope study, coastal salinity study in Gujarat, Bangalore city water quality study).
- ✓ Generation of resource materials (e.g. print, media, brochures, maps) and awareness building activities to encourage the use of hydrologic information by a variety of stakeholders.
- ✓ Hydrology 2 Project is also actively providing support and analysis to various World Bank water projects in India.
- ✓ Building partnerships with outside-India institutions (e.g. MOU with the US Geologic Survey on groundwater issues).

Key Development Partners: Ministry of Water Resources, Central Water Commission, Central Groundwater Board, National Institute of Hydrology, National Geophysical Research Institute, Central Pollution Control Board, Bhakra Beas Management Board, Central Water and Power Research Station, Water Resource and Groundwater Departments in Maharashtra, Gujarat, Orissa, Tamil Nadu, Madhya Pradesh, Andhra Pradesh, Karnataka, Kerala, Chhattisgarh, Punjab, Himachal Pradesh, Goa, Pondicherry, and various universities.

INDIA: Financing Public Private Partnerships in Infrastructure Through Supporting the India Infrastructure Finance Company (IIFCL) Project

Key Dates:

Approved: September 22, 2009

Effective: November 55, 2009

Closing: September 30, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 1,195 | 23 | 1,172 |
| Total Project Cost | 1,195 | 23 | 1,172 |

**As of June 30, 2013*
For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: India has large infrastructure financing needs: the Government of India's estimate for the 12th Five Year Plan (2012-2017) alone is US\$1 trillion, half of which is expected to be raised from private sources. The project's objective is to increase the availability of long-term financing for infrastructure PPP projects in India. This will be achieved through supporting the IIFCL in its role as catalyst for private financing for infrastructure PPPs, as well as stimulating the development of a long-term local currency debt financing market for infrastructure in India. The coverage of the project is intended to be national.

Key Results Expected: Project progress has been very slow. Disbursement of only around US\$23 million, out of an allocation of US\$1,195 million, has been made for one power transmission project. While the capacity building component of the project has made better progress, overall, despite considerable efforts, progress has been extremely limited. The Government of India and the World Bank are in discussions on how best to restructure the project and utilize the funds effectively.

Implementing Agency: India Infrastructure Finance Company Ltd (IIFCL)

Key Development Partners: United Kingdom's Department for International Development (DFID) funding part of capacity building component.

INDIA: Vocational Training Improvement Project

Key Dates:

Approved: June 5, 2007
 Effective: December 17, 2007
 Closing: November 30, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|--------------|-------------|
| IDA | 277.4 | 179.7 | 98.2 |
| Government of India | 79.0 | - | - |
| Total Project Cost | 359.0 | 179.7 | 98.2 |

*US\$ million; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: India is a fast growing economy with a rising demand for skilled workers. A skilled workforce enhances the efficiency and flexibility of the labor market, reduces skills bottlenecks, and enhances mobility and productivity. One of the key suppliers of such workers is the vocational education and training (VET) system. A major component of the VET system is the Craftsmen Training Scheme (CTS), run under the auspices of the Ministry of Labor and Employment and the National Council for Vocational Training (NCVT) at the national level, and the State Department's dealing with vocational training and the State Council for Vocational Training (SCVT) at the State level. However, graduates from the CTS system face low labor market outcomes; the 2006 Baseline Tracer Study conducted by the World Bank shows that less than 30 percent of graduates from ITIs find employment upon graduation. The Government of India sought World Bank assistance to introduce key reforms at both the system and institution levels.

The project development objective is to improve the employment outcomes of graduates from the vocational training system, by making the design and delivery of training more demand responsive. It has three components:

- **Improving Quality of Vocational Training** focuses on: (a) improving quality and relevance of training provided in 400 eligible Industrial Training Institutes (ITIs) selected competitively from eligible States/Union Territories; (b) upgrading training of ITI instructors; and (c) providing incentive funds to States to reward good performance in project implementation.
- **Promoting Systemic Reforms and Innovations** focuses on activities that enhance the overall reach and effectiveness of the vocational training system in the medium-term. Implementation of activities under this component is the responsibility of the Directorate General of Employment and Training, discharged in collaboration with States, industry associations, and private training providers, as necessary.
- **Project Management, Monitoring and Evaluation** supports is provided to: (a) establish project management and implementation structures at the national and State levels; (b) make improvements in system management and implementation of reforms by training policy planners, managers, and administrators; (c) carry out project monitoring and dissemination of information with the help of a computer-based management information system; and (d) carry out project evaluation and policy and system research studies at the national and State levels.

Key Results Achieved and Expected: The project has performed well, surpassing many of its end-of-project targets. A new sector-focused multi-skilling, multi-entry and -exit vocational training course called "Center of Excellence" was introduced in the CTS system. The Institution Management Committee (IMC), with significant private sector representation, was set up at training institution level to bring strong private sector participation in institutional management, and significant power and functions were devolved to the IMC. At the national and state levels, private sector participation in decision making bodies was introduced. A strong monitoring and evaluation culture was created by establishing a sector-wide and web-based management information system. Capacity was significantly strengthened for developing curricula, training trainers, and developing training and teaching aids. This had an impact on recruitment and professional development policies related to trainers.

- ✓ 78 percent** of the graduates from project ITIs already exit from the CTS system with a NCVT certificate, compared to the baseline of 61 percent and an end of project target of 73 percent.
- ✓ 60 percent of project ITI graduates find employment within one year of finishing training, compared to the baseline 32 percent and an end of project target of 50 percent. 38 percent of female graduates find employment within a year of finishing training compared to the baseline of 18.7 percent.
- ✓ Real monthly earnings (INR) of employed graduates from project ITIs measured one year after completing training rose from a baseline of INR 2,421 to INR 3550# (as of October 2012).

**Data refer to the batch of trainees enrolled in 2010-11. These trainees would have taken their final institution-based examination in 2012. # Data from mid-term tracer study.

Implementing Agency: National Project Implementation Unit, Ministry of Labor and Employment.

Key Development Partners: Directorate General of Employment and Training, Ministry of Labor and Employment.

INDIA: OCL II India Ltd

Key Date:

Committed: February 6, 2013

IFC Financing (US\$ million)

| Instrument | Amount | Disbursed | Undisbursed |
|------------|--------|-----------|-------------|
| IFC A Loan | 40.0 | 20.0 | 20.0 |

Background and Objectives: OCL India Limited is one of the leading cement producers in eastern India, with a production capacity of 3.8 million tons per annum at its units in Odisha, a low-income state in India. It is the second largest slag cement producer in India, with a market share of about 25 percent. OCL is building a greenfield cement grinding plant with a capacity of 1.35 million tons per annum in West Bengal. In FY13, IFC provided a \$40 million loan for a \$102 million cement grinding unit in West Bengal. Once the project is completed, OCL's cement capacity is expected to increase to 5.15 million tons per annum.

The project will help OCL: (i) integrate its clinker operations in Odisha and the grinding operations in West Bengal; (ii) reduce total delivered cost of cement to end consumers in West Bengal; and (iii) help OCL maintain market share in all its existing markets, including Odisha.

In 2007, IFC provided a loan in Indian Rupee equivalent to \$50 million to help finance expansion of 1.32 million tons per annum clinker capacity and a greenfield cement grinding capacity of 0.9 million tons per annum in Odisha. This project was completed in 2009.

IFC's value addition stems from its ability to engage strategically with the company in the long-term. IFC's support and valuable inputs to this project on sustainability, in a challenging location in low-income eastern India, have had significant positive social impact.

Key Achievements and Expected Results:

The project is expected to have substantial development impacts, including:

- ✓ Direct and indirect employment creation;
- ✓ Contribution to overall economic development through local supply linkages;
- ✓ Adoption of superior energy efficient technology; and
- ✓ Positive climate change impact through substitution of clinker with blast furnace slag in cement production, and avoiding greenhouse gas emissions.

The project is expected to encourage other private investors to invest in India's frontier states. By supporting companies like OCL in traditional capital intensive sectors such as cement, IFC supports the urgent agenda of job creation, particularly important in the low-income states.

An evaluation conducted in March-April 2012 to assess the impact of IFC's previous investment in OCL found that, in addition to creating 300 direct jobs, the project also created more than 7,000 new indirect jobs. About 70 percent of these were for the unskilled, directly reaching the poor in the state. With IFC's investment in FY13, the project will create 150 direct and 1,500 indirect jobs.

Annex 2: Rural-Urban Transformation

National Ganga River Basin
Andhra Pradesh Municipal Development
Capacity Building for Urban Development
Karnataka Municipal Reform
Tamil Nadu Urban Development III
Sustainable Urban Transport
Mumbai Urban Transport-2A
Punjab Rural Water Supply and Sanitation
Kerala Rural Water Supply and Sanitation (JALANIDHI II)
Uttarakhand Rural Water Supply and Sanitation
Karnataka Rural Water Supply and Sanitation II
Andhra Pradesh Rural Water Supply and Sanitation
Assam Agriculture Competitiveness
Rajasthan Agriculture Competitiveness
Maharashtra Agriculture Competitiveness
National Agriculture Innovation
National Dairy Support
Andhra Pradesh Community Tank Management
Orissa Community Tank Management
Tamil Nadu Irrigated Agriculture and Modernization and Water Bodies Restoration and Management
Andhra Pradesh Water Sector Improvement
Madhya Pradesh Water Sector Restructuring
Maharashtra Water Sector Improvement
Uttar Pradesh Sodic Land Reclamation III
West Bengal Accelerated Development of Minor Irrigation
Karnataka Watershed Development II
Himachal Pradesh Mid-Himalayan Watershed Development
CTC Sector Phase out Project
Chiller Energy Efficiency (GEF and Montreal Protocol)
Financing Energy Efficiency at Micro, Small and Medium Enterprises
Capacity Building for Industrial Pollution Management
Integrated Coastal Zone Management
Biodiversity Conservation and Rural Livelihood Improvement
Dam Rehabilitation and Improvement
INOX Rajasthan (IFC)
IDFC Climate Change Loan (IFC)
DCM Shriam Consolidated Limited (DSCL) (IFC)

INDIA: National Ganga River Basin Project

Key Dates:

Approved: May 31, 2011
 Effective: August 18, 2011
 Closing: December 31, 2019



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IBRD | 801 | 2 | 799 |
| IDA | 199* | 45 | 154 |
| Borrower/Recipient | 556 | | |
| Total Project Cost | 1,156 | | |

*US\$ millions; Exchange adjusted value as on July 10, 2013 is USD 184 million
 For more information see the latest [Implementation Status and Results Report](#)

Background and Objective: The Ganga river, despite being highly revered and the primary water resource for the heartland of India, is seriously polluted and under extreme environmental stress. The river suffers from high levels of organic and bacterial pollution, resulting in a wide range of negative impacts, including on human health, agriculture, urban services, and the environment. The pollution in the Ganga is primarily a result of inadequate infrastructure, the weak capacity of local water and wastewater utilities in the basin, and the poor state of environmental monitoring and regulation. In 2009, the Government of India developed a new vision for clean-up and conservation of the Ganga, leading to the establishment of the National Ganga River Basin Authority (NGRBA) with the mandate to develop and implement a multi-sector program. The World Bank's National Ganga River Basin Project provides upstream support to the NGRBA for institutional development, program design, and early investments. This is a flagship project of the World Bank and the Government of India, and has high priority in India due to the scale of the challenge, and the religious, historical, and cultural importance of the Ganga River in India.

The Project development objectives are to support the NGRBA in: (a) building the capacity of its nascent operational-level institutions so they can manage the long-term Ganga clean-up and conservation program; and (b) implementing a diverse set of demonstrative investments for reducing point-source pollution loads in a sustainable manner at priority locations on the Ganga. Project components cover:

- **Institutional Development:** Including operationalization of the new NGRBA, communications campaigns for river cleaning, and technical assistance for city service providers and environmental regulators.
- **Infrastructure investments in four sectors:** Wastewater collection and treatment, industrial pollution control, solid waste management, and riverfront development, with investments to be selected according to a framework approach.

The project supports activities in the Center and in the five states through which the mainstream of the river runs: Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal. Three of these are low-income and one is special category.

Key Expected Results: Progress towards achieving the project's development objective is measured by three outcome indicators:

- ✓ Average rating of NGRBA-related institutions;
- ✓ Volume of untreated wastewater prevented from entering the Ganga due to project interventions;
- ✓ Improvements in river water quality at targeted locations with significant investments.

A clean river would mean the conservation of a cultural icon in India and abroad and the economic lifeline of hundreds of millions of people, and a huge savings in health costs by reducing the burden of disease associated with inadequate sanitation.

Implementing Agencies: At the Center: the National Mission Clean Ganga in the Ministry of Environment and Forests, and the Central Pollution Control Board. In the States: new State Program Management Groups (SPMGs) in Uttarakhand, UP, Bihar, Jharkhand, and West Bengal. Below the SPMGs are multiple executing agencies, mostly large parastatals such as the Uttar Pradesh Jal Nigam (UPJN) in UP, and the Bihar Urban Infrastructure Development Corporation (BUIDCO) in Bihar.

Key Development Partners: AusAID has supported the project through two trust funds, and through proposed support for an industrial pollution control project in Kanpur and a study tour to Australia.

INDIA: Andhra Pradesh Municipal Development Project

Key Dates:

Approved: December 10, 2009

Effective: March 23, 2010

Closing: December 31, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|------------------------------|--------------|-------------|--------------|
| IDA | 300.0 | 39.0 | 261.0 |
| Government of Andhra Pradesh | 50.0 | 4.0 | 46.0 |
| Total Project Cost | 350.0 | 43.0 | 307.0 |

*US\$ million; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)



Background and Objective: (In the 1980s the Bank funded projects with the Hyderabad Water Board). Andhra Pradesh is among the more urbanized states in India, with a total population of about 84 million, 34 percent of whom live in urban areas. The state has three cities with a population of over one million, including its capital, Hyderabad. Like many states across the country, Andhra Pradesh faces fundamental challenges in managing urbanization and providing for adequate services to a growing urban population: housing, water supply, sewerage, drainage, solid waste management, and transportation.

This project is the Bank's first recent re-engagement in the urban sector with the state of Andhra Pradesh. The project objective is to help improve urban services in the state, and build the capacity of Urban Local Bodies (ULBs) to sustain and expand urban services. Urban service improvements are chosen in a demand-driven manner and implemented by ULBs, subject to several access and performance criteria, and with necessary technical support. The project supports improvements in the financial, technical, and management capacities of all ULBs through technical assistance. The project will also support improvements in the state-level framework that defines ULBs' autonomy, accountability, and incentives for performance, as well as the Government of AP's capacity to monitor ULBs' performances and to provide policy and technical support for their development. The project components are:

- **State-Level Policy and Institutional Development Support:** To improve the state's policy and institutional framework to support service delivery and capacity building by ULBs.
- **Municipal Capacity Enhancement:** To enhance the financial and technical capacity, and operating systems of ULBs.
- **Urban Infrastructure Investment:** To finance sustainable, high-priority investments identified by ULBs to improve urban services or operational efficiency.
- **Project Management Technical Assistance:** To ensure the quality of subproject preparation, implementation, and monitoring.

Key Achieved and Expected Results:

- ✓ About US\$340 million of urban sub-projects have been prepared and are being taken up for implementation across 10 participating ULBs;
- ✓ Over 1.5 million city residents in cities that currently receive 1-3 hours of water supply (not even daily, in many cases) are expected to benefit from improved levels of water supply.
- ✓ The National Institute of Urban Management has been set up – final legal incorporation is awaited, but it has commenced operations from a temporary campus and under an Acting Director.
- ✓ GIS mapping and municipal E-governance activities are commencing across about 120 ULBs.
- ✓ Training of urban sector staff has started, and over 1,000 staff have already received training against a project target of 500.

Implementing Agency: Municipal Administration and Urban Development Department, Government of Andhra Pradesh; Andhra Pradesh Urban Finance and Infrastructure Development Corporation (APUFIDC).

India: Capacity Building for Urban Development Project

Key Dates:

Approved: June 17, 2011

Effective: January 27, 2012

Closing: June 30, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IDA | 60.00 | 4.48 | 55.18 |
| Total Project Cost | 60.00 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: India is undergoing a massive rural-urban transformation. The share of the Indian population living in urban areas is expected to increase from one-third to half the population in the next 20 years. Already, the number of towns in India as jumped from about 5,000 in 2001 to 8,000 in 2011. In addition to this spatial transformation, India is undergoing an institutional transformation with local governments playing a greater role in service delivery and urban management. Although the process of decentralization was initiated two decades ago with the 73rd and 74th constitutional amendments, the transfer of resources and responsibilities to the local governments is still a work in progress.

The launch of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in December 2005 by the Government of India signaled the increased importance of the urban sector in the political agenda. The total budgeted amount was Rs. 50,000 Cr. (more than US\$11 billion in 2005) for the 2005-2012 period to finance city-level investments in infrastructure and housing. There is consensus that lack of capacity at the local level is a major constraint affecting not only the day-to-day management of urban areas but also the ability of cities to absorb technical and financial assistance from the Central and State governments.

The Project development objective is to assist the Ministry of Urban Development (MoUD) and the Ministry of Housing and Urban Poverty Alleviation (MoHUPA) in improving the systems and skills of select urban local government bodies (ULBs) with respect to urban management and urban poverty reduction, as well as to support the two Ministries' implementation of various urban policy and institutional reforms. The project has three components:

- **Capacity Building for Strengthened Urban Management:** This component is implemented by the MoUD, and supports technical assistance to ULBs to improve systems for: (i) financial management; (ii) urban planning; (iii) service delivery; and (iv) governance. ULBs select the desired package of assistance based on an assessment of needs which is undertaken with support from the Project Management Unit. This demand-driven menu approach is in response to the variable capacity building needs faced by ULBs.
- **Capacity Building for Effective Urban Poverty Alleviation and Monitoring:** This component is implemented by the MoHUPA and supports activities including: (i) administering and operating a challenge fund for urban poverty alleviation, (ii) creating a network of practitioners from among the urban local bodies participating in the Challenge Fund to promote information sharing and capacity building in urban poverty alleviation, and (iii) strengthening the MoHUPA's capacity for policy analysis and monitoring and evaluation.
- **Implementation Support:** Supports a national Project Management Unit for providing overall technical and managerial assistance to the MoUD and MoHUPA during implementation.

Key Expected Results:

20 participating ULBs will have implemented at least two urban management reforms in the areas covered under the technical assistance: (i) financial management; (ii) urban planning; (iii) service delivery; and (iv) governance.

Implementing Agency: Ministry of Urban Development (MoUD) and Ministry of Housing and Urban Poverty Alleviation (MOHUPA).

INDIA: Karnataka Municipal Reform Project

Key Dates:

Approved: March 14, 2006

Effective: June 30, 2006

Closing: March 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|-------------------------|------------|-----------|-------------|
| IBRD | 216.0 | 131.8 | 84.2 |
| Government of Karnataka | 94.0 | 55.0 | 39.0 |
| Total Project Cost | 310.0 | 186.8 | 123.2 |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objectives: Karnataka is among the more urbanized states in India, with a total population of about 61 million and an urbanization rate of 39 percent. The capital city of Bangalore, with a population of over 8 million, is one of India's important IT hubs. Karnataka faces fundamental challenges in managing urbanization and providing for adequate public housing and urban services such as water supply, sewerage, drainage, solid waste management, and transport to meet the demands of a fast-growing urban population.

The Project development objective is to help improve the delivery of urban services by enhancing the quality of urban infrastructure, and strengthening the institutional and financial frameworks for urban services at the Urban Local Body (ULB) and state levels. The project components are:

- **Institutional Development:** Finances institutional capacity building activities aimed at better transparency and accountability in basic urban and management functions at the ULB.
- **Municipal Investment Support:** Will provide performance-based investment support to about 30 ULBs outside Bangalore for urban services.
- **Bangalore Development:** Provides financing support to rehabilitate the road network and improve sewerage services in Bangalore.
- **Project Management:** Supports managing project activities, including assisting ULBs to formulate, design, and implement technically and financially sound projects.

Key Results Achieved:

- ✓ 1,637 km of sewer lines have been laid, and over 105,000 sewer connections provided against the target of 120,000;
- ✓ About 125 km of city roads have been rehabilitated in Bangalore;
- ✓ Over 160 ULBs have implemented new municipal e-governance systems covering functions such as accounting, budgeting, property tax management, grievance redressal, and new websites—all resulting in enhanced citizen interface and accountability. This is considered a best practice in India;
- ✓ Over 18,165 urban sector staff trained against the target of 8,700 staff; and
- ✓ About 26 ULBs have accessed performance-based investment support.

Implementing Agency: Urban Development Department, Government of Karnataka; Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC).

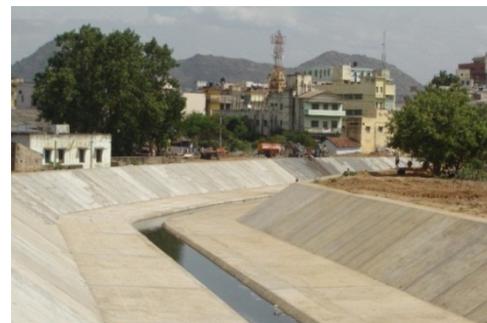
INDIA: Third Tamil Nadu Urban Development Project (TNUDP III)

Key Dates:

Approved: July 5, 2005

Effective: October 19, 2005

Closing: March 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------------|------------|-----------|-------------|
| IBRD | 300.0 | 253.7 | 46.3 |
| Government of Tamil Nadu | 94.0 | 75.0 | 19.0 |
| Capital Markets | 40.0 | 40.0 | 0.0 |
| Total Project Cost | 434.0 | 368.7 | 65.3 |

*US\$ millions; as of June 30, 2013

For more information see the latest [Implementation Status and Results Report](#)

Background and Objective: Tamil Nadu is the most urbanized among the larger states in India, with a total population of about 72 million and an urbanization rate of 48 percent. Tamil Nadu has four cities with over a million people, including its capital, Chennai, and faces fundamental challenges in managing urbanization and providing for adequate public housing and urban services such as water supply, sewerage, drainage, solid waste management and urban transportation networks, and systems for a fast growing urban population. The Tamil Nadu Urban Development Project is the third in the series of Bank support for urban development to the state, and part of a long-standing partnership with the state on urban development.

The development objective of the project is to improve the delivery of urban services by enhancing the quality of urban infrastructure and strengthening the institutional and financial framework. This would be achieved through: strengthening and deepening the empowerment of Urban Local Bodies (ULBs) by continuing and expanding the capacity building programs; and by mobilizing resources on a sustainable basis for urban infrastructure investments through private sector financing, and linking ULBs to the financial markets through the intermediation of the Tamil Nadu Urban Development Fund (TNUDF). The project components are:

- **Institutional Development component:** Supports capacity building initiatives at ULBs, including IT/E-governance, urban mapping, transportation master-plans, and training municipal staff.
- **Urban Investment component:** Urban Investments through the Tamil Nadu Urban Development Fund (TNUDF), including investment support through a line of credit in the form of sub-loans and grants to ULBs for urban infrastructure and investment support for urban transport improvements in and around Chennai.

Key Results Achieved:

- ✓ TNUDF established as a state-level, viable ‘Municipal Fund’ – a first of its kind Bank engagement in India. Established under the earlier TNUDP-II, the Fund has served as a model for many other states;
- ✓ TNUDF has maintained a 100 percent repayment track record on sub-loans to ULBs to date (against a target of less than 95 percent), and carried out pioneering transactions including: the first pooled finance municipal bond issue, promoting capital contributions from beneficiaries of urban projects as a financing mechanism, and PPPs at the municipal level;
- ✓ Approximately US\$40 million has been leveraged through market-based and non-traditional sources;
- ✓ Computerization and e-governance has been implemented in 49 smaller ULBs as part of capacity building efforts;
- ✓ Over 180 km of city roads have been upgraded; water supply services have improved in 17 ULBs, benefitting over 400,000 people; and sewerage networks are being laid that will benefit another 2 million people in smaller towns and cities.

Implementing Agency: Municipal Administration and Water Supply Department, Government of Tamil Nadu; Tamil Nadu Urban Development Fund (TNUDF), and Chennai Metropolitan Development Authority (CMDA).

Key Development Partners: KfW, the German Development Bank, and JBIC (Japan Bank for International Cooperation) have participated through parallel lines of credit to TNUDF using the Bank’s framework.

INDIA: Sustainable Urban Transport Project and GEF- Sustainable Urban Transport Project

Key Dates:

Approved: December 10, 2009

Effective: May 3, 2010

Closing: November 30, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|-----------------------------|--------------|-----------|-------------|
| IBRD | 105.2 | 21.9 | |
| Global Environment Facility | 20.3 | 3.8 | 16.5 |
| Government of India | 223.1 | | |
| Total Project Cost | 234.4 | | |

*US\$ millions, as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: India's continuing urbanization and high economic growth over the last decade have led to an inevitable rise in ownership and use of motorized vehicles across the country's cities and towns. Two-wheeler (e.g. mopeds, motorcycles) and car ownership in cities has grown rapidly—by double digits. This growing motorization, already well-underway, may be exacerbated by the ongoing expansion of urban and industrialized areas as well as rising incomes. The result is additional stress on available—and often limited—transport infrastructure, and on the institutions in charge of road construction and maintenance, traffic management, road safety, and public transport services. As more and more cars and two-wheelers hit the streets, city centers become congested, road safety deteriorates, and the environment suffers as Green House Gas (GHG) emissions increase. While the urban transport sector accounts for less than ten percent of India's total emissions, it is one of the fastest growing sectors in terms of fossil fuel consumption. Without timely interventions to develop and provide attractive alternatives to personal modes of transport, the situation is likely to worsen. With support from the Global Environment Facility (GEF), the Bank, in partnership with UNDP, has been supporting the Ministry of Urban Development since 2006 to develop and implement a Sustainable Urban Transport Program, which aims to strengthen national and local government capacity in urban transport planning and management in a more integrated and comprehensive manner. The project supports the implementation of the India National Urban Transport Policy.

The Project development objective and global environment objective is to promote environmentally sustainable urban transport in India, and to improve the use of environment-friendly transport through demonstration projects in selected cities. The project has two components:

- **Capacity Development Assistance for Urban Transport:** Provides technical assistance to the Ministry of Urban Development to improve national, state and local capacity to implement the National Urban Transport Policy.
- **City Demonstration Projects:** Will catalyze high profile-high impact projects in five cities (Pimpri-Chinchwad in Maharashtra, Naya Raipur in Chhattisgarh, Indore in Madhya Pradesh, and Hubli-Dharwad and Mysore in Karnataka. These demonstration projects focus on: public transport; non-motorized transport; and a pilot Intelligent Transport System (ITS). City Projects include:
 - **Pimpri-Chinchwad:** A Bus Rapid Transit System (BRTS) along two corridors;
 - **Naya Raipur:** Public Transport Connectivity between Raipur and Naya Raipur, and pedestrian and cycling infrastructure in the city;
 - **Hubli-Dharwad:** A BRTS corridor along with associated public transport infrastructure and passenger access improvements;
 - **Mysore:** Intelligent Transport Systems (ITS) including Passenger Information System and Automatic Vehicle Location Systems for city bus service;
 - **Indore:** Intelligent Transport Systems for BRTS including Automatic Fare Collection System and Traffic Signal Priority.

Key Achieved and Expected Results: At project end, this transport project will create better urban transport project preparation and implementation capacities, and will catalyze many more sustainable public transport and NMT projects across the country. The implementation of the ITS Project in Mysore, involving user-friendly Passenger Information Systems and an Automatic Vehicle Location System, has recently been completed.

Implementing Agency: Ministry of Urban Development, Pimpri-Chinchwad Municipal Corporation, Naya Raipur Development Authority, Hubli-Dharwad BRTS Company Limited, Karnataka State Road Transport Corporation, Atal Indore City Transport Services Limited.

Key Development Partners: United Nations Development Program.

INDIA: Mumbai Urban Transport Project- 2A

Key Dates:

Approved: June 29,2010
 Effective: October 8, 2010
 Closing: June 15, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|---------------|---------------|
| IBRD | 430 | 68.9 | 361.1 |
| Government of India | 540.5 | 170.61 | 369.89 |
| Total Project Cost | 970.5 | 239.51 | 730.99 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: Like other fast-growing urban centers in India, the Mumbai region faces enormous challenges, including an acute inadequacy of transport infrastructure. The suburban rail system is the lifeline of Mumbai, carrying an estimated 7.4 million passengers daily and 2.7 billion annually. In the early 2000s, the Bank supported the Government of Maharashtra and Indian Railways' efforts to ease transport constraints in the megapolis through the first Mumbai Urban Transport Project (MUTP I). TranSforM, a comprehensive transport study for the Mumbai region, carried out under MUTP-I, recommended further investment in the suburban rail system as a priority, in recognition of suburban rail's dominant role in the region's transport network. MUTP-II is the follow-up investment in the rail sector, aimed at helping the government respond to continued growing demand for suburban rail transport in the Mumbai metropolitan area.

The project development objective is to improve the passenger carrying capacity, operational efficiency, level of comfort, and institutional capacity of entities involved in the suburban rail system of Mumbai metropolitan area. The Project has four components:

- **EMU Rolling Stock Fleet Increase:** 864 additional EMU cars will be procured, increasing the fleet to 3,124.
- **Conversion of Power Supply from Direct Current (DC) to Alternating Current (AC):** Includes Improvements to signals and telecoms in three sections of the Railway's network of Mumbai.
- **EMU Maintenance Facilities and Stabling Lines:** New stabling lines will be built to accommodate the fleet increase.
- **Capacity Strengthening and Technical Assistance:** Strategic and tactical studies will be carried out, as well as capacity building and training.

The over-stretched Mumbai suburban rail system also suffers from a poor safety record. A demonstration component has been added to the project to address safety-related issues and increase safety awareness.

Key Achievements and Expected Results:

- ✓ The project will increase the number of train services in peak hour (presently varying from 14.4 to 17 trains per hour) to 18 trains per hour on all lines.
- ✓ Trains currently comprise 9 or 12 cars each, and these will be converted to 12 cars each, resulting in increased carrying capacity. Improved system efficiency will result in reduced journey time varying from about 2.5 to 8 percent on different lines.
- ✓ The new trains being procured are more energy efficient, with a regenerative braking system resulting in reduction of energy consumption by about 30 percent from conventional trains.
- ✓ Technical assistance studies under the project are helping the implementing agency to build capacity and plan the more efficient suburban rail system.

Implementing Agency: Mumbai Railway Vikas Corporation Limited, a jointly owned company of the Ministry of Railways and Government of Maharashtra.

Key Development Partners: Ministry of Railways, Government of Maharashtra, various agencies of Ministry of Railways, Mumbai Metropolitan Region Development Authority.

INDIA: Punjab Rural Water Supply and Sanitation Project

Key Dates:

Approved: December 14, 2006

Effective: March 26, 2007

Closing: December 31, 2013

| Financier | Financing* | Disbursed** | Undisbursed |
|---------------------------|---------------|---------------|--------------|
| IDA | 154.00 | 95.68 | 58.32 |
| Government of Punjab | 65.30 | 42.00 | 23.30 |
| Government of India | 42.10 | 35.30 | 6.80 |
| Total Project Cost | 261.40 | 172.98 | 88.42 |

*US\$ millions; as of June 30, 2013; **Government of India and Government of Punjab disbursement figures are approximate

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: The prosperous state of Punjab was suffering from challenges in water supply and sanitation. At the start of the project, some 30 percent of villages still did not have access to basic drinking water services, and while the remaining 70 percent had piped water systems, many had an extremely low customer base and poor Operations and Maintenance (O&M) performance. As a result, about 60 percent of households in Punjab were dependent on unsafe private drinking water sources, and the water supply systems were fast becoming unsustainable, with high O&M costs for the Department of Water Supply and Sanitation (DWSS) and low O&M cost recovery from users. In terms of sanitation, only about 50 percent of households had toilets, and highly charged septic tank effluent flowing into open drains had degraded the environmental conditions in the villages and posed a serious health hazard. The state Government sought support from the World Bank to address these challenges.

The Punjab Rural Water Supply and Sanitation Project is helping the Government of Punjab achieve its broader development goals of improved health and water security, poverty reduction, higher school enrollment (particularly for girls), and reduction in infant mortality and maternal mortality rates. The project also supports the government's efforts to accelerate decentralization by building the capacity of the rural local governments in development and delivery of rural services.

The project's development objective is to assist the Government of Punjab in increasing rural communities' access to improved and sustainable rural water supply and sanitation services. The project components are:

- **Program Management:** Finances establishment and operating costs of the program institutions and training, consultancies, and goods and equipment for: management support to DWSS; information, education, and communication campaigns; operating M&E and Management Information Systems; and capacity building programs.
- **Community Development:** Finances the Support Organizations' consultancy contract fees for their support services to DWSS, Gram Panchayats, project communities, and the operating cost of DWSS staff.
- **Infrastructure Building:** Finances civil works contracts for building new, or improving existing, drinking water schemes in about 3000 villages. It finances upgrading existing water supply schemes in some 200 villages to improve their operational performance, and building small bore sewerage schemes in about 100 villages which already have good household sanitation coverage but where the release of septic tank effluent on the village streets and open drains creates a serious health hazard.

Key Results Achieved:

- ✓ 84 percent of target habitations in rural areas of the state are now 'fully covered';
- ✓ 44 percent of rural households provided with year-round access to safe and adequate water (target of 90 percent);
- ✓ 940 other water service providers are being supported (target of 1,250);
- ✓ 337,124 new piped household water connections as a result of the project intervention;
- ✓ 1.6 million people in rural areas provided with access to improved water sources (target of 2.28 million);
- ✓ 72.3 percent of participating habitations have community sanitation facilities that are performing satisfactorily (target of 90 percent).

Implementing Agency: Department of Water Supply and Sanitation, Government of Punjab.

INDIA: Second Kerala Rural Water Supply and Sanitation Project (JALANIDHI II)

Key Dates:

Approved: December 15, 2011

Effective: April 17, 2012

Closing: June 30, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-------------|--------------|
| IDA | 155.3 | 1.1 | 154.2 |
| Government of Kerala | 46.2 | | |
| Other | 39.7 | 2.1 | 37.6 |
| Total Project Cost | 241.2 | 3.21 | 238.0 |

*US\$ millions, as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: The Government of Kerala (GoK) has significantly improved rural water supply coverage, from 58.6 percent in 2003 to 67.7 percent by 2010. Kerala has also achieved impressive coverage of household sanitation: 95, percent of rural households have access to a toilet facility, and 87, percent of Gram Panchayats (GPs) have received the Government of India's 'Clean Village Award' for 100, percent 'open defecation free' status. Nevertheless, rural households disproportionately remain without adequate water supply, and the access gap between rural and urban areas needs to be bridged. The gap is particularly acute in remote villages and areas with low quantity and poor quality of water. Challenges include: increasing presence of fluoride, iron, and salinity; contamination of private drinking wells due to poor sanitation; emergence of water-stressed areas where demand outstrips local supply; increasing numbers of 'slipped back' habitations; continued dependence of large number of households on private open wells that dry up in the summer; and low coverage of household connections from piped water systems.

The development objective of the Second Kerala Rural Water and Sanitation Project (also known as Jananidhi II) is to increase the access of rural communities to improved and sustainable water supply and sanitation services in Kerala, using a decentralized, demand-responsive approach. The project has three components:

- **Institution Building:** (i) Supports capacity building of sector institutions and support organizations; (ii) assists GOK in implementing a statewide sector development program; and (iii) supports project management costs.
- **Technical Assistance:** Provides technical assistance to implementing agencies to ensure that infrastructure investments under Component C are properly implemented and resultant services efficiently provided.
- **Infrastructure Development:** Finances implementation of investments for: (i) new and rehabilitated intra-GP rural water supply schemes; (ii) pilot rehabilitation and modernization of multi-GP water supply schemes and transfer of internal distribution to GPs; and (iii) sanitation schemes, mainly covering community-centric solid and liquid waste management and household sanitation solutions in difficult terrain.

Key Expected and Achieved Results: Water supply interventions under the project will benefit some 288,000 households, or 1.15 million people, and some 690,000 people will benefit from improved sanitation services. Even in early stages of implementation, the project has begun to yield promising results:

- ✓ Greater demand than anticipated for project interventions from both GPs and beneficiary groups, with approximately twice the number of households coming forward to participate.
- ✓ 898 beneficiary groups have been formed in GPs, whose households have deposited a cumulative US\$ 1.3 million equivalent as upfront contributions towards the capital costs of their communities' water schemes.
- ✓ Gram Panchayat-wide Water Security Plans and Sanitation Plans have been prepared for the entire first batch GPs.
- ✓ 1,031 Beneficiary Groups (BGs), consisting of 52,220 households, have been registered so far in the Batch-I GPs. A large number of these BGs will eventually become water service providers (either as stand-alone BG service providers or in combination with neighboring BGs).
- ✓ 3,702 people have benefited from capacity building programs related to improved hygiene and sanitation behavior (2,179 of these are women).
- ✓ Sanitation planning under Batch-I GPs is being finalized. Feasibility consultancy works for the regional septage management plant is ongoing.

Implementing Agency: Water Resources Department, Kerala Rural Water Supply and Sanitation Agency, Government of Kerala.

INDIA: Uttarakhand Rural Water Supply and Sanitation

Key Dates:

Approved: May 9, 2006

Effective: October 11, 2006

Closing: June 16, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|--|------------|-----------|-------------|
| IDA | 126 | 101 | 26 |
| Government of Uttarakhand and Government of India | 104 | | |
| Total Project Cost | 230 | | |

*US\$ millions; amounts based on exchange rate as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: In 2003, only 50 percent of habitations in the mountain state of Uttarakhand were categorized as ‘fully covered’ with functioning water supply schemes, 38 percent as ‘partially covered,’ and about 12 percent as ‘not covered’. Between 75 to 80 percent of the rural population did not have access to latrines. Villagers spent one to three hours a day collecting water for domestic use. The problem was aggravated by water supply systems with outdated design and inadequate operations and maintenance. All too often, rural water supply and sanitation services did not adequately respond to the user communities’ needs; structures were built at sites without consideration of community needs or preferences. This resulted in government-dominated and target-driven service that became unsustainable in many communities.

The project development objective was to improve the effectiveness of Rural Water Supply and Sanitation (RWSS) services through decentralization, and increasing the role of Panchayati Raj Institutions and local communities in the state of Uttarakhand. The project supports a sector-wide Approach (SWAp) and has three components:

- **RWSS Sector Development:** Supports the state’s sector reform process by establishing and enhancing its institutional capacity to implement, manage, and sustain the medium term RWSS program, including sector planning, programming, and M&E. Key elements include transfer of RWSS service delivery from the state water agencies to Panchayati Raj Institutions, and transformation of the government’s role from service provider to facilitator.
- **RWSS Infrastructure Investments:** Aims to improve sustainable access to RWSS services by financing the infrastructure and software investments. All new water supply investments are made in an integrated manner, with catchment-area management, health, and hygiene awareness promotion, and incentives for construction of individual household latrines. The new investments include building or rehabilitating water supply and sanitation facilities, including water source-strengthening measures, which the communities plan, implement, and manage.
- **RWSS Program Management Support and M&E**

Key Results Achieved:

- ✓ The RWSS SWAp with uniform policies and principles has been successfully implemented across all 13 districts in the state.
- ✓ The three implementing agencies have completed water supply works for Single Village Schemes and Multi Village Schemes in 6,148 habitations, against the overall target of 8,270 habitations.
- ✓ An additional 2,210 habitations are currently under implementation, thus exceeding the project target of 8,270 habitations.
- ✓ The project has already benefited 1.03 million people, against a target of 1.2 million.
- ✓ An additional 691,828 Individual Household Latrines have been constructed, and national-level Nirmal Gram Puruskar (NGP) awards received by 525 Gram Panchayats (accounting for 32 percent of the Project Gram Panchayats, against an overall project target of 30 percent).
- ✓ The Government of Uttarakhand has honored the project management unit with the Right to Information (RTI) Award in October 2009 and October 2010 for its good governance and transparency practices.

Implementing Agencies: Swajal Project Management Unit, Uttarakhand Jal Nigan (UJN), and Uttarakhand Jal Sansthan (UJS).

INDIA: Second Karnataka Rural Water Supply and Sanitation Project—Additional Financing

Key Dates:

Approved: June 15, 2010
 Effective: September 9, 2010
 Closing: June 30, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------------|--------------|-----------|-------------|
| IDA | 150.0 | 70.6 | 79.4 |
| Communities and Gram Panchayats | 22.5 | | |
| Total Project Cost | 172.5 | | |

*US\$ millions; as of March 31, 2013

For more information see the latest Implementation Status and Results Report

Background and Objectives: Karnataka's water sector has three major challenges: (i) enhancing the service levels to better cope with the rising aspirations of rural communities; (ii) ensuring sustainability and enhancing quality; and (iii) correspondingly, introducing new technologies to allow households to switch from hand pumps to piped water. Along with improving water supply, household and environmental sanitation remains an important challenge for the state. Decentralization of water supply and sanitation services to Panchayat Raj Institutions (local rural governing bodies) is central to the Government's efforts to improve service delivery.

The World Bank's engagement with the Government of Karnataka in the rural water supply and sanitation (RWSS) sector spans a decade. Karnataka RWSS I covered 1,104 villages spread over 12 districts during 1993-2000, while the Karnataka RWSS II, popularly known as *Jala Nirmal* (literally Clean Water) covered 3,062 villages spread over 744 Gram Panchayats (GPs) of 11 districts during 2001-10. Based on the results of both projects, and to address the continued and overwhelming demand from communities, additional financing was approved in 2010 to benefit an additional 623 GPs and 1,342 villages, or about 2.8 million people.

The Project's development objectives are to increase rural communities' access to improved and sustainable drinking water and sanitation services; and institutionalize decentralization of RWSS service delivery to GPs and user groups. The project has three components:

- **Community Development and Infrastructure Building**
- **Institutional Building**
- **WSS sector strengthening programs**

Key Achieved and Expected Results: The objective of institutionalizing the decentralization of RWSS services delivery to GPs has been achieved. Project results have demonstrated that RWSS services can be successfully decentralized by aligning the project's institutional arrangements with the existing three-tier set up of Panchayat Raj Institutions (PRIs)—the Zilla Panchayat at the district level; Taluka Panchayat at block level; and the Gram Panchayat at the village. This alignment has allowed PRIs to have complete control of resources and decision-making, leading to a deepening and broadening of the decentralization agenda in the state. The project has also demonstrated that GPs and local communities can successfully manage even large and complex water supply schemes. Results of the Bank's engagement in the RWSS sector in Karnataka include:

- ✓ 1,808 GPs, comprising 4,044 villages in the 11 project districts, have already taken on the responsibilities of RWSS service delivery.
- ✓ Half the beneficiaries are poor, and 25 percent are from Scheduled Castes and Scheduled Tribes.
- ✓ More than a third of the Village Water Supply and Sanitation Committee members are women.
- ✓ Under RWSS I, about 3,000 Water Supply schemes and 1,427 Road and Drainage schemes were completed.
- ✓ Under RWSS II, including this additional financing, 381 Single Village Water Supply Schemes (76% of the target) have already been completed; almost all 500 Road and Drainage Schemes were completed.
- ✓ It is expected that 18 Multi Village Water Supply Schemes will be completed before the project closes in 2014.
- ✓ Already 7 million (out of a target of 8 million) people have benefited from these two projects.
- ✓ An Operation and Maintenance Policy was developed and approved by the state in September 2012. Additional efforts at formulating and institutionalizing long-term sustainability policy are underway.

Implementing Agency: Karnataka Rural Water Supply and Sanitation Agency.

Key Partners: Rural Development and Panchayat Raj Department, Government of Karnataka; Karnataka Rural Water Supply and Sanitation Agency (KRWSSA), Panchayat Raj Institutions in 11 districts.

INDIA: Andhra Pradesh Rural Water Supply and Sanitation Project

Key Dates:

Approved: September 22, 2009

Effective: March 23, 2010

Closing: November 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|------------------------------|------------|-----------|-------------|
| IDA | 150 | 29.4 | 120.6 |
| Government of Andhra Pradesh | 30 | | |
| Total Project Cost | 180 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Village Community Listening with rapt attention in a village

Background and Objectives: The Government of Andhra Pradesh (GoAP) created a Rural Water Supply and Sanitation Department (RWSSD) in 2007 to focus and expand RWSS coverage across the state. At project start, about 46 percent of the rural habitations in Andhra Pradesh (rural population 55 million) were Fully Covered, with access to 40 litres per capita per day of water, and about 54 percent of rural households had individual toilets. The state is keen to gradually decentralize service delivery, while building the capacity of the local governments, or Panchayat Raj Institutions (PRIs). The project was designed to: (i) assist the state in building capacity to pursue its goal of increasing decentralized service delivery systems in the water and sanitation sectors; and (ii) scale-up a demand-responsive approach with policy principles consistent with national policies. The project builds on the accumulated experience and lessons learned from Bank projects in India and across the world.

The project supports RWSS programs in six districts of Andhra Pradesh, and helps them adopt a common RWSS program and policies. The project, through improvements in RWSS service delivery and sustainability of assets, will contribute to achieving goal seven of the MDGs on sustainable access to safe drinking water and basic sanitation.

The project objective is to assist the GoAP to improve rural water supply and sanitation services through progressive decentralization, community participation, and enhanced accountability. The project components are:

- **Capacity and Sector Development:** Supports building institutional capacity for implementing, managing, and sustaining project activities, along with sector development studies to inform policy decisions.
- **Infrastructure Development:** Supports improvements in water supply and sanitation services in the project habitations through new infrastructure or rehabilitating and augmenting existing schemes, integrated with source-strengthening measures and sanitation programs. The project aims to cover 2,600 habitations across 6 districts.
- **Project Implementation Support:** Supports setting up a Project Support Unit for implementing the project, including establishing the M&E and Sector Information Systems.

Key Results Achieved:

- ✓ 800,000 people located in 872 habitations provided access to improved water service.
- ✓ 2,319 toilets built in 56 habitations, benefitting about 11,500 people.

Implementing Agency: Rural Water Supply and Sanitation Department, Government of Andhra Pradesh.

Key Partners: State Water and Sanitation Mission, Zilla Parishads at the district level, Gram Panchayats at the village level.

INDIA: Assam Agricultural Competitiveness Project

Key Dates:

Approved: Original Credit: December 14, 2004; AF Credit: March 08, 2012

Effective: Original Credit :February 24, 2005; AF Credit: June 27, 2012

Closing: March 15, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA Original Credit | 157.89 | 147.91 | 13.40 |
| AF Credit | 49.35 | - | 49.35 |
| Government of Assam | | | |
| Original Credit | 19.97 | | |
| AF Credit | 12.50 | | |
| Original Credit | 40.36 | | |
| AF Credit | 13.77 | | |
| Total Project Cost | 293.84 | | |

*US\$ millions; as of July 11, 2013

For more information see the [latest Implementation Status and Results Report](#).

Background and Objectives: The predominant aspect of Assam agriculture is the monsoon-based rice production systems, accounting for about 70 percent of the net cropped area. Major constraints for agricultural development in the state are lack of farmer capital to invest in irrigation and farm mechanization; inadequate market-linked technology transfer, because of ineffective public sector-dominated service delivery mechanisms; low productivity of the fisheries sector; absence of effective producer organizations to facilitate better service delivery and connection to the market chain; and a poor rural road network, inhibiting movement of goods and trade - compounded by inadequate market-yard infrastructure. The Assam Agricultural Competitiveness Project (AACP) addresses these constraints through upgraded infrastructure and improved physical access to market; by increased farm productivity and family incomes, particularly those categorized as small and marginal producers; and by improving sustainable natural resource management and community access to common resources. The project includes activities focused on rural roads, irrigation, fisheries, livestock, dairy, mechanization, community forestry, demand-driven extension, research, market information, and investment in rural market places.

AACP's development objective is to increase the productivity and market access of targeted farmers and community groups. It has three components:

- **Investment Grant Scheme:** Addresses lack of capital in farm and rural communities for productivity-enhancing investments, focusing on private minor irrigation, farm mechanization, and fish production in ponds, tanks, and beels (wetlands);
- **Agricultural Services and Market Chain Development:** Addresses inadequate market-linked technology transfer; limited basic producer organizations with links to markets; and low productivity livestock resources, focusing on extension system reforms, upgrading programs for livestock and fish, improving marketing services, forming milk cooperatives, and starting pilots in forestry and sericulture; and
- **Infrastructure Development:** Addresses constraints related to a poor rural road network and inadequate market infrastructure, focusing on upgrading rural roads and markets.

Key Results Achieved and Expected:

- ✓ Under the original credit, the AACP has benefited 400,000 people across the agriculture, fishery, dairy, forestry, and livestock sectors.
- ✓ Impact assessment of the original credit shows that the project interventions are heavily skewed towards the most disadvantaged sections of the state. Socioeconomic screening, targeting, and the beneficiary mobilization process have allowed significant participation by small and marginal farmers, and the landless. Twenty percent of the beneficiaries are women.
- ✓ The project outcomes (for original credit) in terms of crop and fisheries productivity, cropping intensity, and marketed surplus are equally impressive. Boro paddy productivity increased from 1.5 tons per ha to 5.9 tons per ha; fish productivity from farmer ponds increased from 0.49 tons per ha to 3.28 tons per ha, and cropping intensity increased from 128 to 186 percent.
- ✓ Some of the best practices developed under the project (e.g. community procurement) have been mainstreamed into the operations of other government schemes.

Implementing Agencies: Assam Rural Infrastructure and Agricultural Services Society, Government of Assam.

INDIA: Rajasthan Agricultural Competitiveness Project

Key Dates:

Approved: March 27, 2012

Effective: July 2, 2012

Closing: April 30, 2019

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IDA | 104.64 | 0.31 | 104.34 |
| Government of Rajasthan | 48.40 | | |
| Other (beneficiaries) | 9.10 | | |
| Total Project Cost | 162.14 | | |

*US\$ millions; as of July 11, 2013

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: The desert state of Rajasthan faces acute water quantity and quality issues. Covering 10 percent of India's land area and accounting for 5 percent of the population, Rajasthan has less than 2 percent of the country's water resources. Erratic rainfall and recurring droughts have exacerbated the situation. A large part of the state relies on groundwater for agriculture, and for industrial and domestic consumption, which has negative impacts on the quality and quantity of groundwater. Sustainable and efficient use of the state's scarce water resources is a major challenge. Given the size of the agriculture sector and its water footprint, improved water and agriculture productivity coupled with market linkages are key elements for sustainable and inclusive growth. While there are many challenges to making the semi-arid desert bloom, there are also significant opportunities: (1) a promising potential for diversification into higher value, less water-consuming horticulture, floriculture, spice and medicinal plant production; (2) scope for livestock development focusing on improved breeding, animal health, nutrition and access to markets; (3) availability of a range of tested on-farm water management technologies and agronomic practices; (4) a policy framework that is increasingly conducive to private sector-led, sustainable agriculture, including recently revised state policies on agriculture, livestock, and agribusiness development, as well as water resources management; and (5) the possibility of scaling up experience in PPPs in agriculture.

The development objective of the project is to establish the feasibility of sustainably increasing agricultural productivity and farmer incomes through a distinct agricultural development approach that integrates agriculture water management and agricultural technology, farmer organizations, and market innovations in selected locations across the ten agro-ecological zones of Rajasthan. The project has four components:

- **Climate Resilient Agriculture:** Supports climate-resilient approaches for sustainable use of the natural resource base, through agricultural and livestock production systems aiming to increase long-term productivity and farm incomes in an environment marked by increased climate and rainfall variability. Activities include: (a) harvest, capture, collection, delivery, and distribution of water for agriculture and livestock purposes in surface water-irrigated canal command areas, groundwater sources, and rainfed areas; (b) on-farm water use efficiency; (c) soil moisture and fertility improvements; (d) sustainable intensification and diversification of farm production; and (e) integrated crop and livestock farming systems.
- **Markets and Value Chains:** Will enable farmers to engage in profitable and sustainable market-oriented production, and promote partnerships and market linkages with other value chain participants and agribusinesses.
- **Farmer's Organizations and Capacity Building:** Supports (a) establishment of farmer groups and organizations, (b) capacity building for participatory planning and plan implementation of collective actions; and (c) strengthening institutions and human resources associated with the project implementation.
- **Monitoring and Evaluation, and Learning:** Aims to implement robust monitoring and evaluation systems, which will support potentially scaling up successful approaches across the state. Work will also focus on strengthening synergies, and convergence with ongoing schemes of the Government of Rajasthan and the Government of India.

Key Expected Results: The project is in its first year of implementation, so progress on achieving results is not yet discernible. By the end of the project in 2019, however, it is expected that:

- ✓ Water used in agriculture will be reduced by 15 percent (from 3000 cum to 2550 cum per gross irrigated area).
- ✓ Water use efficiency will increase by 65 percent over the baseline.

Implementing Agency: The Rajasthan Agricultural Competitiveness Project Management and Implementation Society (RACP-MIS), Government of Rajasthan.

INDIA: Maharashtra Agricultural Competitiveness Project

Key Dates:

Approved: September 28, 2010

Effective: December 20, 2010

Closing: December 31, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IDA | 100.07 | 16.06 | 84.20 |
| Government of Maharashtra | 11.00 | | |
| Other (Beneficiaries) | 42.00 | | |
| Total Project Cost | 153.07 | | |

*US\$ millions; as of July 11, 2013

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: Farmers in the state of Maharashtra have severely limited choices in accessing markets. They continue to rely on regulated wholesale markets –known as *mandi*, or Agriculture Produce Marketing Committee “APMC” markets – which are mandatory for the wholesale trading of many agricultural products. The relatively small number of licensed traders and commission agents in these markets has not only limited farmers’ choices, but also resulted in strong political economy interests to preserve this system, and under-investment in physical infrastructure. The challenge for Maharashtra is to create an environment that enables the farming community to acquire the technical capacity necessary to access market opportunities that result in higher returns and better farm incomes. The Government of Maharashtra’s long-term development plan for improving agriculture productivity and competitiveness includes working through the Bank-supported Maharashtra Agricultural Competitiveness Project (MACP) to implement a three-pronged approach, that: (a) promotes the development of alternative marketing options; (b) supports the top tier of regulated wholesale markets in the state to reform, invest, and provide better services; and (c) gradually undertakes regulatory reforms. Regulatory change, investments in physical infrastructure, strengthened capacity, and improved governance, as well as the participation of all stakeholders (farmers, traders, commission agents, processors, and consumers) is expected to improve competitiveness. Over time, the rest of the agriculture marketing system in Maharashtra is expected to become more efficient.

The development objective of the MACP is to increase the productivity, profitability, and market access of the farming community in Maharashtra. Project activities are grouped into three components:

- **Intensification and Diversification of Market-led Production:** Supports agriculture technology transfer, facilitates networking amongst farmers and agribusinesses on emerging marketing opportunities, provides market intelligence using ICT-based applications and other means, and strengthens livestock support services in the state.
- **Improving Farmer Access to Markets:** Promotes alternative market opportunities by establishing farmer groups and a warehouse receipts system, upgrading local rural markets, piloting e-trading platforms, and modernizing existing wholesale markets and livestock yards.
- **Project Management, Learning, and Adjusting:** Undertakes project coordination and management, and monitoring and evaluation.

Key Achieved and Expected Results: Progress under agriculture marketing reforms, such as allowing the establishment of private agriculture wholesale markets, contract farming, direct purchase from producers by agribusinesses, and removal of minimum distance criteria, are leading to the emergence of alternative market arrangements outside the regulated markets.

- ✓ In the past year there has been a steady acceleration in setting up private wholesale markets, which have already attracted US\$ 6.56 million in investments.
- ✓ Licenses for 27 such markets were issued, 23 of which are functional.
- ✓ Most of these markets deal with cotton and had a total annual turnover of US\$ 215 million, capturing a significant market share of traditional regulated markets. The emergence of private markets has forced some traditional regulated markets to reduce market fees.

Implementing Agency: Government of Maharashtra and Maharashtra State Agriculture Marketing Board.

INDIA: National Agricultural Innovation Project

Key Dates:

Approved: April 18, 2006
Effective: September 18, 2006
Closing: June 30, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 200.0 | 172.3 | 37.8 |
| Government of India | 50.0 | | |
| Total Project Cost | 250.0 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: With limited scope for area expansion, the main sources of agricultural growth in the future will be enhanced productivity, profitability, and competitiveness. In this context, the role of agricultural R&D is vital and the flow of knowledge and innovation critical. For Indian agriculture, there needs to be a paradigm shift from resource- and input-based growth to knowledge- and science-based growth. Against this background, and in response to the new opportunities and constraints created by the gradual transformation of Indian agriculture, the project supports the development and implementation of innovations in agriculture through collaboration among farmers, the private sector, civil society, and public sector organizations. The project is the fourth part of a long-lasting engagement between the Bank and the Government of India to support the development of the national agricultural research system.

The Project's development objective is to contribute to the sustainable transformation of the Indian agricultural sector, from one with a primary focus on food self-sufficiency to one in which a market orientation is equally important for poverty alleviation and income generation. The specific objective is to accelerate the collaborative development and application of agricultural innovations between public research organizations, farmers, the private sector, and other stakeholders. Project components cover:

- **Management of Change in the Indian National Agricultural Research System:** Supports the Indian Council of Agricultural Research (ICAR) to evolve into an "agent for change" in the national agricultural research system. This includes support to strengthen information, communication, and dissemination systems; business planning and development; policy analysis and visioning; and remodeling financial management systems.
- **Research:** On production to consumption system; sustainable livelihood security; and frontier areas of agricultural research.

Key Results Achieved:

- ✓ A total of 188 sub-projects, including 91 public-private partnerships involving 174 private sector organizations, have been established for carrying out agricultural innovations. This is the first time private organizations from outside ICAR and the State Agricultural University system have been involved as partners in carrying out publicly-funded agricultural research in the country.
- ✓ Research and development activities are yielding some promising results: 59 patents and/or intellectual property protection application were submitted; 247 research papers were published in high-impact peer-reviewed journals; 63 technologies and products were commercially transferred to private entrepreneurs; 10 business planning and development units were established in selected ICAR institutions and State Agricultural Universities; and 50 new rural industries were piloted.
- ✓ The project is also helping establish high-performance computing facilities as part of a national agricultural bio-informatics grid, developing a financial management and management information system to connect all ICAR institutions on a real-time basis, and has greatly improved access to e-resources for agricultural research to scientists across the country. Encouraged by initial success, during the next five years ICAR plans to allocate their own funds to further scale-up and mainstream a number of activities piloted under the project.

Implementing Agency: Indian Council of Agricultural Research, Ministry of Agriculture, Government of India.

Key Development Partners: 41 State Agricultural Universities from all the main Indian states are also directly involved with project implementation.

INDIA: National Dairy Support Project

Key Dates:

Approved: March 15, 2012

Effective: June 12, 2012

Closing: December 31, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 352.0 | 0.56 | 333.39 |
| Government of India | 39.1 | | |
| Other (Communities) | 62.8 | | |
| Total Project Cost | 453.9 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: Milk is the single largest agricultural commodity in the country in terms of value of output. Almost half of rural households depend on dairy for their livelihood. About 80 percent of farmers are small and marginal, typically owning one to three milk-producing animals. But average milk yield is low compared to international standards, and the growth rate of domestic milk production has slowed in recent years while domestic demand continues to grow as incomes increase and food preferences shift. The gap between supply and demand has translated into higher milk prices, which is of concern in a country with a large vegetarian population for whom milk and milk products are an important part of food and nutritional security.

This project supports the National Dairy Plan (NDP), prepared by India's National Dairy Development Board, which envisages a multi-state initiative to improve animal productivity, strengthen and expand infrastructure for milk procurement at the village level, and enhance milk processing capacity and marketing over a fifteen-year horizon. With this project, the Bank is re-engaging in dairy development at the national level in India by supporting the first phase of the NDP through investments designed to enhance animal productivity and improve farmer access to organized milk marketing channels. Improving productivity in the Indian dairy sector can potentially contribute to improved food security and stability of national—and global—milk prices, as well as improve the incomes of millions of smallholder milk producers.

The Project Development Objectives are to increase the productivity of milk-producing animals and improve market access of milk producers in project areas. The project finances three main components:

- **Productivity Enhancement:** Aims to increase bovine productivity through support for improved animal breeding and nutrition services;
- **Milk Collection and Bulking:** Aims to increase market access of milk producers by investing in village-level milk collection and bulking facilities; and
- **Project Management and Learning:** Supports management, coordination, and monitoring, learning, and evaluation efforts related to the project.

Key Expected Results:

Expected results include an increase in milk production per animal, the proportion of 'in-milk' female animals to adult female animals, and the share of milk sold to the organized milk processing sector. The project targets production of 2,500 genetically improved bulls; production of an additional 55 million doses of high quality semen; coverage of 2.7 million animals under a ration balancing program; and organizing an additional 1.2 million dairy farmers into milk producer organizations.

Implementing Agency: National Dairy Development Board.

Key Development Partners: Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India.

INDIA: Andhra Pradesh Community Based Tanks Management Project

Key Dates:

Approved: April 19, 2007

Effective: July 27, 2007

Closing: September 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IBRD | 94.5 | 55.1 | 39.4 |
| IDA | 94.5 | 54.7 | 41.5 |
| Government of India | 21.8 | | |
| Other – Communities | 7.0 | | |
| Total Project Cost | 217.8 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: The project supports rehabilitation of selected minor irrigation tanks in the state of Andhra Pradesh. Tanks are small water reservoirs that store rainwater run-off, primarily from the monsoon. This water is subsequently used for irrigation and other agricultural activities. The state has a long tradition of tank irrigation with more than 70,000 tanks in the state. Over time, however, largely due to inadequate maintenance of tank systems, the area irrigated by tanks has declined. This project supports rehabilitation of tanks with the active participation of water user associations (WUA) from the local community. Similar projects have also been (are being) supported in Karnataka, Tamil Nadu, and Odisha.

The project development objective is for selected tank based producers to improve agricultural productivity and help water user associations to manage tank systems effectively. The project supports investments across four components:

- **Institutional strengthening:** Focuses on strengthening community-based institutions to enable them to assume greater responsibility for managing tank systems;
- **Minor irrigation systems improvements:** supports rehabilitation of tank systems and also promotes more effective groundwater management in selected tanks;
- **Agricultural livelihoods support services:** In agriculture, horticulture and fisheries; and
- **Project management**

Activities financed under this project include: (i) rehabilitation of around 2,150 selected tank systems that together irrigate about 255,000 hectares of crop area; (ii) agricultural intensification and diversification through programs for developing agriculture, horticulture, and fisheries activities in the tank systems being rehabilitated; (iii) training and capacity building of about 2,150 WUAs to promote self-management in the tank systems being rehabilitated, and related training and capacity building for public institutions involved in supporting irrigated agriculture; and (iv) project implementation support, monitoring and evaluation, and project coordination by multi-disciplinary teams at appropriate levels.

Key Results Achieved: Good progress has been made toward achieving the project development objective. Data reported from a sample of project tanks indicate that:

- ✓ Yields of main crops like paddy, maize, and groundnut have increased by 21 percent, 36 percent, and 51 percent respectively
- ✓ Cropping intensity has increased by 23 percent from baseline values.
- ✓ In tanks where fisheries interventions have been undertaken, fish productivity has increased nearly four times from baseline values.
- ✓ Institutional strengthening efforts have also led to improvement in WUA functioning as measured through a number of intermediate outcome indicators.

Implementing Agency: Irrigation and Command Area Development Department, Government of Andhra Pradesh.

The Government of India is contributing 25 percent of the Loan/Credit as grant financing to the Government of Andhra Pradesh for the project.

INDIA: Orissa Community Tanks Management Project

Key Dates:

Approved: September 30, 2007

Effective: March 17, 2009

Closing: August 31, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-----------|-------------|
| IBRD | 38.47 | 5.99 | 32.48 |
| IDA | 38.47 | 6.22 | 32.45 |
| Government of India | 7.90 | | |
| Water User Associations | 3.00 | | |
| Total Project Cost | 87.84 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: The project combines rehabilitating community water tanks with strengthening water user associations – Pani Panchayat (PPs) – and agricultural development in a single package in order to maximize the economic returns from scarce water resources. In addition to developing tested practices and processes that can be used to support development of tank-based livelihoods, the project will establish a nucleus of ‘good practice’ PPs which could then be used as learning and training centers at other tanks. The project provides integrated support to tank-based livelihoods and advances the concept of participatory water management. All successful practices developed and tested by the project will be embedded in the government’s own work at other tanks.

The Project development objective is to help tank-based producers to improve agricultural productivity, and help water user associations to manage tank systems effectively. The project covers 324 community tanks with a total command area of about 60,000 hectares, and expects to benefit over 150,000 farmers. Activities at each tank include the establishment and support to PP, rehabilitation and modernization of tanks and respective irrigation systems, and general support to agriculture development. The project’s three components are:

- **Institutional Strengthening:** enables community-based institutions – PPs, Fishing Cooperative Societies, Farmer Interest Groups—to assume greater responsibility for tank system management and improving tank-based agricultural livelihoods.
- **Tanks Systems and Irrigation Improvements:** improves the physical and operational performance of tank systems, ensure safe operation of tank structures, and improve reliability of irrigation water supply by rehabilitating and modernizing tank systems that cover areas ranging from 40 to 2,000 hectares.
- **Agricultural Livelihoods Support Services:** complements irrigation system rehabilitation works with the objective of enhancing the productivity of irrigated lands and increasing water use efficiency and/or cropping intensity.

Key Results Expected:

The project is expected to boost crop productivity from 25 percent for paddy to 50 percent for vegetables. Crop productivity of major crops – paddy, green gram, and vegetables – shows good progress because of agriculture demonstrations and training activities. The net gain as a result of the project is positive as compared to the control area in the state. The mid-term review survey indicates that the beneficiaries from the project so far have been mostly marginal and small farmers, tribals and scheduled caste, and, in specific activities, women. There are significant benefits to good management, operation, and maintenance of the tank system. These include: (i) more water stored in the tank, available for all uses and users; (ii) more reliable, timely, and adequate water supplies; (iii) less conflict, and more equitable use of the available water resources; (iv) improved financial returns to water users; and (v) better protected livelihoods.

Implementing Agency: Orissa Community Tank Development and Management Society, Department of Water Resources, Government of Orissa.

INDIA: Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management Project

Key Dates:

Approved: January 23, 2007

Effective: April 9, 2007

Closing: September 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-----------|-------------|
| IBRD | 335.0 | 154.9 | 180.1 |
| IDA | 150.0 | 150.0 | 0 |
| Government of Tamil Nadu | 81.0 | | |
| Total Project Cost | 566.0 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: Tamil Nadu is a water-stressed state in southern India. Problems associated with water availability have become more pronounced due to increasing demands from both industry and households, as well as a long-term uptrend in the use of water for agriculture. The Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management Project supports the Government of Tamil Nadu's goal of improving irrigation systems across the state to increase agricultural and livestock productivity, and create market linkages for farmers. The Government also recognizes the need to develop and implement a comprehensive institutional framework for efficient water management.

The project's development objective is for selected stakeholders (i.e. those in the watershed area covered by the project) to increase irrigated agriculture productivity in a sustainable water resources management framework. The Project has five components:

- **Irrigation Systems Modernization in a Sub-basin Framework:** Focuses on improvements in local water body's irrigation and larger irrigation systems.
- **Agricultural Intensification and Diversification:** Focuses on improvements in crop, livestock, and fisheries varieties and management practices, as well as improvements in marketing linkages for farmers.
- **Institutional Modernization for Irrigated Agriculture:** Focuses on capacity building for the Water Resources Organization and the establishment and operation of Water Users Associations.
- **Water Resources Management:** focuses on establishing and operating a State Water Resources Management Agency as an apex body for water management issues for the State.
- **Project Management Support**

Key Results Achieved and Expected: The Project is progressing well toward achieving its targets.

- ✓ Crop yields have increased anywhere from 18-32 percent, in line with the project target (25-30 percent).
- ✓ Farmers have diversified from traditional crops such as paddy to higher-value horticultural crops (30 percent area increase).
- ✓ New micro-irrigation systems, which cover over 35,000 ha, have already been introduced against an end of project target of 40,000 ha.
- ✓ Farmers' incomes from agriculture have increased by roughly 35 percent, progressing well toward the intended target of 50 percent.
- ✓ Planned targets for improved irrigation systems are being achieved in terms of area coverage, and the quality of these interventions has been above that prevailing outside the Project.
- ✓ The planned number of Water Users Associations has been established, though their functioning is less effective than anticipated. A model for invigorating the WUAs through a broader program of community water budgeting has been tested successfully and is being expanded.
- ✓ The Project has successfully tested a model to integrate the activities of various line departments at the local level based on Single Window Information Centers, and this model is also being scaled up.
- ✓ The State Water Resources Management Agency is established and serves as a hub for the State to deal more effectively with its water management issues.

Implementing Agencies: There are eight implementing agencies involved in the Project. The primary one is the Water Resources Organization of the Public Works Department. Other agencies are: Department of Agriculture, Department of Horticulture, Tamil Nadu Agriculture University, Department of Agricultural Marketing, Department of Agricultural Engineering, Department of Animal Husbandry, and Department of Fisheries. The work of these agencies is being coordinated by the Multi-Disciplinary Project Unit, established by the Government of Tamil Nadu specifically for the IAMWARM Project.

INDIA: Andhra Pradesh Water Sector Improvement Project

Key Dates:

Approved: 30-June-2010
 Effective: 10-September-2010
 Closing: 31-July-2016

| Financier | Financing* | Disbursed | Undisbursed |
|------------------------------|---------------|-----------|-------------|
| IBRD | 450.60 | 118.29 | 332.31 |
| Government of Andhra Pradesh | 529.06 | | |
| Other | 9.31 | | |
| Total Project Cost | 988.97 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: The water sector in Andhra Pradesh faces a number of critical challenges, including competition among different water-using sub-sectors; poor irrigation and water management practices and instruments; low use of modern technologies; low technical and managerial capacity in water sector institutions; lack of coordinated integrated water resources management (IWRM); and a need to improve knowledge base and management practices and operation and management of existing irrigation and water infrastructure. The Andhra Pradesh Water Sector Improvement Project addresses these challenges. Under the project, the Government of Andhra Pradesh has chosen the multipurpose Nagarjuna Sagar Scheme to modernize and introduce modern water management practices and instruments. The Scheme provides water to irrigate about 1 million hectare area as well as for other uses, and represents a variety of management challenges in the irrigation/water sector.

The project development objectives are to: (i) improve irrigation service delivery on a sustainable basis so as to increase the productivity of irrigated agriculture in the Nagarjuna Sagar Scheme, and (ii) strengthen the state's institutional capacity for multi-sectoral planning, development, and management of its water resources. The project has four components:

- **Improving Irrigation Service Delivery in Nagarjuna Sagar Scheme:** Supports five sub-components in the Nagarjuna Sagar Scheme, which has a command area of about 0.9 million hectare. These are: (i) participatory rehabilitation and modernization of irrigation system; (ii) dam safety works; (iii) fostering and capacity building of water user organizations; (iv) improved water management practices; and (v) social and environmental management plan.
- **Irrigated Agriculture Intensification and Diversification:** Supports the following six sub-components in the Nagarjuna Sagar Scheme: (i) field crops; (ii) horticulture crops; (iii) livestock production; (iv) fish production; (v) adaptive research and (vi) market-led extension.
- **Water Sector Institutional Restructuring and Capacity Building:** Supports: (i) establishing, operationalizing, and fostering the Andhra Pradesh Water Resources Regulatory Commission; (ii) restructuring and capacity building of the Irrigation and Command Area Development Department; (iii) strengthening and capacity building of the Water and Land Management Training And Research Institute; (iv) creating an integrated computerized information system; (v) launching a users'-centered aquifer level ground water management pilot; and (vi) conjunctive use of surface and ground water pilots in Nagarjuna Sagar Scheme.
- **Project Management:** Supports activities under three sub-components: (i) project preparation and management; (ii) project monitoring and evaluation; and (iii) information, education, and communication program.

Key Results Achieved: In its third year of implementation, the project is yielding good results. There is an increase in the availability of irrigated water due to improvement in conveyance efficiency.

- ✓ Water use efficiency increased from 132.5 ha/mcm (baseline value) to 156.4 ha/mcm.
- ✓ Paddy yields increased from 2.49 tons/ha to 3.47 ton/ha, maize from 2.37 tons/ha to 4.43 tons/ha and chilies from 2.89 tons/ha to 3.75 tons/ha.
- ✓ The diversification of crops has also been observed; 2.2 percent of cropped area diversified from traditional paddy to the higher value crops of maize, cotton, chilies, vegetables, and fodder.

Implementing Agency: Irrigation and Command Area Development Department, Government of Andhra Pradesh.

INDIA: Madhya Pradesh Water Sector Restructuring Project

Key Dates:

Approved: August 7, 2004

Effective: January 11, 2005

Closing: June 30, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|------------------------------|--------------|-----------|-------------|
| IBRD | 387.4 | 234.8 | 152.6 |
| Government of Madhya Pradesh | 47.0 | | |
| Total Project Cost | 434.4 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objective: It is vital to improve the performance of irrigation systems and reform India's irrigation sector, since irrigation is an essential input for a successful and profitable agriculture sector. In Madhya Pradesh, one of India's low-income states, irrigated agriculture uses about 90 percent of water resources, which are increasingly under stress from population growth and competing demands from other—non-agricultural—users. Climate change may also negatively impact water availability and distribution. There is a large gap between the irrigated area developed in Madhya Pradesh and the actual area under irrigation, as many systems are deteriorated. Considering these issues and constraints, there needs to be an increased focus on integrated water resources management, which provides a central role for water user associations (WUAs). Developing effective associations that are technically and financially sustainable and able to manage sections of irrigation system, is a long-term activity requiring lots of support and capacity building.

The Madhya Pradesh Water Sector Restructuring Project addresses these issues, and focuses on: (i) overall water resources management and irrigation sector reform; (ii) reform of the Water Resources Department (WRD) to be able to not just focus on irrigation scheme planning and development, but also on scheme water management and WUA development; (iii) rehabilitation and modernization of medium- and large-scale irrigation schemes, including the lower order systems; and (iv) support by selective line agencies, agriculture, horticulture, and fisheries, to maximize the benefits of the improved irrigation systems.

The project's development objective is to improve productivity of water for sustainable growth and poverty reduction in selected focus river basins (Chambal, Sindh, Betwa, Ken, and Tons) of Madhya Pradesh. The project has three major components:

- **Water Resources Management– Institutions and Instruments:** sets up the institutions for integrated water resources management and river basin planning;
- **Service Delivery – Irrigation and Drainage Institutions:** transforms the department into a modern and efficient organization, including through separation of irrigation management from irrigation development, adoption of modern technologies for irrigation management, and support to WUAs; and
- **Improving Productivity of Selected Existing Irrigation and Drainage Assets:** rehabilitates and modernizes about 290 schemes with a command area of around 500,000 ha, and extension and advisory support to increase agricultural, horticultural, and fisheries production.

Key Results Achieved: As a result of the project interventions (in particular, rehabilitation of irrigation infrastructure and improvement in water management):

- ✓ 122,000 ha in 71 schemes have been provided with operational irrigation and drainage services;
- ✓ Productivity of water for wheat has increased from about 0.3 kg per cubic meter of water before the project to over 0.6 kg per cubic meter of water;
- ✓ Fish production has increased from 10-20 kg/ha of water spread area to 40-50 kg/ha of water spread area; and
- ✓ Average farm income of project beneficiaries has doubled from about Rs 16,000 per ha to over Rs 30,000 per ha.

Implementing Agency: Madhya Pradesh Water Resources Department, Government of Madhya Pradesh.

INDIA: Maharashtra Water Sector Improvement Project

Key Dates:

Approved: June 23, 2005
 Effective: September 29, 2005
 Closing: March 28, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IBRD | 325.00 | 283.16 | 41.84 |
| Government of Maharashtra | 61.15 | | |
| Other | 7.62 | | |
| Total Project Cost | 393.77 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: The water sector in Maharashtra faces critical challenges, including increased competition among different sectors, poor quality irrigation service delivery, limited cost recovery, and a fragmented approach in planning and management of water resources. To address these issues, the Government of Maharashtra (GoM) has taken a number of bold and path-breaking actions, including a state-level Water Policy (2003), and passed legislation to create a Water Regulator and allow the management of irrigation systems by farmers. The Bank-supported Project seeks to help GoM implement these water sector reform initiatives.

The project development objectives are to strengthen the state's capacity for multi-sectoral planning, development, and sustainable management of the water resources; and to improve irrigation service delivery and productivity of irrigated agriculture. The project's four components provide support for institutional reforms and capacity building in water resources management, as well as irrigation service delivery and complementary investments in improving and modernizing physical assets. They are:

- **Water Sector Institutional Restructuring and Capacity Building:** Supports the establishment and operationalization of the Maharashtra Water Resources Regulatory Authority; restructuring of the existing Maharashtra Krishna Valley Development Corporation into the Maharashtra Krishna Valley Water Resources Corporation as a river basin agency, and its capacity building; restructuring and capacity building of the Water Resources Department; strengthening and capacity building of the Water and Land Management Institute; and the establishment of an integrated computerized information system.
- **Improving Irrigation Service Delivery and Management:** Supports participatory rehabilitation and modernization of about 286 selected irrigation schemes covering about 670,000 ha of Culturable Command Area; enhancement of the safety of 291 dams; formation and capacity building of Water Users' Associations in 286 selected irrigation schemes; implementation of improved water management practices and instruments in six selected irrigation schemes; strengthening of agriculture support services; and implementation of a social and environmental management plan.
- **Innovative Pilots:** Supports four pilots of user-centered aquifer level groundwater management, and four pilots of innovative irrigated agriculture.
- **Project Management:** Supports the state level Project Preparation and Management Unit; monitoring and evaluation; and an information, education, and communication campaign to create awareness about the project initiatives.

Key Results Achieved:

- ✓ The state Water Resources Regulatory Authority has been established and is operational, and the Water Resources Department has been restructured.
- ✓ Water User Organizations have been established in selected projects.
- ✓ Water use efficiency has increased by 37.5 percent against targeted 30 percent.
- ✓ Net increase in agriculture income has increased by 29.5 percent against targeted 20 percent.
- ✓ Water entitlement has been issued to 69 percent of Water Users' Associations under the project, and canal distribution systems have been transferred to 63 percent of the water user organizations for further irrigation management.

Implementing Agency: Water Resources Department, Government of Maharashtra, Mantralaya, Mumbai, Maharashtra.

INDIA: Uttar Pradesh Sodic Lands Reclamation Project III

Key Dates:

Approved: June 30, 2009
 Effective: September 18, 2009
 Closing: December 31, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|-----------------------------|------------|-----------|-------------|
| IDA | 197.0 | 63.3 | 133.7 |
| Government of Uttar Pradesh | 49.2 | 15.8 | 33.4 |
| Beneficiaries | 25.8 | 8.3 | 17.5 |
| Total Project Cost | 272.0 | 87.4 | 184.6 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: Uttar Pradesh is the most populous state in India. It is also one of the poorest, with an annual per capita income of US\$436 in 2011, compared to US\$1,410 nationally: almost 40 percent of the population lives below the poverty line. Agriculture is a crucial sector for the state. 80 percent of the population is rural and highly dependent on agricultural production for their livelihoods; agriculture employs about 66 percent of the labor force, primarily in rice and wheat cultivation. Yet the state's agriculture suffers from productivity gaps of more than 50 percent in key crops, such as rice and wheat.

The Bank-supported Uttar Pradesh Sodic Lands Reclamation Project-III builds on the lessons learned from two predecessor projects that reclaimed about 255,000 ha of Sodic lands from 1993 to 2007. The ongoing project aims to sustainably reclaim another 130,000 ha covering 25 districts of predominantly barren and low productivity Sodic lands. This would improve household food security through increased productivity and cropping intensity. By focusing on degraded lands cultivated by poor farmers, the project contributes to sustainable poverty alleviation.. The Bank has been the Government of Uttar Pradesh's key partner in Sodic land reclamation for the last 15 years and has helped develop and refine the intervention model, including institutional development at the state and user levels.

The project development objective is to increase agricultural productivity of degraded lands in selected areas of Uttar Pradesh by reversing water-induced land degradation, enhancing soil fertility, and improving the provision of agriculture support services. The project has five components:

- **On-Farm Development and Land Treatment:** aims to sustainably reverse water-induced land degradation—salinization, sodification, and water-logging—through carefully sequenced technical interventions.
- **Improvement of Drainage Systems:** aims to improve the drainage networks in the project area to remove/leach effluents, excess rain, and irrigation water from reclaimed and adjoining areas.
- **Agriculture Support Services:** aims to increase agricultural productivity by introducing improved technology, better agronomic practices, and more effective provision of key support services.
- **Institutional Strengthening and Capacity Building for Market Access:** improves the profitability of farm production and enhances livelihoods of the poor by creating better input-output market linkages and more efficient and effective delivery of key support services, and strengthening community-level capacities and provision of some productive infrastructure.
- **Project Management:** aims to ensure smooth implementation of all project activities, monitoring of project implementation progress and outputs/outcomes, and learning from project experience.

Key Results Achieved:

- ✓ Nearly 47,000 ha of Sodic land have been reclaimed, with another 20,000 ha expected this year.
- ✓ Nearly 3,700 ha of ravine land were also reclaimed, against a target of 3000 ha.
- ✓ The productivity of the reclaimed Sodic lands has increased to nearly 6.5 tons per ha and the cropping intensity to 200 percent. A majority of these lands had been previously barren. On both these fronts (productivity and cropping intensity), the mid-term achievements have exceeded the targets.
- ✓ The annual crop income per household, at nearly US\$700, has exceeded the end of project target.
- ✓ The project continues to have an inclusive, pro-poor character: (i) 93 percent of beneficiaries are small and marginal farmers, and 80 percent of beneficiaries belong to backward castes which constitute the most marginalized communities. The project has enabled nearly 40,000 landless and marginal farmers (37.5 percent of total beneficiaries) to obtain secure tenure and possession of land (some 17,000 ha). Of this, over 3,000 beneficiaries have been allotted new land.

Implementing Agency: Uttar Pradesh Bhumi Sudhar Nigam, Government of Uttar Pradesh.

Key Development Partners: Departments of Agriculture, Animal Husbandry, Irrigation; Panchayati Raj, Government of Uttar Pradesh, and the Remote Sensing Application Centre, Lucknow.

INDIA: West Bengal Accelerated Development of Minor Irrigation Project

Key Dates:

Approved: October 4, 2011

Effective: March 19, 2012

Closing: December 31, 2017

| Financier | Financing * | Disbursed | Undisbursed |
|---------------------------|----------------|-----------|-------------|
| IBRD | 125 | 1.22 | 123.78 |
| IDA | 125 | 5.69 | 110.82 |
| Government of West Bengal | 50 | | |
| Total Project Cost | 300 | | |

*As of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: Water resources development is a priority for the Government of India, given the country's limited water resources. Development of irrigation infrastructure is necessary to reduce climatic risks, and irrigated agricultural development has always been central to the Government's strategy for ensuring food security for all. The average agriculture productivity levels are still low in West Bengal, compared to those of advanced agricultural states in the country. There is large potential for enhancing agriculture productivity, provided that the timely supply of all inputs and adequate irrigation water can be assured. Despite having abundant surface and groundwater resources, 40 percent of the state's cultivated area is rainfed, and the cropping intensity has stagnated at 180 percent over the last decade. The majority of the rainfed area belongs to small and marginal farmers, and to help improve livelihoods, the state provides them with minor irrigation schemes for exploiting surface and ground water, including lift irrigation, deep and shallow tube wells, pump-dug wells, tanks, and small water harvesting structures. Once developed and implemented, these schemes are operated and maintained by the community. Unfortunately, performance of these minor irrigation schemes has been mixed mainly due to the absence of any strong ownership among users. The Bank-supported West Bengal Accelerated Development of Minor Irrigation Project aims to contribute to improved reliability of water resources for irrigation and increased agricultural productivity by empowering communities. The total area to be developed under the project is 139,000 ha, benefiting an estimated 166,000 farm families.

The Project Development Objective is to enhance agricultural production of small and marginal farmers by developing minor irrigation schemes, strengthening community-based irrigation management, and supporting agricultural development, including provision of agricultural services, encouraging crop diversification and use of new technologies, and creating income-generating opportunities. The project's four components are:

- **Strengthening Community-based Institutions:** by establishing water users' associations and other farmers' organizations to assume responsibilities for management, operation, and maintenance of minor irrigation schemes and improved irrigated agricultural practices.
- **Irrigation System Development:** by supporting construction of 2,400 new minor surface water irrigation schemes and 2,260 new minor ground water irrigation schemes.
- **Agriculture Support Services:** by providing agricultural support services in the project area to enhance productivity and diversification in agriculture.
- **Project Management Support:** by strengthening the state's water resources department to ensure effective project management.

Key Expected Results: The project is in its second year of implementation. The project's main contribution will be in the area of modernized planning and monitoring, improved water resources development and management practices, and creation of sustainable institutions to efficiently operate and maintain irrigations structures. The project is expected to result in a more than 40 percent increase in yield of main agricultural crops (rice, oilseeds, and vegetables), 4,200 new operational water users associations with 25 percent female beneficiaries, and more than 60 percent of marginal and poor farmers strengthened to generate resources for management, operation, and maintenance of the schemes.

Implementing Agency: Department of Water Resources Investigation and Development, Government of West Bengal.

INDIA: Karnataka Watershed Development 2

Key Dates:

Approved: September 6, 2012

Effective: April 23, 2013

Closing: December 31, 2018

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 60.0 | | |
| Government of India | 25.7 | | |
| Total Project Cost | 85.7 | | |

*US\$ millions; as of June 30, 2013.

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: Approximately 60 percent of India's population depends on rainfed agriculture for their primary livelihood. Thirteen states, including Karnataka, account for about 75 percent of the total rainfed area in India, and have low agricultural productivity and are susceptible to drought, deepening environmental stress, and degradation. The Government of India is helping states address these issues through the National Integrated Watershed Management Program (IWMP) supplemented by the National Rural Employment Guarantee Scheme (NREGS). Yet IWMP, which finances soil and water conservation activities in arid, rainfed areas, has not achieved desired results. The Karnataka Watershed Development Project-II (KWDP-II) is a new approach for watershed management in India. The design builds on the earlier Bank-supported Karnataka Watershed Development Project-I (KWDP-I), which is seen as one of the World Bank's most successful watershed projects, winning five prestigious national and two major international awards. KWDP-I generated a substantial number of positive lessons and best practices around integrated watershed management, agricultural intensification, rural livelihoods, monitoring and evaluation, and building resilience to climate change. The Bank is providing mainly technical support to help the IWMP achieve better results and improve convergence with NREGS.

The Project Development Objective is to demonstrate more effective watershed management through greater integration of programs related to rainfed agriculture, innovative and science-based approaches, and strengthened institutions and capacities.

- **Improved Program Integration in Rainfed Areas:** will demonstrate the successful integration of programs in watershed development, using a science-based approach in project areas.
- **Research, Development and Innovation:** will establish a coordinated research approach to provide practical knowledge and tools to support integrated watershed management.
- **Institutional Strengthening:** will strengthen the institutions and human resources of key stakeholders to improve effective delivery of services for integrated watershed management.
- **Strengthening Horticulture in Rainfed Areas:** will strengthen the knowledge base regarding horticulture potential in rainfed areas, and demonstrate and build the capacity of institutions and communities to improve production and value addition of horticulture in project areas.
- **Project Management and Coordination:** will ensure effective and efficient project management.

Key Expected Results: Under the project, new science-based approaches and tools will be adopted into wider IWMP watershed operations such as improved hydrological inputs as part of landscape scale watershed assessments, and decision support models used for site selection. Up to 70 percent of micro-watersheds will have improved convergence and integration with other programs such as NREGS. Agricultural and horticultural productivity in IWMP project areas for selected crops is expected to increase.

Implementing Agency: Karnataka Watershed Development Department and the Department of Horticulture, in partnership with the National Bureau of Soil Survey and Land-Use Planning, Karnataka State Remote Sensing Application Center, Indian Institute of Science, Karnataka University of Agricultural Science, and Karnataka University of Horticultural Science.

INDIA: Himachal Pradesh Mid-Himalayan Watershed Development Project

Key Dates:

Approved: December 13, 2005

Effective: February 24, 2006

Closing: March 31, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|-----------|-------------|
| IDA --Original Credit | 60 | 58 | 2 |
| Additional Financing | 37 | 0 | 37 |
| Government of India | 10 | | |
| Other(local communities) | 5 | | |
| Total Project Cost | 112 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: Himachal Pradesh is a mountain state in northern India and a rich repository of biodiversity, forming the catchment for several major northern Indian rivers. Despite the growing importance of tourism and hydropower, the economy of HP remains largely agrarian, based on rainfed crops, horticulture, and livestock. Nine out of ten households are rural, and most of these live in small settlements, typically located in remote valleys and heavily dependent on forests and community lands for their daily requirements of fuel wood, fodder, and food. Constraints to rural development include rugged topography and poor access to social and economic services, small and fragmented landholdings, fragile soils, and excessive human and livestock population pressure in a highly fragile mountain eco-system. To meet the challenges of poverty reduction and sustainable natural resource management, an integrated approach to watershed development is needed to ensure that land and water resources are sustainably managed and the livelihoods of rural inhabitants enhanced.

The World Bank has had a long history with watershed development in the state and the current project aims at scaling up the successes of earlier interventions by entrusting a large share of project implementation responsibilities to the local governments i.e. Gram Panchayats (GPs). This will help mainstream policies that promote cost-sharing, participation, and effective local governance into state-wide watershed development efforts. The primary objective of the proposed project is to reverse the process of degradation of the natural resource base, and improve the productive potential of natural resources and incomes of the rural households in the project areas. The secondary objective is to support policy and institutional development to harmonize watershed development projects and policies across the State, in accordance with best practices. There are three project components:

- **Institutional Strengthening:** Building capacity of communities and local governments to effectively manage watershed development in a participatory, transparent, and demand-driven manner;
- **Watershed Development and Management:** Financing of soil and water conservation, non-arable land treatments, crop and livestock production, and rural infrastructure; and
- **Enhancing Mountain Livelihoods:** Promotion of value added in agriculture and income-generating activities, particularly for tribal and vulnerable groups.

Key Results Expected:

- ✓ 20 percent increase in real incomes over baseline for households in Project area.
- ✓ 50 percent increase in production and coverage of grasses, bushes, and trees.
- ✓ 50 percent increase in yields of milk, paddy, wheat, maize, and horticulture.

Implementing Agency: Integrated Watershed Development Project, Solan.

INDIA: CTC Sector Phase Out Project

Key Dates:

Approved: September 21, 2004

Effective: December 10, 2004

Closing: December 31, 2013

| Financier | Financing* | Disbursed | Undisbursed |
|--|------------|-----------|-------------|
| Multilateral Fund of the Montreal Protocol | 53 | 38.6 | 14.4 |
| Total Project Cost | 53 | 38.6 | 14.4 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



A plant in Gujarat state which phased out CTC use in its chlorinated rubber process

Background and Objective: Carbon Tetrachloride (CTC) is a powerful ozone-depleting substance, with an ozone-depleting potential higher than Chlorofluorocarbon (CFC) and a strong greenhouse gas. Under the Montreal Protocol on Substances that Deplete the Ozone Layer, India had an obligation to phase out, by 2010, the production and consumption of controlled CTC to zero. CTC could continue to be used and produced as raw material towards the production of Teflon and other products, as this type of use does not lead to significant releases of chemicals and is therefore not covered by the Montreal Protocol.

India, the third largest developing country producer of CTC and a key player in the Montreal Protocol, turned to the Bank for assistance in implementing the treaty, building on the Bank's successful experience in addressing production phase out of CFCs. The project was designed as a holistic, performance-based plan to simultaneously phase out the use of CTC in degreasing applications and in the pharmaceutical and rubber industries, reduce controlled production accordingly, and implement management and oversight systems for production for on-going non-controlled use.

The Project Development Objective is to assist India in implementing its Country Program and CTC Phase-out Program for phasing-out CTC Consumption and CTC Production within its territory. The global environmental objective of this Montreal Protocol operation is to support international efforts to restore the stratospheric ozone layer to its original level in order to provide the earth's living organisms with the full benefit of the ozone layer's protection from solar radiation. The project has three components:

- **Financial support to thirty eligible enterprises that were using CTC**, after verifying that they had successfully converted their equipment, practices, and processes to CTC-free ones;
- **Payment as compensation for production reduction to the three eligible CTC producers** against independently verified agreed reduction targets; and
- **Support and technical assistance to the Project Management Unit** at the Ozone Cell of the Ministry of Environment and Forests.

Key Expected and Achieved Results:

- ✓ The Project target of zero consumption and production of controlled CTC in India was achieved by January 2010, in line with the Montreal Protocol schedule. The reduction in CTC achieved is roughly equivalent to avoiding CO₂ emissions from 3.7 coal fired power plants, or from over 2.7 million passenger vehicles, each year.
- ✓ Intermediary results include developing and successfully implementing a quota system for production of controlled uses and a robust monitoring and verification framework.

Implementing Agency: Ministry of Environment and Forests, Ozone Cell.

Key Development Partners: Industrial Development Bank of India, financial intermediary; Association of Chloromethane producers and CTC producers beneficiaries under the project; Other agencies of the Multilateral Fund involved with CTC in India: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), United National Environment Programme (UNEP), and United Nations Industrial Development Organization (UNIDO).

INDIA: Chiller Energy Efficiency

Key Dates:

Approved: June 30, 2009 and June 9, 2009

Effective: November 23, 2009 and November 26, 2009

Closing: June 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---|------------|-----------|-------------|
| Global Environment Facility (GEF) Grant | 6.3 | 1.0 | 5.3 |
| Montreal Protocol Grant | 1.0 | 0.5 | 0.5 |
| Total Project Cost | 7.3 | 1.5 | 5.8 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objective: India decided to prohibit the production of new Chlorofluorocarbons (CFCs) as of August 1, 2008. Past experience, however, has shown that advancements in chiller technology and the resulting energy efficiency gains and potential savings do not accelerate the phase-out of old and inefficient centrifugal chillers. Appropriate financial arrangements needed to be put in place to accelerate the replacement of old centrifugal chillers to new non-CFC based energy efficient chillers. India, as a Party to both Montreal and Kyoto Protocols, was eligible for financial and technical assistance from the Multilateral Fund (MLF), the Global Environment Facility (GEF), and the Clean Development Mechanism (CDM). The Chiller Energy Efficiency Project (CEEP) aims to stimulate the accelerated conversion of CFC-based chillers to new non-CFC ones, through the provision of financial incentives to address market and techno-economic barriers. It is supported by grants from GEF and MLF, with provisions for a future component supported by the CDM.

The Project's development objective is to accelerate the replacement of centrifugal chillers with efficient non-CFC-based centrifugal chillers in order to promote deployment of energy efficient technologies and products to reduce GHG emissions, and support the phase-out of CFC demand in India. It includes four components:

- **Provision of Incentives for Investment** in Energy Efficient Chillers.
- **Measurement, Monitoring and Verification** using methodology approved by the CDM Executive Board.
- **Technical Assistance**, focusing on enhancing the awareness in energy conservation measures, the understanding of the impact of the phase-out of production of CFCs on the servicing sector, and strengthening the capacity of chiller owners and other stakeholders to monitor the performance of new chillers and to undertake refrigerant management.
- **Project Management**

Key Expected and Achieved Results:

At the end of the Project, 370 CFC based chillers were to be replaced. To date, only 29 have been replaced mainly due to two factors: (a) the phase out of CFC production in India and banning of imports, resulting in reduced supply of CFCs in the country and rapid replacement by the owners of existing chillers with low-cost refrigerant alternatives; (b) the complexities of the carbon finance component and reluctance of beneficiaries to access CDM in an uncertain global scenario. As a result, the project will be restructured to focus on increasing energy efficiency of chillers while also phasing out new generation of ozone-depleting refrigerant gases (HCFCs). A revolving fund concept is being reintroduced into the program through the super-ESCO, Energy Efficiency Services Ltd, which will allow sustainability beyond project life. 300 chillers are expected to be targeted under the program achieving energy efficiency of about 10-15percent.

Implementing Agency: Industrial Development Bank of India Ltd.

INDIA: Financing Energy Efficiency at Micro, Small and Medium Enterprises Project

Key Dates:

Approved: May 27, 2010

Effective: September 29, 2010

Closing: December 31, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---|--------------|-------------|-----------------|
| Borrower/Recipient | 0.26 | 0.06 | 0.20 |
| Global Environment Facility (GEF) Grant | 11.30 | 0.95 | 10.35 |
| Private Sector Financing | 46.00 | 2.50 | (market driven) |
| Total Project Cost | 57.56 | 3.51 | |

*US\$ million; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



An example of a typical MSME currently benefiting from the project

Background and Objective: The Indian Micro, Small, and Medium Enterprises (MSME) sector is facing high and rising energy costs, unlike other sectors of the economy such as agriculture that benefit from subsidized energy prices. Many Indian MSMEs are energy-intensive, employing inefficient and outmoded technologies. Investments in cost-effective energy efficiency measures would improve their productivity and bottom-line profits. MSMEs can benefit from improving energy efficiency. The barriers to adopting energy efficiency measures typically include access to finance, a gap in understanding between energy auditors and energy efficiency practitioners and local banks, higher transaction costs for preparing energy efficiency proposals, and imperfect information. MSMEs are also generally unfamiliar with the performance of readily available efficient equipment.

The Project development objective is to increase demand for energy efficiency investments in target MSME clusters, and to build their capacity to access commercial finance. The project has four components, focusing on five MSME industrial clusters:

- **Increasing awareness of Energy Efficiency:** through outreach efforts, and dissemination of information about successful projects. Increase capacity of energy auditors, financial intermediaries, vendors, and MSMEs.
- **Preparation and implementation of 500 Energy Efficiency proposals:** through technical assistance for preparing Investment Grade Detailed Project Reports, which involves detailed energy audits and preparing financing plans, facilitating loans from banks and financial intermediaries, and providing implementation support.
- **Broad Programmatic Knowledge Management:** for monitoring and evaluation, collection of best practice examples, dissemination, and policy development functions, with the goal of ensuring effective implementation and replication of energy efficiency improvement efforts at MSMEs.
- **Implementation support for the two Project Management Units**

Key Expected and Achieved Results:

- ✓ 4 million lifetime emission reductions by project end;
- ✓ US\$46 million worth in energy efficiency investments by 2014;
- ✓ 500 energy auditors trained by 2014;
- ✓ Outreach activities to 1,300 entrepreneurs are already underway, meeting exactly the end of project target of 1,300.

Implementing Agencies: Bureau of Energy Efficiency (BEE), Ministry of Power; and Small Industries Development Bank of India (SIDBI).

INDIA: Capacity Building Project for Industrial Pollution Management

Key Dates:

Approved: June 3, 2010

Effective: October 13, 2010

Closing: September 30, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-----------|-------------|
| IBRD | 25.21 | 0.63 | 25.15 |
| IDA | 38.94 | 8.2 | 30.06 |
| Government of India | 11.24 | | |
| Total Project Cost | 75.39 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



The contaminated pink lake in Andhra Pradesh

Background and Objective: India generates 4.4 million tons of hazardous waste per year, with a large percentage of it illegally dumped outside industrial estates, on abandoned public lands, and within privately owned lands. Despite amendment of national legislations, compliance is low and the data is deficient on illegal dumps and hazardous waste generation and characterization. Demand for land due to rapidly increasing urbanization is resulting in use and redevelopment of former industrial land or dump sites, which are at the margins of fast expanding cities. Since most of these “brownfield lands” are potentially contaminated with industrial waste, resulting in chemical pollution of soil, surface, and ground waste, such contaminated waste sites have the potential to pose significant health risk to communities and exposed individuals, especially poor and marginalized communities who live on the fringes of urban areas. India needed the support to develop the tools and methodologies for human health risk assessments and the capacity to evaluate technical, economic, legal, social, and environmental feasibility of remediation of contaminated sites.

The Project Development Objective is (i) to build tangible human and technical capacity in selected state agencies for undertaking environmentally sound remediation of polluted sites (ii) to support the development of a policy, institutional and methodological framework for the establishment of a National Program for Rehabilitation of Polluted Sites (NPRPS). The project is targeting sites in Andhra Pradesh and West Bengal. Project Components cover:

- **Strengthening of Environmental Institutions:** Building capacity for addressing pollution remediation
- **Investments in Priority Remediation and Environmental Improvements:** Rehabilitation of orphan hazardous waste sites and municipal dumpsites. Four pilot projects (2 each in Andhra Pradesh and West Bengal) will demonstrate sound remediation technologies for Orphan Hazardous Waste and Municipal Solid Waste Disposal sites.
- **Project Management**

Key Expected and Achieved Results:

- ✓ National Program for Remediation of Polluted Sites (NPRPS) using risks assessment methodology for prioritizing polluted sites, supported by public consultations is developed. The three baseline studies to develop NPRPS (inventory, methodology and Policy for remediation) are in the advanced stages and are expected to be completed by the end of 2013.
- ✓ Guidelines and standards for remediation developed and adopted by participating states and Ministry of Environment
- ✓ Establish Environmental Compliance Assistance Center (ECACs) to promote measures for voluntary industrial compliance Business Plans for setting up the ECACs, procurement in both the states, and capacity building activities are in the final stages of completion.
- ✓ Pilots for remediation using area based approach ready for implementation including pollution profiling and mapping, indicators, detailed engineering plan, monitoring and after-care program. Project implementing agencies have hired international consultants to develop detailed remedial plans for the 4 pilot sites and the plans for 3 sites have already been completed.

Implementing Agencies: Ministry of Environment and Forests and the State Pollution Control Boards, Department of Environment of the Government of West Bengal and Government of Andhra Pradesh

Integrated Coastal Zone Management Project

Key Dates:

Approved: June 15, 2010
 Effective: September 22, 2010
 Closing: December 31, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|-------------------------------------|---------------|--------------|---------------|
| IDA | 221.96 | 40.87 | 181.09 |
| Government of India (and States) | 63.74 | 18.97 | 44.77 |
| Total Project Cost | 285.67 | 59.84 | 225.83 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: India has 63 million people living in low-elevation coastal areas, endowed with significant ecological and economic resources. These coastal areas are unable to ensure balanced development due to the increasing threat of hazards on economic and livelihood security; fragmented and weak institutional frameworks; and lack of appropriate knowledge-based decision-making. As a result, coastal and marine resources are depleted and degraded. Unless these resources are conserved as part of overall economic development plans, there will be further impacts on the livelihood, health, and well-being of the coastal population. In 2006, the Government of India adopted the Integrated Coastal Zone Management (ICZM) approach (a shift from a purely regulatory to a management approach) that would, with people’s participation, promote livelihood security of the coastal communities, protect the ecosystems, and promote sustainable development. In 2007, the Government of India requested the Bank’s financing to create the initial institutional and knowledge bases to support its long-term reform agenda, and to pilot activities that would inform larger future projects and programs. The Integrated Coastal Zone Management Project is the largest ever Bank financing in coastal zone projects, and one of the largest ever for knowledge outputs.

The Project Development Objective is to assist the Government of India in building national capacity to implement a comprehensive coastal management approach, and to pilot the ICZM approach in the states of Gujarat, Orissa, and West Bengal. Project components cover:

- **National ICZM Capacity Building:** Aims to establish and support an appropriate national institutional structure for guiding and coordinating coastal zone management. It includes: (a) hazard line and coastal sediment cell mapping; (b) mapping and management of ecologically sensitive areas; (c) establishing a new national institute for sustainable coastal zone management; and (d) national-level capacity building.
- **Development and Implementation of ICZM in the states of Gujarat, Orissa and West Bengal:** Aims to develop and empower state-level authorities to adopt appropriate ICZM approaches consistent with national strategies. It includes: (a) preparation and adoption of ICZM plans; (b) institutional strengthening of state-level coastal zone authorities; (c) pilot investments consistent with local ICZM priorities around three themes of coastal resource conservation/ protection; pollution management; and community livelihood enhancement, adapting to threats from sea-level rise.

Key Expected and Achieved Results: By project end, it is expected that India will have established an appropriate national institutional structure for guiding and coordinating implementation of the ICZM approach. It is expected that the various knowledge products produced under this project (i.e. 10 “Knowledge Benchmarks” as well as the 8 pilot ICZM activities) will provide useful lessons and guidance for the development of the overall structure as well as future ICZM interventions.

The project’s intermediate outcomes include:

- ✓ 9,000 ha mangrove planted with community involvement;
- ✓ 78,000 km² of aerial photography completed;
- ✓ Several village-level micro projects completed, in particular in sanitation, solar power, power connection, and livelihood improvement;
- ✓ First successful “technology-agnostic” bid for sewage treatment plant in India with 15 years DBO contract;
- ✓ Large real-time lake water monitoring system installed in Odisha;
- ✓ Over 100,000 turtles protected, more than 10,000 hatched and released into the sea.

Key Partners: Ministry of Environment and Forests, Society for Integrated Coastal Management, National Centre for Sustainable Coastal Management, Survey of India, Government of Gujarat, Government of Odisha, Government of West Bengal.

INDIA: Biodiversity Conservation and Rural Livelihood Improvement Project

Key Dates:

Approved: May 17, 2011

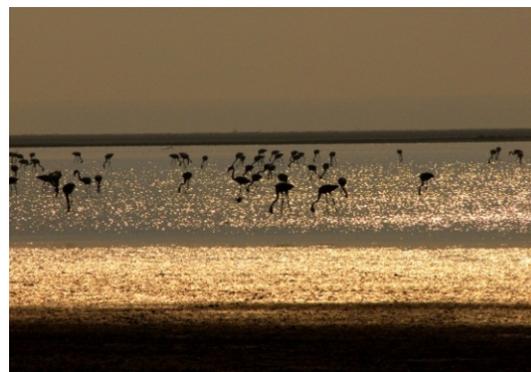
Effective: July 13, 2011

Closing: March 2018

| Financier | Financing* | Disbursed | Undisbursed |
|---|--------------|-------------|--------------|
| IDA | 15.36 | 1.54 | 13.82 |
| Government of India & beneficiary | 7.52 | | |
| Global Environment Facility (GEF) Grant | 8.14 | 0.82 | 7.32 |
| Total Project Cost | 31.02 | 2.36 | 21.14 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Flock of Flamingoes at the Little Rann of Kachchh, Gujarat

Background and Objective: The Project supports India's Ministry of Environment and Forests (MoEF) in piloting new conservation models that look beyond the Protected Areas, and recognize the need for innovative solutions to biodiversity loss through improved coordination, capacity building, generating awareness, reskilling, and convergence of actions. Given the pace of land use changes and growing population pressure on Protected Areas, there is a real danger that the loss of biodiversity and ecosystem services could reach a tipping point at which there will be a failure to supply key inputs for sustaining economic growth. Coupled with this is the fact that over 100 million people are directly dependent on biodiversity resources for subsistence.

The project development objective is to develop and promote new models of conservation at the landscape scale through enhanced capacity and institution-building for mainstreaming biodiversity conservation outcomes. The project has four components:

- **Demonstration of landscape conservation approaches in two pilot sites:** Investments in planning, coordination, and convergence through innovative microplans at the village level and landscape mapping; includes limited investments in improving habitat quality.
- **Strengthening knowledge management and national capacity for landscape conservation:** Development of a curriculum for a national-level landscape management course; strengthening three Field Learning Centers for translating best practices in conservation management into training modules; and carrying out national-level training sessions.
- **Scaling-up and replicating successful models of conservation in additional landscape sites:** Two new sites will be added this year to further scale-up the landscape approach model.
- **National coordination for landscape conservation:** Supports a Project Management Unit at the MoEF for coordinating amongst all the six Implementing Agencies.

Key Expected and Achieved Results: The project's development outcomes will be measured by the following performance indicators:

- ✓ The successful adoption of the landscape approach in two sites;
- ✓ Development and adoption of an Institutional and Methodological Framework for Landscape Conservation Approach.
- ✓ Improved management of at least 600,000 hectares of Protected Areas within landscapes.

The project is expected to lead to an increased natural resource base, reduced dependence on Protected Areas, and improvement in community livelihoods through the sustainable use of biodiversity resources, as well as converging with other programs. It will support the preparation and implementation of village microplans and track benefits accrued to beneficiaries, including women.

Implementing Agencies: Ministry of Environment and Forests, State Forest Departments of Gujarat and Uttarakhand, Protected Area Management of Periyar Tiger Reserve, Gir National Park and Kalakad Mundanthurai Tiger Reserve and Wildlife Institute of India.

INDIA: Dam Rehabilitation and Improvement Project

Key Dates:

Approved: June 29, 2010

Effective: April 18, 2012

Closing: June 30, 2018



| Financier | Financing* | Disbursed | Undisbursed |
|-------------------------------|------------|-----------|-------------|
| IBRD | 175.0 | 0.4 | 174.6 |
| IDA | 175.0 | 5.5 | 168.9 |
| Central and State Governments | 87.5 | | |
| Total Project Cost | 437.5 | | |

*As of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: India has over 5,000 large dams that are essential for water storage to cater to India's increasingly competitive use of scarce water resources. There is limited scope for building new dams, however, since all easy dam sites are already in use, acquiring land is difficult, and construction costs are very high. Many existing dams are under distress, and the Dam Rehabilitation and Improvement Project (DRIP) is designed to implement innovative solutions to again allow for the optimal use of the existing 223 dams covered by the project.

The project's development objective is to improve the safety and operational performance of selected existing dams in the states of Kerala, Madhya Pradesh, Orissa, and Tamil Nadu. The project has two major components:

- **Rehabilitation and Improvement of Dams and Associated Appurtenances:** Comprehensive rehabilitation and improvement of 223 dam and appurtenant structures in the project states. In addition, hydrological assessments, preparation of asset management plans and emergency preparedness plans, development of emergency warning systems, public awareness campaigns, and floodplain mapping will be carried out.
- **Dam Safety Institutional Strengthening:** To support and strengthen the Dam Safety Organization (DSO) at the national level in the Central Water Commission and DSOs and Water Resources Departments in each of the four participating states, as well as the State Electricity Boards in Kerala and Tamil Nadu. DSOs will become effective organizations that can take the lead in overseeing that dams remain safe from a structural and operational point of view. Dam managers will be assisted with the development of appropriate skills and modern tools to adequately operate and maintain dams.

Key Expected Results: The project has just completed its first year of implementation. The four participating states have set up project management teams and have made progress with hydrology reviews to update the design flows, preparation of a number of dam screening templates, and designs for the rehabilitation/modernization of a number of dams. Madhya Pradesh has started work on a small number of dams, while other implementing agencies are expected to start the work on a number of dams by the end of 2013.

The main results expected at the end of the project include:

- ✓ 223 project dams with the ability to safely deal with recurrent floods, and with acceptable stability and seepage; 223 fully operational dams, with reduced risk of failure;
- ✓ 150 project dams with need-based operation and maintenance (O&M) plans implemented, and with at least 80 percent of the required annual budget for O&M allocated; and
- ✓ 60 dams where emergency response plans have been prepared and disseminated to the population.

Implementing Agencies: Central Water Commission, Water Resources Departments of Kerala, Madhya Pradesh, Orissa, and Tamil Nadu, and State Electricity Boards of Kerala and Tamil Nadu.

INDIA: INOX Rajasthan

Key date:

Committed: August 31, 2012

IFC Financing (US\$ million)

| Instrument | Amount | Disbursed | Undisbursed |
|------------|--------|-----------|-------------|
| IFC A Loan | 50.0 | 50.0 | - |

Project Description and Objectives:

Incorporated in 2010, INOX Renewables Limited houses the wind power generation business of the INOX Group. An independent renewable energy producer, INOX Renewables has a significant presence in wind energy generation and aims to become a leading wind farm developer in India.

IFC provided a loan of \$50 million (equivalent to Rupees 2,619 million) in FY13 to Inox Renewables (Jaisalmer) Limited, a wholly owned subsidiary of Inox Renewables. The loan will support the construction of the first phase (64 MW) of the wind farm project, up to 300 MW capacity, in Rajasthan, a low income state.

Key Achievements and Expected Results:

The project will have a strong development impact:

- Increased generation of renewable power: INOX Renewables will set up new renewable energy-based generation capacity to meet the increasing demand for power in the country. and in the process help reduce the intensity of greenhouse gas emissions in the Indian power sector;
- Private sector development in renewable energy: The project will help a mid-tier renewable energy company to develop its business at an early stage, resulting in a signaling effect in the market for other businesses;
- Generate employment in the region: The project will create 25 new direct jobs (7 of which are for women) during operations and maintenance of the plants, but more importantly is expected to create significant temporary jobs (during construction) and indirect and induced jobs over the life of the project.

By 2017, the project is expected to provide power to 0.092 million residential customers and help reduce greenhouse gas emissions by 0.12 million metric tons of CO₂ equivalent per year.

INDIA: IDFC Climate Change Loan

Key Date

Committed: June 25, 2010

IFC Financing (US\$ million)

| Instrument | Amount | Disbursed | Undisbursed |
|------------|--------|-----------|-------------|
| IFC A Loan | 75.0 | 75.0 | - |

Project Description and Objectives: IFC provided a rupee loan equivalent to \$75 million to IDFC Ltd (earlier known as Infrastructure Development Finance Company Ltd). The loan was provided for making investments in renewable energy and cleaner production/ energy efficiency projects. The investment is in line with IFC's strategic priority to address climate change impacts.

The objective of IFC's long term loan was to help IDFC better balance its structural liquidity. At the time, long term funding was crucial to help IDFC expand its lending to renewable energy projects, which typically have long repayment periods.

Key Achievements and Expected Results:

The purpose of the investment was to help IDFC scale-up its capacity to assess renewable energy/ energy efficiency projects by leveraging IFC's experience and knowledge of these sectors worldwide.

Through this project, IDFC and IFC built on each other's strengths—IDFC's client reach in the local market and IFC's expertise in climate change projects—to achieve wider scale and impact on climate change investments in India.

Importantly, the fact that a leading financial institution like IDFC is expanding into climate friendly projects helped encourage other financial institutions to enhance their risk appetite and invest more in these sectors.

INDIA: DCM Shriram Consolidated Limited (DSCL)

Key Date

Committed: 2008

IFC Financing (US\$ million)

| Instrument | Amount | Disbursed | Undisbursed |
|-----------------------------|--------|-----------|-------------|
| IFC A Loan DCM Consolidated | 30.0 | 30.0 | - |
| IFC A Loan DSCL II | 6.6 | 6.6 | |
| IFC A Loan Bharuch | 50.0 | 50.0 | |

About the Client: DCM Shriram Consolidated Limited (DSCL) is an agri-business and chemicals company headquartered in Delhi. DSCL's sugar plants are located in the low income state of Uttar Pradesh, while its chemical production facilities are based in Rajasthan and Gujarat. The agri-business segment, which includes fertilizers, sugar, rural retail chain etc., contributes about 70 percent of the total revenue. DSCL also has a presence in the Philippines and Vietnam, and is initiating business operations in Thailand, Indonesia, and Bangladesh.

Project Description: IFC has committed a total of \$85 million to DSCL across three facilities. IFC also partnered with the company in its social and farmer development initiatives.

IFC's first investment in 2005, a \$30 million long-term loan, supported expansion of DSCL's Chlor-Alkali, PVC resin, and carbide production facilities in the low income state of Rajasthan. IFC helped the company improve its environmental footprint with energy efficiency and cleaner production upgrades. A second investment of \$6.6 million is helping DSCL's sugar division expand production and set up new facilities. The project is helping the company improve waste recovery and energy efficiency. In 2008, IFC committed a third-round of investment to DSCL, a \$50 million long-term loan to help finance environmental upgrades that minimize incremental effluent discharges, as well as additional capacity expansions for its rapidly growing chemical and sugar operations.

IFC, through its advisory arm, advised DSCL in implementing a farmer engagement model to improve sugarcane productivity. IFC brought in expertise to develop a package of practices based on sugarcane's specific agro-climatic needs. IFC trained the company's extension workers, who further helped the farmers in seed management, soil improvement, water usage, planting techniques, monitoring, and reporting. These practices were incorporated into a manual for training the DSCL extension workers and an easy reference pictorial flipchart for farmers.

The company has also launched programs to promote judicious use of various agri-inputs by supporting integrated plant nutrient management and a focus on transfer of location-specific and need-based farm technology

Key Achievements and Expected Results:

Supported by IFC's investment, in 2012, DSCL reached 150,000 farmers, provided employment to 4,577 people, and contracted an additional 5,200 people.

IFC's advisory interventions helped train over 50 DSCL extension workers in improved farm practices who in turn trained more than 13,000 farmers. A quasi-experimental evaluation revealed that in the first year of the project, trained farmer's productivity increased 23 percent versus 11 percent for farmers who did not receive training. In the second year of the Project, the productivity of trained farmers increased by 86 percent, while those who did not receive training recorded an increase of 19 percent.

Annex 3: Inclusion

National Rural Livelihoods
North East Rural Livelihoods
Bihar Rural Livelihoods
Rajasthan Rural Livelihoods
Orissa Rural Livelihoods
Tamil Nadu Empowerment and Poverty Reduction
Second Madhya Pradesh District Poverty Initiatives
Technical Engineering Education Quality Improvement II
Secondary Education Program
National Vector-Borne Disease Control and Polio Eradication Support
Tamil Nadu Health System
ICDS System Strengthening and Nutrition Improvement Program
Karnataka Health System Development and Reform
Uttar Pradesh Health Systems Strengthening
National AIDS Control Support
Scaling Up Sustainable and Responsible Microfinance
Bandhan Financial Services Limited (IFC)
Kerala Local Government and Service Delivery
West Bengal Institutional Strengthening of Gram Panchayats
Karnataka Panchayat Strengthening
Bihar Panchayat Raj Institutions
Low-Income Housing Finance
Bihar Kosi Flood Recovery Project
National Cyclone Risk Mitigation (APL I)
Tamil Nadu and Puducherry Coastal Disaster Risk Reduction

INDIA: National Rural Livelihoods Project

Key Dates:

Approved: July 5, 2011

Effective: July 18, 2011

Restructured: May 24, 2013

Closing: December 31, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|-----------|-------------|
| IDA | 500 | 23.1 | 476.9 |
| Government of India | 150 | 6.9 | 143.1 |
| Total Project Cost | 650 | 30 | 620 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objective: Despite high GDP growth rate over the past decade, over 250 million rural people in India (45 million households) remain locked in poverty, living on less than US\$1 per day. One of the key challenges facing India today is how to successfully translate high economic growth into inclusive growth that leads to significant and accelerated rural poverty reduction. Rural livelihoods programs are designed to help tackle this immense development challenge.

The Bank's engagement on rural livelihood programs dates back to a series of projects in the states of Andhra Pradesh, Madhya Pradesh, and Rajasthan started in 2000. Since then, the Bank has invested more than a US\$1 billion in eleven livelihood projects at the state level. Thirty million rural poor have been mobilized to form own institutions, enabling them to access livelihood opportunities and build social, financial, and economic capital. The rural poor have been empowered socially and economically, enabling them to build linkages with state and market institutions. They have higher savings, more access to credit, livelihoods and public services, and households and communities benefit from increased public and private investment. The most vulnerable groups (women, Scheduled Castes, and Scheduled Tribes) have been socially empowered, enabling them to build social and financial capital and increase access to growth opportunities. One of the main lessons learned from this decade-long engagement is that significant investment in building the institutional platforms of rural poor households is a critical foundation for sustainable poverty reduction. The National Rural Livelihoods Project supports the Government of India's efforts to scale up these state-level interventions to the national level through support to the National Rural Livelihood Mission (NRLM)—*Aajeevika*. Bank financing supports the program in 13 high poverty (also mostly low-income) states.

The project's development objective is to establish efficient and effective institutional platforms for the rural poor that enable them to increase household income through sustainable livelihood enhancements and improved access to financial and selected public services. Project components cover:

- **Institutional and Human Capacity Development:** Aims to transform the role of the Ministry of Rural Development into that of providing high quality technical assistance in the field of rural livelihoods promotion.
- **State Livelihood Support:** Aims to support state governments in establishing necessary institutional structures and mechanisms to implement NRLM activities from the state- to the block-level, including support to forming institutions for the rural poor.
- **Innovation and Partnership Support:** Aims to create an institutional mechanism to identify, nurture, and support innovative ideas from across the country to address the livelihood needs of the rural poor.
- **Project Implementation Support:** Aims to strengthen the National Mission Management Unit for effective project management at the national level to develop key systems and processes to coordinate and manage the project and the NRLM.

Key Expected Results:

- ✓ Thirteen State Rural Livelihood Missions formed and providing good quality TA to poor communities.
- ✓ About 6 million identified rural poor households mobilized into community institutions.
- ✓ US\$100 million in cumulative savings by rural poor households through thrift and financial inclusion.
- ✓ \$500 million in bank credit leveraged by rural poor households from the formal financial sector.
- ✓ 1 million rural poor households have improved farm productivity, livestock productivity, and market access.
- ✓ 500,000 new jobs created for the poor.

Key Development Partners: The project recognizes partnerships as key implementation arrangements and encourages the States to directly access technical and knowledge support from reputed resource organizations, especially in the following areas:

- Partnerships with home grown models like IFAD/DFID/EAP, sharing the same ethos. Some of the ready candidates include MAVIM, OTELP, JTELP, WDC, and NGOs with track records.
- Knowledge Partners for programmatic verticals like BIRD (Financial Services), PRADAN (Agriculture and Ecological Services), BAIF (Livestock), Landesa (Land Access), FAO (Agriculture and Livestock).

INDIA: North East Rural Livelihoods Project

Key Dates:

Approved: December 20, 2011

Effective: March 12, 2012

Closing: March 31, 2017



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 130 | 0.9 | 120.6 |
| Government of India | 14 | | |
| Total Project Cost | 144 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: More than 44 million people live in the North East region of India, 85 percent of which live in rural areas, and 35 percent of which are below the poverty line. Despite its rich natural resources and relatively good human development indicators, the region lags behind the rest of India in economic growth. The development challenge in the North East is compounded by geo-political isolation, protracted insurgency in some areas, and recurring natural disaster. Agriculture remains the backbone of the economy, contributing close to 30 percent of regional GDP and providing employment to over 75 percent of the people. The traditional *jhum* (shifting) cultivation—the predominant agriculture production method in the region—is no longer economically and environmentally viable due to increasing population pressure and shorter fallow periods, which have led to reduced soil fertility and lower productivity. Despite the relatively high literacy rate, the region also suffers from alarmingly high youth unemployment rate of 14 percent, mainly as a result of a high drop-out rates and lack of skills.

Since 2000, the World Bank in India has supported empowerment and livelihood enhancement through seven state level projects, which have mobilized over 30 million rural poor to enable them to access livelihood opportunities and build social, financial, and economic capital. The programs have resulted in increased savings, improved access to credit, livelihoods, and public services, and have contributed to the social empowerment of the excluded castes and indigenous people. Experience from these projects, and from an International Fund for Agriculture and Development (IFAD)-financed project in three North East states (Assam, Meghalaya, and Manipur), identified the need for: (i) effective skill development for youth; (ii) linking community-based organizations with wider markets; (iii) improving communities' access to credit and other financial services by forming sustainable institutions for the poor; and iv) convergence with other government programs. The North East Rural Livelihoods Project (NERLP) aims to empower the rural poor and improve their livelihoods in the states of Mizoram, Nagaland, Sikkim, and Tripura.

The development objective is to improve rural livelihoods, especially for women, unemployed youths, and the most disadvantaged, in the participating North Eastern States. The project has four components:

- **Social Empowerment:** empowers the rural communities and create sustainable institutions so they manage common activities around microfinance, livelihoods, and natural resource management.
- **Economic Empowerment:** develops the capacity of rural communities to plan and manage funds for economic initiatives.
- **Partnership Development:** with various service providers, resource institutions, and public and private sector organizations to bring finance, technology, and marketing support, so that the community groups are able to improve their livelihoods.
- **Project Management:** facilitates implementation, coordination, learning, and quality enhancement.

Key Expected and Achieved Results: By project end, it is expected that:

- ✓ 60 percent of female Self-Help Group (SHG) members will increase their incomes by 30 percent.
- ✓ 30 percent of project-benefited unemployed youths will be employed.
- ✓ 50 percent of the most disadvantaged households will achieve a minimum of 30 percent improvement in livelihood indices.
- ✓ 70 percent of the SHGs formed and supported by the project are institutionally sustainable.

Implementing Agency: North East Livelihood Promotion Society (NELPS), which was set up by the Ministry of Development of North East Region, Government of India.

Key Development Partners: North Eastern Region Community Resource Management Project (NERCOMP) financed by IFAD North East Council, Ministry of Development of North East Region, Government of India.

INDIA: Bihar Rural Livelihoods Project

Key Dates:

Approved: June 14, 2007; May 31, 2012 (AF)

Effective: October 1, 2007; September 5, 2012 (AF)

Closing: October 31, 2015



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|-------------|--------------|
| IDA | 163 | 71.5 | 91.5 |
| Government of Bihar | 53 | 23.5 | 29.5 |
| Total Project Cost | 216 | 95.0 | 121.0 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#).

Background and Objective: In Bihar, India's second poorest state, per capita income was just a quarter of the national average. Almost 90 percent of the population lives in rural areas with limited opportunities for self-employment, and little access to basic services. Although agriculture was the mainstay of the economy and employed over 80 percent of the population, the vast majority of farmers survived at or near subsistence levels. Without an adequate banking network, most poor people had to borrow from extortionist moneylenders, or from relatives and friends to meet family expenses, often pawning tiny plots of land to repay old debts. Growing landlessness and the lack of livelihood opportunities led to large out-migration from the state. Earlier efforts by the Bihar Government to promote the social and economic mobilization of the poor had been thwarted by entrenched caste identities and the absence of sensitive support and facilitation. The additional financing supports the geographical expansion of the project to cover all the state's blocks in the existing six districts of the project and support consolidating and scaling up pilot activities undertaken in the parent project. It will also scale up activities to promote greater social accountability and increase the impact of last mile service delivery approaches using the institutional platform of community based organizations already formed. The Project's development objective is to enhance social and economic empowerment of the rural poor in Bihar. It has four components:

- **Community Institution Development:** Builds/strengthens primary and federated social and economic community institutions.
- **Community Investment Fund:** Involves transferring financial and technical resources to the Community-Based Organizations on a demand-driven basis as a catalyst to improve livelihoods.
- **Technical Assistance Fund:** Will improve quantity and quality of service provision by public, cooperative, community, and private service providers. The fund will also be used to improve the supply of key support services for the community organizations and federations in the areas of institution building, finance, and livelihoods enhancement.
- **Project Management:** Will facilitate overall co-ordination, implementation, financial management, and monitoring and learning of the project at state and district levels.

Key Expected and Achieved Results:

- ✓ Mobilized 900,000 poor women into 70,600 self-help groups (SHGs) and 5,000 village organizations.
- ✓ More than 90 percent of SHG members belong to vulnerable groups, such as Scheduled Caste, Scheduled Tribes, and Backward Castes.
- ✓ SHGs have saved over US\$5 million, and made US\$ 12.5 million in loans to each other, to help create credit histories with commercial banks. SHG members are now creditworthy clients for commercial banks.
- ✓ The project has facilitated SHGs' access to US\$ 40 million in bank credit.
- ✓ 150,000 farmers have accessed agriculture productivity enhancement interventions, resulting in an 86 percent increase in yield in paddy, and 72 percent increase in wheat.
- ✓ Nearly 15,000 households have increased their price realization through the project's dairy intervention.
- ✓ 15,000 youth have been linked to formal sector jobs.
- ✓ 100 village organizations are managing a public distribution system (PDS) intervention to ensure access to food entitlements.
- ✓ More than 30,000 households have accessed pensions through the work of their village organizations. Other entitlements, such as health insurance and access to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)—a national work guarantee scheme—is also being promoted on a pilot basis.
- ✓ A recent independent impact evaluation based on a survey of 4,000 households shows that the project has increased the savings, reduced high cost indebtedness, led to increased food security and assetization, and increased women's empowerment significantly.
- ✓ An additional 1 million households will be mobilized into 100,000 SHGs. These households are expected to access nearly US\$ 60 million from the Community Investment Fund, and US\$ 60 million from commercial banks.

Implementing Agency: Bihar Rural Livelihood Promotion Society, Government of Bihar.

Key Development Partners: Civil society organizations, such as Action for Social Advancement (ASA) and Professional Assistance for Development Action (PRADAN), which support pilots and help scale up agriculture sector interventions; private and social enterprises, such as State Bank of India and Punjab National Bank, which provide credit linkages for poor households; agriculture processors (e.g. SHAKTI SUDHA Pvt. Ltd., EDA Rural Systems, Asian Heritage Foundation), which enable access to markets; and government departments, such as the Agriculture Department, which helps scale up the system of crop intensification, the Food and Civil Supplies Department, which enables access to food entitlements, the Social Welfare Department for access to pensions, and the Labor Department for access to health insurance.

INDIA: Rajasthan Rural Livelihood Program

Key Dates:

Approved: January 11, 2011

Effective: June 22, 2011

Closing: October 31, 2016

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IDA | 160.49 | 14.82 | 146.48 |
| Government of India | 21.10 | | |
| Total Project Cost | 181.59 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: Rajasthan is India's largest state in terms of area, and is 8th out of 28 states in terms of both population and state GDP. More than three-quarters of the population live in rural areas. Despite a rapid decline in poverty, from 50 percent in 1970 to about 24 percent in 2005, more than two million people rank as absolute poor according to the 2002 census. The highest incidence of poverty and vulnerability occurs in Southern and Eastern Rajasthan, with human development Indicators lowest in Southern Rajasthan, where periodic drought cycles have led to significant seasonal out-migration. The Rajasthan Rural Livelihoods Project (RRLP) focuses on 17 districts in Southern and Eastern Rajasthan.

The Project's development objective is to enhance economic opportunities and empowerment of the rural poor, with a focus on women and marginalized groups, in the 17 targeted districts of Rajasthan. The project has five components:

- **Institution Building and Social Empowerment:** Helps the poor mobilize themselves into Self-Help Groups (SHGs) and develop their capacity to initiate and expand sustainable livelihoods activities.
- **Community Investment Support:** Supports asset creation of SHGs and their federations; and identifies and supports innovative approaches to improve livelihoods of the rural poor.
- **Skill Development and Employment Promotion:** Supports helping beneficiaries to connect to new employment opportunities by creating a structured mechanism for skill development and job creation.
- **Climate Change Adaptation:** Aims to develop and implement drought adaptation mechanisms and institutional models at the state, district, and local levels.
- **Project Implementation Support:** Facilitates various implementation, coordination, learning, and quality-enhancement efforts.

Key Expected and Achieved Results:

- ✓ 400,000 poor rural households mobilized into 33,000 SHGs. As of August 2013, a total of 4,952 SHGs have been promoted and disbursements to these groups under the project have started.
- ✓ 23,100 SHGs linked to banks so as to mobilize additional credit for poor households.
- ✓ Enhanced resilience to climate change shocks for poor households through developing and implementing drought-adaptation mechanisms at the state, district, and local levels.
- ✓ Increase in income, savings, and diversification of income sources for 70 percent of targeted poor households.
- ✓ 17,000 youth receive skill development training and are placed in jobs.

Implementing Agency: Rajasthan Ajeevika Vikas Parishad (RAVP), an independent umbrella society established by the Government of Rajasthan to implement various anti-poverty initiatives. The RGAVP has a governing council chaired by the Chief Minister of Rajasthan, which provides oversight and general policy and strategic direction. Day-to-day implementation is delegated to a State Project Management Unit (SPMU), which in turn will work through District Project Management Units (DPMUs) and Project Facilitation Teams (PFTs) at the district and local levels.

INDIA: Orissa Rural Livelihoods Project

Key Dates:

Approved: July 31, 2008
 Effective: March 31, 2009
 Closing: December 31, 2013



Master Book-Keeper Training Program

| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IDA | 75.84 | 31.52 | 44.63 |
| Total Project Cost | 75.84 | 31.52** | 44.63 |

*US\$ millions; as of June 30, 2013

**March 31, 2013 figures.

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: Orissa's economy has witnessed consistent and high growth rates during the last decade, above the national average, and in 2012-2013 impressively withstood the continuing slowdown of previous years in economic growth. Poverty has declined from 57.2 percent in 2004-2005, to 37 percent in 2009-2010. In terms of real per capita income, however, the State has lagged behind the national average ever since independence. There has been a transformation in the State's economy, from agriculture-based to an industry- and service-led economy. The performance of the agriculture sector continues to be highly volatile, mainly due to the adverse impact of natural shocks such as cyclones, droughts, and floods. The State's unemployment rate is higher than the national rate of unemployment. The cost of living in rural Orissa is one of the lowest in the country. The State is predominately rural, with more than 85% of the population residing in rural areas; this includes high percentages of tribal households. Out of the 30 districts, 19 are Maoist-affected districts. Access to social, financial, and economic services are below the national averages in the rural areas. The rural areas are relatively under-serviced by both the public and private sector, and the intensity of this is more prevalent in the tribal districts.

The project development objective is to enhance the socio-economic status of the poor, especially women and disadvantaged groups, in selected blocks of 10 districts in the state of Orissa. The Project will help build the capacity of Community Based Organizations of the poor and vulnerable to better manage their own institutions and livelihood initiatives, and the capacity of households to help them plan and meet credit demand for household and investment needs. The project has four components:

- **Institution Building:** Includes (a) community-level institution building, and (b) developing project staff capacity to implement the project effectively.
- **Community Investment Fund (CIF):** The Fund will transfer financial and technical resources to Panchayat-level and Block-level federations of Self Help Groups (SHG). CIF grants finance micro investment plans in the areas of institution building, leverage micro-finance, and livelihoods enhancement.
- **Livelihood Promotion Fund:** This Fund is to increase the share of SHG households in the value chain of key commodities or products. The component is primarily focused on enhancing livelihoods by strategic investments on a value-chain.
- **Project Management, Knowledge Management, and Replication:** To ensure the smooth implementation of project activities, monitoring of project implementation progress and outputs/outcomes achieved, and best practice/knowledge sharing from project experience, to be scaled up to other districts.

Key Expected and Achieved Results:

- ✓ 700,000 rural households mobilized into SHGs accessing financial and livelihoods services.
- ✓ 72 percent of identified poor and extremely poor households included and benefiting from direct project inputs or through linkages.
- ✓ US\$50 million internal savings mobilized.
- ✓ Cumulative US\$60 million mobilized from commercial bank linkage.
- ✓ 70,000 households benefiting from agriculture-based livelihoods.
- ✓ 8000 community professionals developed for servicing the poor households in a predictable and sustainable manner.
- ✓ 50 percent of participating households reported reduced dependency from high cost debt.

Implementing Agency: Odisha Livelihood Mission – TRIPTI established by the Department of Panchayati Raj, Government of Odisha.

Key Development Partners: Banks, NGOs, Mission Shakti, Department of Agriculture, and other line departments.

INDIA: Tamil Nadu Empowerment and Poverty Reduction Project

Key Dates:

Approved: July 12, 2005; November 18, 2010 (AF)

Effective: October 24, 2005 and February 22, 2011 (AF)

Closing: September 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|--|------------|-----------|-------------|
| IDA | 274 | 162 | 112 |
| Government of India/Government of Tamil Nadu | 64 | | |
| Other – Community | 12 | | |
| Total Project Cost | 350 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objective: Tamil Nadu is India's eleventh largest state by area and the seventh most populous state. It is also one of the most industrialized states and had the second largest state economy in 2012. However, over 20 percent of the population continues to live in poverty, which is particularly pronounced in rural areas with high inequality and a large disabled population. A large portion of the population depends on agricultural for their livelihoods due to low skill levels and weak access to credit and markets with which to engage the growing non-farm sector.

The World Bank has financed empowerment and livelihood projects in India since 2000, which have mobilized over 30 million rural poor to form their own institutions, enabling them to access livelihood opportunities and build social, financial, and economic capital. State level livelihood projects (in Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Rajasthan, Orissa, and Bihar) have achieved significant results in terms of increased savings, access to credit, livelihoods, and the convergence of public services at the household level. This experience is now being scaled up across the country through the National Rural Livelihood Program, as well as to four states in the North East under the Bank-supported North East Rural Livelihood Project.

The Project Development Objective is to empower the poor and enhance their livelihoods through the development of community-level institutions; to enhance skills and capacities of the poor (especially women, youth, differently-abled, and the vulnerable); and to finance demand-driven investments related to livelihoods for the target poor. The project has three components:

- **Village Livelihoods Program:** Building institutional capacity, and funding productive livelihood-related investments at the village level;
- **District and State Support to Village Livelihoods Program:** Strengthening project teams at the state and district levels to extend support to the village level, and support monitoring, evaluation, and learning; and
- **Project Management:** Includes staffing and human resource development.

Key Expected and Achieved Results: The original project covered 2,509 village panchayats and over 581,000 households in 16 districts of Tamil Nadu. The additional finance credit will allow the project to expand to include another 1,658 village panchayats (382,000 households) spread across 10 new districts.

- ✓ More than 28,000 new Self Help Groups (SHGs) have been formed by the project, with a particular focus on the poorest women and inclusion of youth, tribal, and differently-abled. The savings and internal lending of these SHGs have enabled members to enhance their livelihood activities and household incomes. By establishing Panchayat Level Federations, and clustering SHGs around economic activities, opportunities have been provided for improved access to services and markets. The total savings and credit amount available with SHGs is over US\$ 360 million, of which about 30 percent is from SHG savings.
- ✓ Over 191,700 target youth have benefited from jobs-oriented skills training, with 84 percent now employed in corporate sectors including the construction industry, the service sector, telecommunications, and garment production.
- ✓ Over 169,000 differently-abled and vulnerable persons have received individual assistance through the village institutions.

Implementing Agency: Tamil Nadu Pudhu Vaazhvu Society established by the Rural Development and Panchayat Raj Department, Government of Tamil Nadu.

INDIA: Second Madhya Pradesh District Poverty Initiatives Project

Key Dates:

Approved: June 24, 2009
 Effective: October 14, 2009
 Closing: December 12, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|--|------------|-----------|-------------|
| IDA | 100 | 67.4 | 31.2 |
| Government of India/ Government of Madhya Pradesh | 10 | | |
| Total Project Cost | 110 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: Madhya Pradesh is India's second largest state in terms of land area. With an estimated population of about 72.5 million, it is also the fifth most populous state of India (Census 2011). It remains one of India's poorer states, and more than one-third of its population belongs to socially and economically marginalized groups. Agriculture employs nearly 72 per cent of all workers, and although poverty in rural areas had declined to 28.3 percent at time of project preparation, agricultural productivity and incomes were below the national average. The state government has attempted to address the problems of rural poverty, low agricultural productivity, and social exclusion through a variety of policies and programs, including through the promotion of Self-Help Groups (SHGs) and employment-focused skills development.

The World Bank in India has financed empowerment and livelihood projects since 2000. Projects have helped mobilize over 30 million rural poor people into institutions, enabling them to access livelihood opportunities and build social, financial, and economic capital. State level livelihood projects in Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Rajasthan, Odisha, and Bihar have achieved significant results in terms of increased savings, access to credit, livelihoods, and the convergence of public services at the household level. This experience is now being scaled up through the National Rural Livelihood Project and the North East Rural Livelihood Project, which covers four states in the North East of India. This is the Second District Poverty Initiatives Project in Madhya Pradesh (MP DPII-II). The Project's development objective is to improve the capacity and opportunities for the targeted rural poor to achieve sustainable livelihoods. This will be achieved by enhanced participation by the rural poor in economic activities, skill enhancement for taking up higher value employment, and increased income among project target households through an increased asset base and market linkages. The project has four components:

- **Social Empowerment and Institution Building:** Empower the poor by helping them organize themselves into SHGs and federate into higher levels of institutions, such as Village Development Committees (VDCs), cluster-level organizations, and producer collectives;
- **Livelihoods Investment Support:** Develop the capacity of SHGs to start livelihoods initiatives and to strengthen their business operations through producer-based federations, companies, and cooperatives;
- **Employment Promotion Support:** Enable the project beneficiaries to capture new employment opportunities by establishing a structured mechanism for skill development and job creation; and
- **Project Implementation Support:** Facilitate various governance, implementation, coordination, learning, and quality enhancement efforts in the project.

Key Expected and Achieved Results:

- ✓ 60 percent of the graded SHG members report a minimum of 20 percent increase in household incomes.
- ✓ 60 percent of the graded SHGs are viable and sustainable. A 2012 assessment found a strong improvement in household incomes for over 70 percent of SHG members.
- ✓ With the current mobilization of nearly 350,000 beneficiaries (across 4,700 villages) into over 26,600 SHGs, the project is already close to its target of forming 30,000 SHGs. This is resulting in stronger financial inclusion, substantial group savings (over US\$ 3.5 million), and improved access to credit (over US\$ 2.8 million bank loans).
- ✓ Close to 20,000 youth have received skills training in various trades for both wage and self-employment, and over 105,000 youth benefited from job placements services through job fairs.
- ✓ Eighteen producer companies in agriculture, dairy, and poultry have been established, and play a significant role in providing economic benefits through employment, markets, and quality produce to farmers and shareholders.

Implementing Agency: Madhya Pradesh Society for Poverty Alleviation Initiatives, established by the Panchayat and Rural Development Department, Government of Madhya Pradesh.

INDIA: Technical Engineering Education Quality Improvement II Project

Key Dates:

Approved: March 18, 2010

Effective: August 6, 2010

Closing: December 31, 2014



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 230 | 45.8 | 234 |
| Government of India | 200 | | |
| Other | | | |
| Total Project Cost | 500 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: The Government of India has set itself the target of training 500 million people, from basic literacy to higher degrees, by 2020. The higher education sector is beset by problems – from non-transparent governance, to poor quality, from low investments and lack of labor market orientation, to weak quality assurance. The first phase of the Technical Engineering Education Quality Improvement Project (TEQIP) started a reform process through 109 government and private engineering education institutions in 13 states and 18 national institutions. In the TEQIP institutions, graduates' salaries increased by 90 percent over the baseline in nominal terms, and the employment rate increased by 42 percent. About 83 percent of the existing education curricula have been revised, and about 91 percent of eligible programs are either accredited or under assessment for accreditation. The principles in the TEQIP program – autonomy coupled with accountability – are central to the Government's reform agenda in higher education. These reforms have now been taken forward in the second phase of the TEQIP, which has almost doubled the number of participating institutions and states.

The TEQIP II project has two components:

- **Improving quality of education in selected institutions:** Grants are provided to institutions to improve undergraduate education or graduate education, and to establish Centers of Excellence.
- **Improving System Management:** Includes a number of activities to improve the governance and management of institutions and the system (including management training, establishing a Management Information System, and support Governing Bodies).

Key Results Achieved and Expected: The project is making good progress toward achieving its key performance indicators. More specifically:

- ✓ The percentage of institutions that have academic autonomy has increased from 30 percent to 55.85 percent, only 10 percent short of its target value of 65 percent.
- ✓ The number of faculty with Masters or PhD degrees has also increased and surpassed its end-project target of 60 percent. The baseline was 45 percent and today 88.27 percent of faculty have these higher educational degrees.
- ✓ The number of Masters and PhD level students has also increased from 15,000 to 16,139, against a 22,500 end-project target.
- ✓ The proportion of programs supported under the TEQIP project which are official accredited has not increased, as some programs' accreditation period ended, and many new programs have been started and only recently applied for accreditation. To date, there has been no progress from the baseline of 30 percent to the end-project target of 50 percent.

Implementing Agency: Ministry of Human Resources Development, Department of Higher Education, New Delhi. Most of the resources under the Project are provided to individual engineering colleges to carry out improvements in line with their Institutional Development Proposals. The State Governments are also partners, as they provide support through State Facilitation Units and meet 25 percent of project costs.

INDIA: Secondary Education Program

Key Dates:

Approved: March 22, 2012
 Effective: November 7, 2012
 Closing: June 30, 2017



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|------------|-------------|
| IDA | 500 | 124 | 376 |
| Government of India | 12,306 | | |
| Other | 90 | | |
| Total Project Cost | 12,896 | 124 | 376 |

*As of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objective: The outstanding success of the Government of India's elementary education program, which increased enrollment rates to almost 100 percent, is putting pressure on secondary education (grades 9 and 10). Secondary education needs to expand rapidly in response, while at the same time improving the quality of education: two Indian states which participated in the OECD PISA assessment of 15-year olds in mathematics, science, and reading, ranked at the very bottom of 70+ participating countries/regions. The Government of India asked the Bank to support expansion and quality improvement in secondary education through the Bank's flagship program, given our long history of support to elementary education. Since 2004, IDA has contributed close to US\$1.85 billion to the program in 2 phases -SSA I-2004-2007 (US\$500 million), and SSA II-2008-2012 (US\$1.35 billion). The Secondary Education Program, like SSA, is also funded by DFID and the EU, though total Development Partner contributions are about 10 percent of costs over 5 years. However, the Bank's financial contribution enables it to support and influence the shape of the whole multi-billion dollar program.

The project development objective is to help India achieve increased and more equitable access to good quality secondary education through support of the Government's ongoing program for secondary education as delineated in the *Rashtriya Madhyamki Shiksha Abhiyan* (RMSA) Framework. The Framework is designed to expand access, enhance equity, and improve the quality of secondary education; and in particular, support new innovations and expansion of promising pilot programs. Quality improvement activities include teacher professional development, recruitment of additional teachers, and capacity building of local institutions to support change. Access will be expanded through new and upgraded schools, especially in underserved areas, outreach to communities, more relevant learning materials, and better teachers. Innovations will be supported through new activities of the RMSA program, with clear guidelines for application and appraisal of proposals.

Key Expected Results: The RMSA program will contribute to the improvement of access, equity, and quality in secondary schools across India, preparing students for higher education and eventually the job market. More specifically, performance indicators are:

- ✓ Enrollment of students in Secondary (Grades IX and X) will rise from 28.3 to 38.4 million.
- ✓ Gender Parity Index in enrolment in schools covered by RMSA programs will increase from 0.94 to 0.97.
- ✓ Gross graduation rate will increase from 74 to 86 percent.
- ✓ RMSA's Quality Improvement Policies modified using the analysis of the new National Assessment of Student Achievement in secondary education.

Implementing Agency: Ministry of Human Resource Development, Department of School Education and Literacy, New Delhi. State Governments are responsible for implementation, and contribute 25 percent of financing.

Key Development Partners: United Kingdom's Department for International Development (DFID) (direct to program) and European Union (through education sector budget support).

INDIA: National Vector-Borne Disease Control and Polio Eradication Support Project

Key Dates:

Approved: July 31, 2008

Effective: March 6, 2009

Closing: December 31, 2013

| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IDA | 326 | 227.6 | 98.8 |
| Total Project Cost | 326 | 227.6 | 98.8 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: Vector-borne diseases—infectious diseases transmitted by mosquitoes and other organisms—are still a significant source of morbidity and mortality in India. Malaria and kala azar, a parasitic infection transmitted by sandflies, disproportionately affects tribal populations, and poor people. The severe form of *falciparum* malaria is often fatal and is rapidly on the rise in India, reflecting an increasing resistance to primary treatment drugs. Kala azar occurs mainly among the poorest residing in unhygienic housing, and if left untreated or ineffectively treated, it can be fatal. Eleven states account for 90 percent of the reported 2 million malaria cases in India, and almost all new kala azar reported cases are from Bihar, Jharkhand, and West Bengal. In its National Health Policy (2002), the Government of India lays out a program to reduce mortality from malaria by 50 percent, and eliminate kala azar by 2010.

The Bank-supported National Vector-Borne Disease Control and Polio Eradication project is helping the Government to improve the implementation of its national program, while focusing on the endemic states and poor and tribal communities. Reforms under the project include introducing new treatment policies and technologies, such as Artemisinin Combination Therapy for malaria and oral Miltefosine for kala azar; rapid diagnostic tests that can be used at the village level; and integrated vector management, along with Long Lasting Insecticidal Nets. This project also supported the Government of India's campaign to eradicate polio by procuring and supplying Oral Polio Vaccines. The Government's intensive immunization and surveillance interventions have paid off: in 2009, India accounted for nearly half of the world's polio cases, but as of January 13, 2013, it has been "polio free" for two years.

The project development objective is to enhance the effectiveness of the government response to control malaria, eliminate kala azar, and eradicate polio. This will be achieved by increasing the number of people benefiting from effective prevention, diagnosis, and treatment services for malaria and kala azar, and vaccinating against polio. The project has four components:

- **Improving access to and use of malaria prevention and control services:** Focuses on: (a) Improving Malaria Case Management, (b) Strengthening Malaria Surveillance, and (c) Effective vector control, financing pharmaceuticals, diagnostic kits, laboratory consumables and equipment, insecticides, nets, IT, furniture, training, and Information Education Communication materials.
- **Improving access to and use of services for the elimination of kala azar:** Focuses on improving Kala Azar case management and surveillance and effective vector control, financing supply of rapid diagnostic kits for kala azar dipsticks, pharmaceuticals, training, insecticides, behavior change communication materials, equipment, furniture, transport, and computers and software.
- **Policy and strategy development, capacity building, and monitoring and evaluation:** Focuses on providing technical support to develop guidelines, training, supervision, quality control, and monitoring and evaluation systems.
- **Supply of polio vaccine:** Provides financing to enable the Government of India to order adequate stocks of different types of polio vaccine and undertake urgent purchases when required.

Key Results Achieved:

- ✓ Malaria prevalence in project districts has declined.
- ✓ Kala azar prevalence and mortality across the three affected states, namely Bihar, Jharkhand, and West Bengal, has significantly decreased.
- ✓ Over six million Long Lasting Insecticidal Nets (LLIN) have been purchased and/or distributed, and surveys indicate that 27 percent of the eligible LLIN target population in project areas "slept under one during the previous night," as of February 2013.
- ✓ 817 health personnel trained in the new treatment guidelines.
- ✓ Project initiatives (diagnostics, treatment, human resources/supervision, monitoring and evaluation) incorporated into the Government's 12th Five-Year Plan, which promotes sustainability.

Implementing Agency: Ministry of Health and Family Welfare; Departments of Health and Family Welfare of the State Governments of Andhra Pradesh, Bihar, Jharkhand, West Bengal, Odisha, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, and Chhattisgarh.

Key Development Partners: Department of International Development, Government of United Kingdom, and the Bill and Melinda Gates Foundation.

INDIA: Tamil Nadu Health System Project

Key Dates:

Approved: December 16, 2004; April 29, 2010 (AF)

Effective: January 27, 2005; August 6, 2010 (AF)

Closing: September 30, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|---------------|--------------------|
| IDA | 231.56 | 170.88 | 40.52 [#] |
| Government of Tamil Nadu | 34.56 | 30.34 | 4.22 |
| Total Project Cost | 266.12 | 201.22 | 44.74 |

*US\$ millions; as of June 30, 2013; [#] US\$ 20 million cancelled & reallocated to post-Tsunami reconstruction project in 2005.

For more information see the [latest Implementation Status and Results Report](#)



Tribal patients being seen by doctor at camp in Gudalur Block

Background and Objectives: Tamil Nadu, with a population of 72 million (Census 2011), has demonstrated a strong commitment to development through its social sectors. With a vibrant history of engagement with the Bank, the state has been a pioneer in reforming health, education, rural development, and livelihoods. It has proactively identified its priorities in health, and worked towards achieving them by operationalizing a functional health system. The state has a robust public health infrastructure, a committed pool of skilled human resources in the health sector, and significant experience in managing several state-based as well as vertical health programs. Under the Tamil Nadu Health System Project, the state is continually strengthening its health system, and focusing on maternal and child health, equitable access to health care, prevention and treatment of non-communicable diseases, ICT-based health information systems, improved quality of care, and private sector engagement in health.

The project's development objective is to significantly improve the effectiveness of the health system in Tamil Nadu. It has four components:

- **Increasing access to and utilization of services:** Focuses on (i) operationalizing a network of Comprehensive Emergency Obstetric and Neonatal Care Centers (CEmONCs) across the state to address the currently stagnant Maternal Mortality and Infant Mortality Rates; (ii) supporting targeted interventions for equitable access to quality health care for tribal populations; and (iii) facilitating use of public hospitals by the poor and disadvantaged by harnessing the private sector and its strengths.
- **Non-Communicable Disease Prevention and Control:** Focuses on (i) health promotion through school, workplace, and community-based interventions, as well as a multi-dimensional information and education campaign; and (ii) clinical interventions of free screening (basic and higher diagnostics), treatment, and follow up of screened positive patients.
- **Building capacity for oversight and management of the health system:** Focuses on (i) strengthening monitoring and evaluation through an ICT-enabled hospital management system in secondary health facilities and a health management information system networking the entire public health infrastructure of the state; (ii) improving quality of care by accrediting selected health facilities and strengthening ongoing quality improvement programs at secondary health facilities; (iii) strengthening health care waste management knowledge and practices in all public health facilities of the state; and (iv) building capacity of the state government in strategic development and implementation with infrastructure, administrative, and M&E support.
- **Improving effectiveness and efficiency of public sector to deliver essential services:** Focuses on (i) equipment rationalization, strengthening equipment and pharmaceuticals logistics, and supply chain management; and (ii) HR planning and development.

Key Results Achieved and Expected:

- ✓ 125 centers fully functional, resulting in greater access to and use of maternal and neo-natal care services, particularly by poor, disadvantaged, and tribal groups.
- ✓ Decrease in the infant mortality rate (IMR) from 43/1,000 live births in 2005, to 22/1,000 live births in 2012 (SRS, India Census).
- ✓ Decrease in the maternal mortality rate (MMR) from 109 in 2004-05, to 79 in 2012-13.
- ✓ All 5 tribal health interventions well established with good uptake.
- ✓ PPPs for emergency transportation and mortuary van services well established.
- ✓ Effective non-communicable disease interventions scaled up throughout the state; non-communicable disease prevention, screening, and treatment pilot scaled up to all 32 districts, with over 2 million people screened for hypertension, over 1 million for diabetes, half a million for cervical cancer, and 740 thousand for breast cancer.
- ✓ Improved health outcomes, access, and quality of service delivery through strengthened oversight of the public sector health systems, and greater engagement of the NGO.
- ✓ Increased effectiveness of public sector hospital services, primarily at district and sub-district levels.

Implementing Agency: Tamil Nadu Health Systems Project, Tamil Nadu Medical Services Corporation and Public Works Department.

Key Development Partners: Department of Public Health, Department of Medical Services, and Department of Medical Education, Government of Tamil Nadu; Electronics Corporation of Tamil Nadu; National Institute of Epidemiology; Department of Education; Department of Labor; and Tamil Nadu Corporation for Development of Women.

INDIA: ICDS System Strengthening and Nutrition Improvement Project

Key Dates:

Approved: September 6, 2012

Effective: November 26, 2012

Closing: December 31, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-----------|--------------|
| IDA | 106.0 | 0 | 106.0 |
| Government of India | 45.5 | 0 | 45.5 |
| Total Project Cost | 151.5 | | 151.5 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: India has one of the highest malnutrition rates in the world. One third of India's children are born with low birth weight; 43 percent of those under five are underweight; 48 percent are stunted; 20 percent wasted; 70 percent anemic; and 57 percent vitamin A deficient. Undernourished children have higher rates of mortality; lower cognitive and school performance; are more likely to drop out of school; and are less productive later in life, with an estimated 10 percent potential reduction in individual lifetime earnings and a 2-3 percent loss in GDP. Much of undernourishment occurs during pregnancy and in the first two years of life (called the 'window of opportunity' to improve nutrition), when, without appropriate interventions, the damage to brain development, future economic productivity, and consequently human development, is largely irreversible.

The Government of India's flagship program, the Integrated Child Development Scheme (ICDS), is designed to facilitate the holistic development of children by providing supplementary nutrition, and health and child care services to pregnant and lactating women and children less than 6 years of age. As implemented, however, it is overly focused on supplemental food distribution; does not preferentially target children under two and pregnant-nursing mothers (the 'window of opportunity' for improving nutrition); and has had not focused enough on effective nutrition interventions such as promoting appropriate feeding and caring practices, thus limiting its impact on malnutrition despite several decades of implementation. Recognizing the need for change, the Government of India has recently restructured the ICDS to strengthen its focus on 0-3 year olds and on behavior change for nutrition, and is designing a multi-sectoral program in high-burden districts to address the multi-causal nature of malnutrition. World Bank support, through a two-phased project, will help the Government of India build the necessary capacity and systems to implement this reformed approach, as well as test innovations and pilots to improve implementation, including multi-sectoral nutrition actions across eight high-burden states in their efforts to reduce malnutrition.

The overarching program goal of the two-phased project is to improve nutritional outcomes for children in India. The development objective of the three-year first phase is to support the Government of India and participating states to: (i) strengthen the ICDS policy framework, systems, and capacities, and facilitate community engagement, to ensure greater focus on children less than three years of age; and (ii) strengthen convergent actions for improved nutrition outcomes. The project has four components:

- **ICDS institutional and systems strengthening.** This will support strategic interventions/improvements to enhance the effectiveness of the ICDS program.
- **Community mobilization and behavior change communication.** This will strengthen the supply- and demand-side interface of the ICDS program, especially at the point of delivery of nutrition services, and rigorously monitor and evaluate it.
- **Convergent nutrition action.** This will support the Government of India's efforts to initiate and subsequently expand a comprehensive convergent nutrition response to complement the ICDS, in order to address the multiple determinants of malnutrition.
- **Project management, monitoring, and evaluation.** This will support effective project management.

Key Results Achieved and Expected: The project was launched in May 2013 and is in the early implementation phase. Expected results for phase I include:

- ✓ 80 percent of project ICDS blocks will be reporting information using the revised ICDS management information system;
- ✓ 70 percent of project districts will have implemented an "incremental capacity building" system;
- ✓ Six project states will have implemented and evaluated at least one community engagement pilot;
- ✓ 70 percent of *anganwadi centers under the project* will have implemented the interpersonal communication activities focused on infant and young child feeding practices, as defined in the state behavior change communication plans; and
- ✓ Six project states will have piloted and implemented "convergent nutrition actions" in at least one district.

Implementing Agency: Ministry of Women and Child Development; Departments of Women and Child Development of the State Governments of Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

Key Development Partners: Department of International Development, Government of United Kingdom; United Nations Children's Fund; International Food Policy Research Institute; CARE India.

INDIA: Karnataka Health System Development and Reform Project

Key Dates:

Approved: August 22, 2006, August 27, 2012 (AF)

Effective: January 11, 2007, January 22, 2013 (AF)

Closing: March 31, 2012, March 31, 2016 (AF)



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|---------------|---------------|
| IDA | 211.83 | 131.57 | 80.26 |
| Government of Karnataka | 99.65 | 64.65 | 35.00 |
| Total Project Cost | 311.48 | 196.22 | 115.26 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: Karnataka, a state in the south of India, has a population of 61 million with higher per capita income and better health indicators than all-India averages, although there are significant socio-economic disparities within the state. As government health spending has substantially increased in recent years, basic investments and operations of health services have largely been assured from domestic funds. Nevertheless, system-level challenges persist, the quality and responsiveness of health services continue to require improvement, significant gaps remain in access to services, and the state is confronting new health challenges, notably the growing burden of non-communicable diseases (NCD). In this context, the Karnataka Health System Development and Reform Project has focused on supporting policy change, institutional development, new strategies and innovations, and filling gaps.

The project development objective is to improve health service delivery, public-private collaboration, and financing, particularly for underserved and vulnerable groups in Karnataka. The project has three components:

- **Strengthening Existing Government Health Programs:** Supports policy change, institutional capacity development at the state and district levels, and health service quality improvement.
- **Innovations in Service Delivery and Health Financing:** Supports investments in health service delivery capacity (i.e. round-the-clock health centers to improve maternal care), service-delivery contracts with NGOs, environmental health and regulation, a pilot for the prevention and control of non-communicable disease, and a pilot road safety program (coordinated with an IDA-financed transport project). This component also supports institutional development of a government health insurance scheme financing hospital services for the poor.
- **Project Management and Monitoring and Evaluation:** Supports overall project oversight and implementation.

Key Results Achieved and Expected:

- ✓ An assessment of organizational development needs has been done and training implemented, district health administration and planning has been strengthened, management and clinical guidelines have been developed, procurement reform has been implemented, and monitoring and evaluation have been strengthened.
- ✓ The project has financed construction and renovation of 305 health facilities, 13 drug warehouses, and 27 training centers, while 111 mobile health clinics and 19 citizens' help desks in hospitals are run by contracted NGOs. The institutional capacity of the government health insurance scheme has been strengthened. A needs assessment and technical design for the planned NCD and road safety activities have commenced.
- ✓ Performance indicators have shown significant progress: the proportion of births delivered in a health facility has risen from 65 percent in 2005-06 to 86 percent in 2009 (with an end-project target of 90 percent); 111 mobile health clinics are operational (against the end-project target of 125); and the number of claims paid by the health insurance pilot program benefiting poor households exceeds 32,000 (compared to the end-project target of 45,000).

Implementing Agency: Department of Health and Family Welfare, Government of Karnataka.

Key Development Partners: Local institutions such as the Institute of Public Health and the Indian Institute of Technology-Bangalore.

INDIA: Uttar Pradesh Health Systems Strengthening Project

Key Dates:

Approved: December 20, 2011

Effective: May 25, 2012

Closing: March 31, 2017



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|--------------|---------------|
| IDA | 143.88 | 10.71 | 133.30 |
| Government of India | 17.03 | 1.90 | 15.13 |
| Total Project Cost | 160.90 | 12.61 | 148.43 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: Uttar Pradesh is India's most populous state with an estimated population of nearly 200 million, or 17 percent of the population of India (Census 2011). Seventy-seven percent of the population lives in rural areas, and about 33 percent live below the poverty line. Uttar Pradesh has been ranked in the bottom third of Indian states on the Human Poverty Index since 1981, and the state lags behind all other states of the country on most human development indicators.

Uttar Pradesh will determine achievement of India's health goals and its health related Millennium Development Goals, given the size of the state population and the disproportionately higher mortality and morbidity rates. Public health spending has been steadily increasing in the state and is no longer the binding constraint. Despite increasing government, donor, and private investments in the health sector in Uttar Pradesh, the main challenges that are undermining the full impact of the inputs are centered on inadequate organizational performance. The Bank-financed project is expected to leverage its resources to support the Government of Uttar Pradesh to improve the efficiency of the health system and enhance the effectiveness of public investment in the health sector.

The development objective of the Uttar Pradesh Health Systems Strengthening Project is to improve the efficiency, quality, and accountability of health services delivery in the state by strengthening the State Health Department's management and systems capacity. The project's two components are:

- **Strengthening the Department of Health's management and accountability Systems:** Supports: (i) strengthening strategic planning functions; (ii) improving use of data for program management; (iii) strengthening the use of financial information for improved decision making, and strengthening of procurement and supply chain management systems; and (iv) introducing and strengthening social accountability mechanisms and introducing provider incentives in the public sector, and evaluating their impact.
- **Improving the Department of Health's capacity to perform its quality assurance role and more effectively engage the private sector:** Supports: (i) strengthening the institutional capacity for service quality improvement and regulatory capacity by establishing Quality Assurance (QA), Environment Management, and Public-Private Partnership (PPP) Cells in the Directorate of Health; (ii) hospital accreditation under the National Accreditation Board of Hospitals; (iii) contracting with the private sector for delivery of diagnostic services and non-clinical support services; and (iv) strengthening human resources management and availability.

The project disburses a third of the Credit against results met in pre-agreed indicators (Disbursement Linked Indicators); it uses a technical assistance provider and works through the regular client systems, with necessary risk mitigation.

Key Results Expected:

- ✓ Creation and staffing of key cells in the Health Directorate.
- ✓ Supporting the Government in its development of a draft health PPP policy, and on strengthening procurement and supply chain management.
- ✓ Development of a drug stock indenting and supply chain management software for all districts, and training staff to use it.
- ✓ Identification of facilities for accreditation and a gap assessment for all hospitals underway.
- ✓ Development and piloting of a draft health report card.
- ✓ Development of draft bidding documents and contracts for housekeeping and diagnostics.
- ✓

Implementing Agency: Department of Health and Family Welfare, Government of Uttar Pradesh.

Key Development Partners: Bill and Melinda Gates Foundation and UNICEF. Duke University (impact evaluation) and IFC (larger private sector engagement).

INDIA: National Aids Control Support Project

Key Dates:

Approved: May 1, 2013

Effective: Not yet effective

Closing: December 31, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|-----------|-------------|
| IDA | 255 | 0 | 255 |
| Government of India | 255 | 0 | 255 |
| Total Project Cost | 510 | 0 | 255 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: India launched the first National AIDS Control Program (NACP I) in 1992, focusing on blood safety, prevention among high risk groups, raising awareness among the general population, and improving surveillance. In the second phase (NACP II, 1999-2006), India continued to expand the program at the state level, with greater emphasis on targeted interventions and involving NGOs. In the third phase (NACP III, 2007-2012), India has scaled up targeted HIV prevention interventions for most at risk population groups and further expanded the surveillance system. The World Bank supported all three phases of the NACP.

The goals of the fourth phase of the NACP are to accelerate reversal of the HIV epidemic and integrate responses. The National AIDS Control Support Project will support the fourth phase of NACP (2012–2017), with a focus on HIV prevention and targeted interventions. The Project will contribute to three components of the NACP IV: (i) prevention, (ii) behavior change, and (iii) institutional strengthening. Two other components of NACP IV – provision of care, treatment, and support to people living with HIV and AIDS; and strategic information systems, including disease surveillance – will be supported by the national budget, with technical and financial support from other donors.

The project development objective is to increase safe behaviors among high-risk groups in order to contribute to the national goal of reversing the HIV epidemic by 2017. The project has three components:

- **Scaling Up Targeted Prevention Interventions:** Will support scaling up targeted interventions, with the aim of reaching hard-to-reach population groups which do not yet access and use the prevention services of the program, and saturating coverage of such population groups. This component will also support the state training resource center in capacity building for preventive interventions at the state level, and will focus on the bridge population, i.e. migrants and truckers.
- **Behavior Change Communications:** Will include: (i) communication programs and campaigns for risk reduction and safe behavior, advocacy, social mobilization and behavior change communication (BCC) to integrate people living with HIV and AIDS and hard-to-reach groups into society, and encourage normative changes aimed at reducing stigma and discrimination in society at large, and health facilities in particular; as well as increase demand and effective use of testing and counseling services; (ii) financing a research and evaluation agency to assess the cost-effectiveness and program impact of BCC activities; and (iii) establishing and evaluating a helpline at the national and state level to further increase access to information and services.
- **Institutional Strengthening:** Will support innovations to enhance performance management, including fiduciary management; strengthen procurement and supply chain management; strengthening Technical Support Units over a 3-4 year period to ensure quality of targeted interventions; supporting the services of an agent to procure opioid substitution therapy; disseminating best practices; and financing the necessary audits.

Key Results Expected: The project aims to achieve the following key results:

- ✓ Increase safe behaviors among high-risk groups. Indicated by 85 percent of female sex workers, and 65 percent of men having sex with men, reporting using a condom;
- ✓ Maintain/increase access to targeted interventions to prevent HIV among populations at highest risk. Indicated by targeted interventions reaching 90 percent of female sex workers, and 80 percent of high-risk men having sex with men, in 2017;
- ✓ Scale-up prevention interventions for bridge population groups. Indicated by 90 percent of planned prevention interventions for migrants and truckers implemented by 2017;
- ✓ Strengthen the institutional capacity and program management of the national program. Indicated by 90 percent of states submitting completed audit reports to the Department of AIDS Control within agreed time limits, and 80 percent of NGOs contracted as per the States AIDS Control societies, by 2017; and
- ✓ Increase demand for HIV services through behavior change communications. Indicated by 80 percent of high burden districts implementing BCC strategy and plan, with focus on demand generation and stigma reduction, by 2017.

Implementing Agency: Department of AIDS Control, Ministry of Health and Family Welfare, Government of India.

Key Development Partners: United Nations AIDS, United Nations Development Program, Bill and Melinda Gates Foundation.

INDIA: Scaling Up Sustainable and Responsible Microfinance Project

Key Dates:

Approved: June 1, 2010

Effective: August 18, 2010

Closing: June 30, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|---|------------|--------------|--------------|
| IDA | 100 | 94.6 | 9.2 |
| IBRD | 200 | 60.7 | 139.2 |
| Borrower (Small Industries Development Bank of India) | 30 | | |
| Total | 330 | 155.3 | 148.4 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Sumita Das of Sualkuchi town in Assam with the loom she bought with a loan from a Bank-supported MFI

Background and Objectives: Private sector microfinance institutions (MFIs) have made a significant contribution to promoting financial inclusion, particularly credit. Despite being a tiny fraction of the banking system, they account for as much as 60 percent of small loan accounts in the entire banking system. The Project was designed recognizing this contribution and the potential for further scale-up, but also recognizing that the unprecedented growth in the sector could affect the quality of credit discipline and market behavior on the part of some MFIs.

The objective of the project is to scale-up access to sustainable microfinance services for the financially excluded, particularly in under-served areas of India, by introducing innovative financial products and fostering transparency and responsible finance. While national in coverage, the project focuses on financially underserved states. So far, several low income states have been major recipients of project funding, though some funding has also gone to underserved households in southern states with better financial access.

Key Achieved and Expected Results: The project has made important contributions in promoting responsible microfinance in India, and over 12 million clients of project-funded MFIs have benefited from a greater focus on responsible lending. Substantive sector-wide improvements facilitated by the project include: better data transparency; stronger grievance-redressal systems; enhanced systems for client protection; establishment of a sector-wide code of conduct; and substantially improved use of credit market infrastructure. A recent achievement has been the launch of a web-based data platform that will provide quarterly operational data and annual financial data on MFIs. Further applications, such as ‘heat maps’ that geo-map and highlight areas of risk, are proposed to be added to the platform.

Project funding has also helped scale-up sustainable microfinance, directly funding 568,000 clients for micro-enterprise or consumption needs, through 12 MFIs, 11 of which are operationally self-sustainable. Around 80 percent of clients are in underserved states, including in low-income states such as Bihar and Orissa, West Bengal, Rajasthan, and the North Eastern States.

Progress on project outcome indicators and implementation continues to be satisfactory. Progress on indicators related to leveraging project funding by other resources; targeting project funding to underserved areas; sustainability of funded MFI operations; and data transparency, has been impressive and exceeds the project targets.

Implementing Agency: Small Industries Development Bank of India (SIDBI).

INDIA: Bandhan Financial Services Limited

Key Date:

Committed: May 11, 2011

IFC Financing (US\$ million)

| Instrument | Amount | Disbursed | Undisbursed |
|------------|--------|-----------|-------------|
| Equity | 29.0 | 29.0 | - |

Project Description and Objectives:

In FY12, IFC invested \$29.44 million in Bandhan Financial Services Limited, one of the largest microfinance institutions in India. Bandhan operates in 18 Indian states and Union Territories, with a focus on eastern and north eastern parts of the country, including low income states like Bihar, Chhattisgarh, Jharkhand, Odisha, Rajasthan, and others, where population density is high and microfinance penetration is low. Bandhan focuses primarily on providing microloans to women micro-entrepreneurs in rural and urban areas. As of May 31, 2013, Bandhan has more than 4 million borrowers and a loan portfolio of over \$700 million equivalent. IFC's equity financing is expected to help Bandhan increase outreach in the states it which it currently operates, as well as expand its outreach in states with the greatest need for access to finance; diversify its product base; and establish international best practices in operations and governance.

In addition to financing, IFC's Advisory Services are strengthening Bandhan's capacity for sustainable and efficient growth of its operations. IFC support will promote adopting higher environmental and social standards. IFC will also play a key role in the company's corporate governance, and encourage Bandhan to incorporate best practices in corporate governance and risk management. Finally, IFC is expected to play a key role in leveraging its relationships with other microfinance institutions and microfinance networks to exchange ideas and adopt best practices to support Bandhan.

Key Achievements and Expected Results:

The investment is expected to have a high developmental impact by:

- Increasing access to finance in some of the poorest of India's low income states;
- Promoting a more balanced growth of microfinance in India. Most of the microfinance institutions operating in India are concentrated in the south). Bandhan's operations are mainly in the eastern and north eastern part, where microfinance penetration is low and very few microfinance institutions of significant size are located;
- Contributing to employment creation and poverty reduction in the states where Bandhan operates; and
- Providing capacity building support in areas such as governance, product development, and environmental and social standards for best practice promotion.

In 2013, Bandhan provided access to financial services to more than 4 million women-owned micro clients, and expects to provide access to finance to nearly 8 million women-owned micro/individual clients by 2016.

INDIA: Kerala Local Government and Service Delivery Project

Key Dates:

Approved: March 29, 2011
 Effective: September 2011
 Closing: December 31, 2015



Fish Market: Income Enhancement Local Government Systems

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|---------------|---------------|
| IDA | 200 | 84.46 | 115.54 |
| Government of Kerala | 60 | 20 | 40 |
| Total Project Cost | 260 | 104.46 | 155.54 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: Kerala is considered a front runner in India’s decentralization reforms. Local governments in Kerala are in a unique situation—taking on more devolved responsibilities and with a greater degree of local autonomy. Kerala is undertaking a second generation of decentralization reforms, which focus, in a practical and incremental manner, on expanding local expenditure autonomy, strengthening local government institutional capacity, and enhancing the state government’s ability to manage and oversee the intergovernmental fiscal system. The Kerala Local Government and Service Delivery Project contributes to the Government of Kerala’s second generation decentralization reforms through support to enhance governance and improve service delivery. At the national level, the project supports the overall process of decentralization as mandated under the 73rd and 74th Constitutional Amendments.

The Project development objective is to enhance and strengthen the institutional capacity of the local government system in Kerala to deliver services and undertake basic administrative and governance functions more effectively and sustainably. The project supports 978 Gram Panchayats (GPs) and 60 municipalities across the state. The project has four components:

- **Performance Grants.** Provides GPs and Municipalities with additional discretionary funds, based on a formula, to expand local investment in the creation, maintenance, and operation of capital assets, as an incentive for strengthening institutional capacity.
- **Capacity Building.** Provides inputs to strengthen and supplement the existing systems and human resources of municipalities and GPs, to enhance their institutional performance.
- **Performance Monitoring:** Supports strengthening the system of performance monitoring GPs and Municipalities across the State.
- **Support the Project Management Unit:** within the Local Self Government (LSG) Department in overall coordination, implementation, and monitoring and evaluation of the project.

Key Achieved and Expected Results:

- ✓ Significant improvement in implementing performance grants, and notable improvements in service delivery on the ground, based on a review of a sample of sub-projects undertaken by the local governments.
- ✓ Local governments, through consultation with their citizens in a participatory manner, invest in a variety of activities, broadly categorized into four main areas: connective infrastructure, urban renewal (water-front development, recreation and beautification), modernization of local self-governments (including citizen-centered service delivery front offices), income enhancing (e.g. revenue mobilization) and public safety; education, health and social services; energy generation; and water supply, sanitation and solid waste management.
- ✓ Training all local governments in core areas such as budgeting, planning, financial management, procurement, and environmental and social safeguards.
- ✓ The project has contributed to cleaning-up audit backlogs in all 978 LSGs, and finalization of e-governance systems in all LSGs for enabling citizen service delivery, accountability and transparency through the Information Kerala Mission. Focus is now on ensuring proper implementation of these e-governance systems to achieve improved governance and service delivery.

Implementing Agency: Local Self Government Department (LSGD), Government of Kerala.

INDIA: West Bengal Institutional Strengthening of Gram Panchayats Project

Key Dates:

Approved: June 8, 2010

Effective: September 3, 2010

Closing: December 31, 2015



Strong citizen interface

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|---------------|---------------|
| IDA | 200 | 106.92 | 93.08 |
| Government of West Bengal | 35 | 21.50 | 13.50 |
| Total Project Cost | 235 | 128.42 | 106.58 |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)

Background and Objectives: West Bengal has a progressive record amongst Indian states in decentralization initiatives for local governance systems. The Panchayats and Rural Development Department (PRDD) of the Government of West Bengal (GoWB) is committed to expanding and deepening this process by providing the Panchayati Raj Institutions (PRIs) with the resources, capacities, and incentives to improve service delivery and governance. The overall strategic vision of the project is to institute a discretionary block grant system which incentivizes local governance and service delivery performance throughout the state as an integral and ongoing element of the broader PRI fiscal framework in West Bengal.

The Project development objective is to develop institutionally-strengthened local government bodies at the village levels—Gram Panchayats (GP). The project features four main components:

- **Support annual performance-based block grant:** to participating GPs for local public goods and services. In order to access the grant, GPs are required to meet a prescribed set of mandatory minimum conditions and pass an annual independent score-based performance assessment in key areas.
- **Focus on capacity building for GPs:** Provides formal and hand-holding support and system development support to strengthen the institutional capacity of GPs to deliver basic services.
- **Strengthen PRDD's oversight and systems for monitoring of PRIs:** through (i) annual performance assessments and quality assurance audits; (ii) internal and external monitoring and reporting systems; (iii) evaluations and studies of the program; and (iv) external audit support.
- **Support Program Management and Project Communications:** in overall project coordination, implementation, and citizen communication.

Key Results Achieved and Expected:

- ✓ 81 percent of the GPs have already established well-functioning planning and fiduciary systems, compared to target of 80 percent;
- ✓ In FY13-14, a total of 794 out of 1,000 GPs have qualified for the third round of the block grant. This is a 40 percent increase since the project started.
- ✓ At present, 95 percent of the project GPs have approved and disclosed their plans and budgets; 97 percent have 'clean' external audits; 95 percent have up-to-date financial, planning, and accounting records maintained in the GP Management System; and around 90 percent could expend a minimum 60 percent of all untied grants received by the third quarter in a fiscal year;
- ✓ The annual performance assessment shows that districts with a large vulnerable group population are progressively ranking better.
- ✓ Vulnerable development mapping was introduced by the project last year, and close to 83percent have already incorporated it into the FY13-14 GP annual plan;
- ✓ Gender-based reporting on schemes;
- ✓ The online reporting system has been rolled out to all project GPs, and around 95 percent of the GPs provided detailed implementation reports.

Implementing Agencies: Panchayats and Rural Development Department, Government of West Bengal.

INDIA: Karnataka Panchayat Strengthening Project

Key Dates:

Approved: June 29, 2006

Effective: October 4, 2006

Closing: December 31, 2013

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|---------------|-----------|-------------|
| IDA | 123.10** | 120.70 | 2.40 |
| Government of Karnataka | 13.33 | | |
| Total Project Cost | 136.43 | | |

*US\$ millions, as of July 19, 2013

** IDA amounts reflect SDR exchange rate as of July 19, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: India opted for decentralization to increase the accountability of government, improve services and public spending, and reach out to poor people. The central government sees rural governments as the key mechanism for delivering core services to rural poor, and one of its priorities was to make this approach work in some states to serve as an example and a model for the rest of the country. Karnataka was the ideal candidate for using the model of decentralized service delivery to set an example for the rest of India. The poorest parts of Karnataka have many features typical of more northern states, with a high incidence of poverty, difficult access, and severe resource constraints. But Karnataka also has a long history of rural governments, more than any other state in India. The project covers 39 of the ‘most backward’ blocks (taluks) and 1,341 Gram Panchayats, to build capacity of the Panchayat Raj Institutions (PRIs), provide a formula-based grant, revamp financial management and procurement systems, and improve the effectiveness of service delivery across a range of core basic services devolved under the Karnataka Panchayat Raj Act, 1993.

The development objective of the project is to improve the effectiveness of service delivery by Karnataka Gram Panchayats (GPs or village governments), particularly with respect to the management of public resources and the delivery of relevant services as prioritized by the rural people. The project has four components:

- **Block grants to GPs:** Formula-based untied grants.
- **Information systems for constituents:** Increases the ability of poor people to voice their demands to, and elicit responses from, local governments, in particular the poorest and excluded groups;
- **Building the capacity of panchayats:** Increasing the capacity of all three levels of Panchayats in managing resources, collecting revenues, and delivering services; and
- **Building the capacity of the state:** Putting in place systems at the state level to enable it to oversee, facilitate, and manage the Panchayat system.

¹ A three-tiered rural local government structure in India: Zilla Panchayats at the district level (avg. pop. of two million), Taluk Panchayats at the block level (avg. pop. 250 thousand), and Gram Panchayat at the village level (avg. pop. of 5,000).

Key Achieved Results:

- ✓ The number of Gram Sabhas has risen from a low base of about 4,000 to over 7,000, with an increase in local representation, and plans reflecting community needs (participatory planning).
- ✓ The collection rate of own source revenue increased from 31 percent in 2009/10 to 37.3 percent in 2011/12, allowing for improvement in own source revenue generation in the project GPs.
- ✓ Field visits to 20 GPs covering four districts and Focus Group Discussions show that village residents are satisfied with the services rendered by their respective GPs. Villagers appreciate the works undertaken by the GPs and the participatory planning approach at the grass root level.
- ✓ Additional focus has been placed on further improving the quality and efficiency of local service delivery.
- ✓ The 2013 post-procurement review indicates:
 - Some improvement in participation of bidders in tendering, bidding outcomes, and implementation of a GP-level Procurement Monitoring tool.
 - All works were completed and are being used by the beneficiaries, indicating that the general public appreciates the assets created at the GP level, and villagers are using the facilities/works created through participatory planning.
 - Continued improvement in documenting procurement, payments, and completion certificates of works.

Implementing Agency: Gram Swaraj Project, Rural Development and Panchayat Raj Department, Government of Karnataka.

INDIA: India: Bihar Panchayat Strengthening Project

Key Dates:

Approved: August 27, 2012

Effective: Signed on June 27, 2013 (not yet effective)

Closing: December 31, 2017

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 84 | - | 84 |
| Government of Bihar | 36 | - | - |
| Total Project Cost | 120 | - | - |

*US\$ millions; as of July 23, 2013

For more information see the [latest Implementation Status and Results Report](#).

Background and Objectives: Bihar is one of the poorest states in India. Per capita income is about one-third of the national average. Out of its 103-million population, 90 percent live in rural areas. Agriculture and allied activities employ 80 percent of Bihar's labor force but contribute only about 20 percent to the state Gross Domestic Product (GDP). Its human development indicators are among the lowest in India.

The project seeks to strengthen Bihar's Panchayati Raj institutions as units of self-governance capable of planning and implementing development schemes, promoting community life, and generating employment opportunities. The project supports the Government of Bihar's plans for strengthening the institutional framework for the functioning of Gram Panchayats, or village councils, and bringing about visible changes in village sanitation, quality of drinking water, nutritional status of children, and generating employment opportunities through better management of natural resources.

The project's development objective is to "support Bihar's capacity to promote and strengthen inclusive, responsive, and accountable Gram Panchayats in selected districts across the state." The project has five components:

- Construction of Panchayat Sarkar Bhawans (Local Self Government Offices);
- Capacity building for Panchayati Raj Institutions;
- Strengthening the State Government's capacity to manage a gradual decentralization and empowerment process;
- Panchayat Performance Grant; and
- Project Management and Coordination.

Key Expected Results:

- ✓ Increased number of elected representatives trained to perform their mandated role effectively.
- ✓ More villagers from socially disadvantaged groups (Scheduled Castes, Scheduled Tribes, and women) attending and participating actively in regular Gram Sabha meetings in project districts.
- ✓ Increased number of Gram Panchayat Standing Committees that meet regularly to discharge their statutory functions and those focusing on Planning and Budgeting of various programs.
- ✓ Increased percentage of Gram Panchayat project beneficiaries from socially disadvantaged groups (Scheduled Castes, Scheduled Tribes, and women).
- ✓ Increased number of Gram Panchayats submitting an annual financial statement within four months from the end of fiscal year for external audit.
- ✓ Increased percentage of people from all social groups who perceive that the Gram Panchayat is increasingly "inclusive, responsive, and accountable" in helping to address their individual and community issues.

Implementing Agency: Bihar Gram Swaraj Yojana Society, Government of Bihar.

INDIA: Low-Income Housing Finance Project

Key Dates:

Approved: May 14, 2013

Effective: August 31, 2013

Closing: December 31, 2018



| Financier | Financing* | Disbursed | Undisbursed |
|--------------------|------------|-----------|-------------|
| IDA | 100 | 0 | 100 |
| Total Project Cost | 100 | 0 | 100 |

*US\$ millions; as of June 30, 2013.

For more information see the latest Implementation Status and Results Report

Background and Objectives: India's urban population is expanding at a rapid pace and is expected to rise to 600 million by 2031, more than double that in 2001. This has led to an acute shortage of housing. The shortages are the result of a complex set of factors on both the supply and the demand side. On the supply side, inappropriate land use policies and building norms artificially restrict the availability of housing. On the demand side, housing finance is constrained, more so than in other emerging economies. This is largely due to the fact that the bulk of the affected population works in the informal sector, and needs customized lending policies for which the required capacity is still lacking. More than 90 percent of the housing shortage is faced by low-income and poor families. These households are largely excluded from formal housing finance and face the high borrowing costs that come with a high reliance on informal sources of credit. The drivers of this market failure include informality of the borrower's income (no documentation of income), and for most low-income people, the informality of their dwelling (no clear mortgageable title to the property).

The development objective of the Low-Income Housing Finance Project for India is to provide access to sustainable housing finance for low-income households to purchase, build, or upgrade their dwellings. The Project aims to address market failures by giving the necessary capacity building and implementation support and incentives to the National Housing Bank (NHB) – the apex level financial institution for the housing financial system in India – intermediary institutions, and primary lending institutions to expand lending to lower income groups. The Project also provides finance for NHB to refinance low-income housing loans made by primary lenders.

Key Achieved and Expected Results: Expected results to be achieved at the end of the project include:

- ✓ Increase in the number of primary lenders active in the low-income segments.
- ✓ Increase in volume of lending to lower income borrowers.
- ✓ Increase in the number of borrowers in the lower income segments. Financing under the Project aims to create incentives for lenders to focus on lower income households. The Project aims to deliver on reaching down to lower income households while maintaining quality standards for the loan portfolio.

Implementing Agency: National Housing Bank (NHB).

Development Partners: International Finance Corporation (IFC), KfW, the German government-owned development bank, and the United Kingdom's Department for International Development (DFID).

INDIA: Bihar Kosi Flood Recovery Project

Key Dates:

Approved: September, 9, 2010

Effective: March, 08, 2011

Restructured: June 28, 2013

Closing: September 14, 2014

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------|------------|-----------|-------------|
| IDA | 220 | 36 | 184 |
| Government of Bihar | 43 | | |
| Total Project Cost | 263 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#).



Background and Objectives: On August 18, 2008, the Kosi river burst through its eastern embankment 11 km upstream of the Kosi Barrage in Nepal, 8 km north of the Indian border. This created major flooding in Nepal and in the Indian state of Bihar, with about 3.3 million people affected in Bihar alone. The Kosi floods were subsequently declared a national calamity by the Government of India.

The Bihar Kosi Flood Recovery Project (BKFRP) aims to support flood recovery and risk reduction efforts in the affected regions through: (i) reconstruction of damaged houses and road infrastructure; (ii) strengthening the flood management capacity in the Kosi Basin; (iii) enhancing the livelihood opportunities of the affected people; and (iv) improving the emergency response capacity for future disasters.

The project became effective in March 2011, but progress has been slow due to the project's low level of implementation readiness. In addition, as an emergency project, the survey, design, documentation, and tendering of activities started only after the project was approved. The project was restructured to reprioritize investments and strengthen the capacity of state institutions in implementing the project.

Key Expected and Achieved Results:

- ✓ *Owner Driven Housing Reconstruction:* Out of the proposed 100,000 houses to be reconstructed, the beneficiary list for 65,000 has been finalized and the process of allocating funds to beneficiaries has been initiated. Currently, over 52,000 beneficiaries have been given their first instalment of housing assistance, and over 11,000 homes have been completed.
- ✓ *Reconstruction of Roads and Bridges:* All 20 contracts for roads and 48 contracts for the bridges, totalling \$68 million, have been awarded, and works are underway.
- ✓ *Strengthening Flood Management Capacity:* One embankment contract has been awarded and the construction has begun. In addition, three contracts for flood channels and three technical studies on flood management are in the advanced stage of tendering. New pilot investments for embankment strengthening have been added in the component during the restructuring.
- ✓ *Livelihood Restoration and Enhancement:* This component has substantially mobilized community institutions and their capitalization. The project has enabled the community institutions to leverage considerable credit from commercial banks. In conjunction, agriculture and livestock pilots have also been successfully implemented. The component is now removed from the project and merged with a similar Bank-funded project in the state.

Key Development Partners: The Government of Bihar set up the Bihar Aapada Punarwas Evam Purarnirman Society (BAPEPS) for implementing the project. Other state agencies, such as Rural Works, Road Construction, and Water Resources Departments, are also involved.

INDIA: National Cyclone Risk Mitigation Project (APL I)

Key Dates:

Approved: June 22, 2010

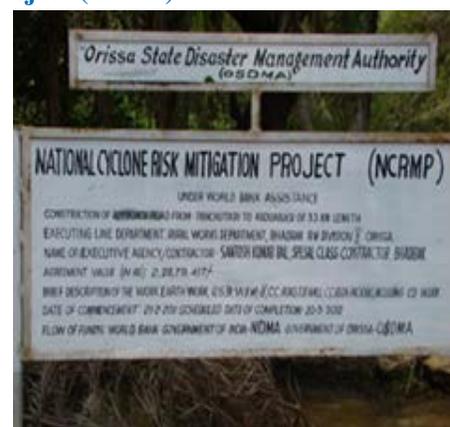
Effective: March 30, 2011

Closing: October 31, 2015

| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|------------|-----------|-------------|
| IDA | 255 | 35 | 220 |
| Government of West Bengal | 65 | | |
| Total Project Cost | 320 | | |

*US\$ millions; as of June 30, 2013

For more information see the [latest Implementation Status and Results Report](#)



Background and Objectives: India is highly vulnerable to natural hazards, particularly cyclones, floods, earthquakes, and landslides. Approximately 5,700 km of the total 7,500 km of coastline is exposed to severe cyclones, and an estimated 40 percent of India's 1.2 billion people live within 100 km of the coast. Between 1980 and 2000, on average 370 million people were exposed to cyclones. Up to half of all tropical cyclones affecting South Asia hit the Indian coastline, which is particularly susceptible to storm surges due to a shallow coastal shelf and particular tidal characteristics. The economic impact is also considerable; studies indicate natural disaster losses of as much as 2 percent of India's Gross Domestic Product (GDP) and as much as 12 percent of federal government revenues. Low-lying terrain, high population density, and limited community awareness make the population in India's coastal states and union territories extremely vulnerable. As climate change and weather variability become more pronounced, hazard events are likely to increase. The National Cyclone Risk Mitigation Project supports the Government of India in its efforts to mitigate cyclone-related risk and integrate disaster mitigation into the long-term national development process.

The development objectives of the project are to reduce vulnerability of coastal communities living in the vulnerable coastal states and Union Territories of India to cyclone and other hydro-meteorological hazards. The project is the first phase of a proposed three-phased Adaptable program Loan. The first phase of the project covers the states of Odisha and Andhra Pradesh. The project has four components:

- **Early Warning System and Capacity building for Coastal Communities:** Aims to reduce the vulnerability of coastal communities by addressing the existing gaps in disseminating warnings to communities, and in piloting and using new technology.
- **Cyclone Risk Mitigation Infrastructure:** Aims to improve access to emergency shelters, evacuation, and protection against cyclones and other hydro-meteorological hazards such as wind storms, flooding, and storm surge in high risk areas.
- **Technical Assistance for National and State Level Capacity Building and Knowledge Creation:** Aims to help understand risk and vulnerabilities better, and prepare key institutions to address them effectively, across India. Activities include studies, assessments, training and capacity building activities related to risk and damage assessments, development of training modules and action plans and implementing them through identified partner agencies.
- **Project Management and Implementation Support:** Provides support for project management by financing incremental operating costs for the Project Management Unit and Implementation Units, nodal units in line departments and the National Institute of Disaster Management (NIDM), office equipment, training and exposure visits, and consulting services for specialist activities.

Key Results Achieve and Expected:

- ✓ About 36 cyclone shelters, 190 roads, and 11 bridges have been completed. By 2015, 297 shelters, 1,050 km of roads, and 180 embankments will have been completed.
- ✓ By the end of the project 60 percent of the coastal population will have access to cyclone shelters, up from 30 percent at the start of the project.

Key Development Partners: The Bank team is working closely with the Ministry of Home Affairs (MHA), National Disaster Management Authority, National Institute of Disaster Management, Odisha State Disaster Management Authority, and the Department of Revenue and Disaster Management in Andhra Pradesh.

INDIA: Tamil Nadu and Puducherry Coastal Disaster Risk Reduction Project

Key Dates:

Approved: June 20, 2013
 Effective: Not yet Effective
 Closing: July 28, 2018



| Financier | Financing* | Disbursed | Undisbursed |
|---------------------------|--------------|-----------|-------------|
| IDA | 236.0 | 0 | 236.0 |
| Government of India | 101.2 | | |
| Total Project Cost | 337.2 | | |

*US\$ millions; as of June 30, 2013

For more information see the latest *Implementation Status and Results Report*

Background and Objectives: In the aftermath of the Indian Ocean Tsunami of December 26, 2004, the World Bank supported India's recovery efforts with the India - Emergency Tsunami Reconstruction Project (ETRP), focused on the state of Tamil Nadu and the Union Territory of Puducherry. The objective of the ETRP was to revive livelihoods and promote recovery in Tsunami-affected areas. ETRP was restructured in August 2009, with the addition of a new component: Vulnerability Reduction of Coastal Communities (VRCC). The VRCC extended the reconstruction program beyond those affected by the tsunami to the entire coast, targeting communities regularly exposed to cyclones, storm surges, and coastal flooding (and potential tsunamis), as well as addressing these communities' poor access to evacuation shelters and early warning systems. When the restructured ETRP closed on December 31, 2011, several works were complete, several ongoing, and some had yet to be taken up.

The Tamil Nadu and Puducherry Coastal Disaster Risk Reduction Project (CDRRP) focuses on new initiatives in risk reduction and mitigation, but also integrates the previous ETRP.

The CDRRP aims to increase the resilience of coastal communities in Tamil Nadu and Puducherry to a range of hydro-meteorological and geophysical hazards, along with improving the capacities of project implementation entities to respond promptly and effectively to an eligible crisis or emergency. The project has five components:

- **Vulnerability reduction of coastal communities:** Through infrastructure such as permanent houses, evacuation shelters and routes, and a resilient electrical network;
- **Sustainable fisheries:** Aims at upgrading infrastructure, sustainable co-management, and addressing safety at sea;
- **Capacity building:** Focused on disaster risk management of government institutions, civil society, the school education system, and coastal communities;
- **Implementation support:** Includes incremental operating costs for operating the Project Management Unit (PMU) and respective Project Implementation Units (PIUs) in the line departments; and
- **Contingency Emergency financing:** Will be drawn by the government of Tamil Nadu and/ or Puducherry to cover emergency response and recovery costs.

Key Expected and Achieved Results: Project yet to be signed and awaiting effectiveness. Reconstruction of over 16,000 vulnerable houses from earlier ETRP are now complete, and several fisheries infrastructure works are on-going.

Key Development Partners: The project supports the Government of Tamil Nadu and Government of Puducherry in implementing the project, and works with other state agencies such as the Revenue Administration Disaster Management and Mitigation Department, Fisheries Department, Environment and Forest Department, Public Works Department, and Rural Development Department.