



# Country Operations Business Plan

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December 2008

India  
2009

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 2 December 2008)

Currency Unit	–	Indian rupees (Re/Rs)
Re1.00	=	\$0.02
\$1.00	=	Rs49.90

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADTA	–	advisory technical assistance
BERC	–	Bihar Electricity Regulatory Commission
CAD	–	capacity development
CDTA	–	capacity development technical assistance
COBP	–	country operations business plan
CPS	–	country partnership strategy
ECG	–	sustainable economic growth
ENV	–	environmental sustainability
FYP	–	five year plan
GOV	–	governance
HUDCO	–	Housing and Urban Development Corporation
IFREM	–	integrated flood and riverbank erosion management
IFRERM	–	integrated flood and riverbank erosion risk management
IIFCL	–	India Infrastructure Finance Company Limited
INRM	–	India Resident Mission
ISD	–	inclusive social development
JNNURM	–	Jawaharlal Nehru National Urban Renewal Mission
JSF	–	Japan Special Fund
MFF	–	multitranches financing facility
MOUD	–	Ministry of Urban Development
OCR	–	ordinary capital resources
PATA	–	policy and advisory technical assistance
PPP	–	public-private partnership
PPTA	–	project preparatory technical assistance
PSD	–	private sector development
REC	–	Rural Electrification Corporation of India
SAEN	–	South Asia Energy Division
SAGF	–	South Asia Governance, Finance, and Trade Division
SANS	–	South Asia Agriculture, Natural Resources, and Social Services Division
SARD	–	South Asia Department
SATC	–	South Asia Transport and Communications Division
SAUD	–	South Asia Urban Development Division
TA	–	technical assistance
TASF	–	Technical Assistance Special Fund
ULB	–	urban local body

## NOTES

- (i) The fiscal year (FY) of the Government of India begins on 1 April and ends 31 March. FY before a calendar year denotes the year in which the fiscal year starts, e.g., FY2008 begins on 1 April 2008 and ends on 31 March 2009.

(ii) In this report, "\$" refers to US dollar.

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## I. CONSISTENCY OF THE BUSINESS PLAN WITH THE CURRENT COUNTRY PARTNERSHIP STRATEGY

1. The current Asian Development Bank (ADB) strategy for India is presented in the country strategy and program 2003–2006.<sup>1</sup> The strategy and assistance program have evolved over time in line with India's changing development needs as discussed in the country strategy and program updates of 2004 and 2005 and the country operations business plans (COBPs) of 2006 and 2007.<sup>2</sup>

2. This COBP, covering 2009, is an integral part of the larger India country partnership strategy (CPS) 2009–2012 which is expected to be finalized in the first quarter of 2009. The management review meeting for the draft India CPS was held on 1 August 2008. The Government has requested more time for reviewing the draft CPS in order to examine the 2010–2011 program further in the context of its current priorities. Since the CPS will be submitted for Board consideration in early 2009, this COBP has been prepared to obtain the approval of the ADB Board for the proposed assistance program in 2009. The 2010–2011 program will be reflected in the forthcoming CPS along with the 2009 program.

3. Since the draft CPS is closely aligned with the priorities of India's 11th Five Year Plan (FYP) 2007–2012, the business plan proposed in this COBP will continue to support the Government's efforts to promote inclusive growth and facilitate infrastructure development, with a special focus on India's relatively poor and weak-capacity states.<sup>3</sup> For example, operations have been initiated in Bihar,<sup>4</sup> Himachal Pradesh,<sup>5</sup> and Orissa<sup>6</sup> in 2008. To catalyze investment, ADB has been supporting the Government's efforts toward promoting public-private partnership (PPP) in infrastructure. Technical assistance (TA) is being provided to several state governments and central (infrastructure) line ministries to build capacity for identifying and appraising projects for the PPP mode of finance. A preliminary list includes 30 projects identified as potential PPP pilot projects. ADB is currently helping to develop these projects further.

4. Integrated sector road maps have been prepared for the India CPS to ensure that complementarities between ADB's public and private operations are tapped effectively. While ADB's public sector window will work with the Government to enhance infrastructure investment and improve the investment climate, its private sector window will partner through equity investment, guarantees, and/or loans. ADB considers both macro and micro prudential impacts while undertaking interventions within its private sector window. Dialogue for expanding ADB's local currency lending initiative is currently ongoing.

5. To make a tangible and measurable impact in a vast and diverse country such as India, ADB's public sector operations will leverage its own resources through official and commercial

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<sup>1</sup> ADB. 2003. *Country Strategy and Program (2003–2006): India*. Manila.

<sup>2</sup> ADB. 2004. *Country Strategy and Program Update (2005–2007): India*. Manila; ADB. 2005. *Country Strategy and Program Update (2006–2008): India*. Manila; ADB. 2006. *Country Operations Business Plan (2007–2009): India*. Manila; ADB. 2007. *Country Operations Business Plan (2008–2010): India*. Manila.

<sup>3</sup> <http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11default.htm>

<sup>4</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Bihar State Highways Project*. Manila (\$420 million).

<sup>5</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors on a Proposed Multitranchise Financing Facility to India for the Himachal Pradesh Clean Energy Development Investment Program*. Manila (\$800 million).

<sup>6</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors on a Proposed Multitranchise Financing Facility to India for the Orissa Integrated Irrigated Agriculture and Water Management Investment Program*. Manila (\$188.2 million).

cofinancing. This will also add value for Indian clients by exposing them to alternative sources of funding. A non-sovereign loan (\$225 million) to the state-controlled Rural Electrification Corporation of India (REC) has been approved recently. It will be used to support India's rural electrification program and to provide affordable and reliable power to mostly poor households. ADB will help to strengthen the transmission and distribution networks, including a high-voltage distribution system that will replace existing low-voltage networks that suffer significant power losses. REC will use the money to provide long-term loans to State Electricity Boards and other borrowers engaged in rural power development. ADB will also explore cofinancing opportunities to enhance the overall development resources flowing into India. The Organization of Petroleum Exporting Countries Fund for International Development has provided \$30 million in cofinancing for the Orissa Integrated Irrigated Agriculture and Water Management Investment Project (footnote 6). ADB is also in dialogue with Agence Française de Développement regarding possible cofinancing for the proposed Bihar Power Sector Development Project.

6. Support for infrastructure development—transport, energy, urban, agriculture, and water resources management—would remain the core focus of ADB's India assistance program in 2009. Crosscutting themes such as private sector development, gender and development, and environmental sustainability have been mainstreamed within the sector road maps and will be reflected in the forthcoming CPS. Given the challenges facing India and the world at large owing to climate change and degradation of the environment, the environmental focus of the assistance program has been enhanced significantly to cover both, adaptation and mitigation aspects. Operations will help to promote the use of hydropower, solar, and other renewable energy forms, and to lower pollution and greenhouse gas emissions by strengthening the rail and urban transport infrastructure. Assistance for strengthening coastal protection and improving management of water resources through flood control and improved irrigation has also been included.

7. At the subregional level, a tourism development project to support the integrated development of tourism infrastructure and services in high-potential, multicountry circuits has been included for 2009. The India portion of the project will focus on Sikkim, which has a good road connection to Bagdogra—a regional hub and an airport site with potential links to northern Bangladesh, Bhutan, eastern Nepal, and other North Eastern states.

8. Owing to the joint efforts of ADB and the Government, portfolio performance has continued to improve in recent years. Contract awards rose from \$557 million in 2004 to \$1,466 million in 2007, while disbursements increased from \$381 million in 2004 to \$1,363 million over the same period. The contract awards ratio improved from 26.1 (compared to the ADB-wide ratio of 27.4) in 2005 to 42.3 as against the ADB-wide ratio of 30.2 in 2007. The disbursement ratio rose from 16.5 in 2005 (ADB-wide ratio 20.7) to 25.9 in 2007 as against the ADB-wide ratio of 25.4. This improvement in portfolio performance is in large part due to the sector-focused, tripartite portfolio review meetings that were initiated in September 2005. This format will be continued. Greater emphasis is also now being given to tracking and monitoring results (see paras. 14 and 15 below).

9. The efforts of ADB and the Government to improve project readiness have also been showing positive results. There was no bunching of loan negotiations in 2006, 2007, and 2008. All eight loans programmed in 2008 have been approved as of 23 October 2008.

## II. INDICATIVE LENDING AND NONLENDING PROGRAMS

10. The 2009 assistance program has been designed to support the Government's development priorities as laid down in the 11th Five Year Plan. Including full amounts for multitranche financing facilities, the firm program totals to \$2.72 billion in 2009. Lending on a subproject basis (including regular loans) will be capped at \$1.62 billion as laid down in ADB's annual work plan and budget framework guidelines for 2008. In terms of loan amounts, transport, energy, and urban sector (including tourism) projects account for 37%, 7%, and 20%, respectively, of the 2009 program. Agriculture and water resources management projects account for 14% and governance and finance-related projects for 22% of the 2009 program. The TA program has been designed in line with the loan program. It amounts to \$29.8 million for 2009.

## III. SUMMARY OF CHANGES TO LENDING AND NONLENDING PROGRAMS

11. The changes in the 2008–2009 lending and nonlending program, as compared to that laid down in the 2007 COBP, are due mainly to rescheduling of loans in line with their preparedness and changes in the loan amount and modality in some cases owing to technical reasons. Some new operations were also included in response to the Government's requests. The underlying thrust of ADB's India assistance strategy, however, remains unchanged, as discussed in section I. For example, a loan to support reform of the *Khadi* and Village Industries Commission was included in 2008 at the request of the Government.<sup>7</sup> Owing to technical considerations, the Bihar State Highways Project was converted from a multitranche financing facility to a regular loan and the loan amount was reduced to \$420 million (footnote 4). The environmental orientation of ADB's assistance program has also been strengthened in support of the 11th FYP's priorities and the National Climate Change Action Plan that was announced by the Government on 30 June 2008.

12. ADB operations are focused mainly in the relatively poor and weak-capacity states, which may at times find it difficult to provide the required counterpart funds. ADB's average country-level cost-sharing limit has been raised from the existing 70% to 80% for the CPS period (2009–2012). The same limits are also proposed for TA financing. The Government has concurred with the proposed recommendation.

## IV. INDICATIVE INTERNAL RESOURCE REQUIREMENTS

13. As requested by the Government, ADB has expanded operations in recent years to more than a dozen states, most of which are lagging in terms of poverty and social indicators as well as the quality of overall infrastructure. Demands on staff time and resources for processing and implementing projects and to provide capacity development support have been increasing. In addition, the effort being put in to tap such new lending modalities as nonsovereign public sector operations and to build capacity and generate awareness in the area of PPP for infrastructure operations, as mandated in ADB's long-term strategic framework 2008–2020 (Strategy 2020), also adds to the demand on staff resources.<sup>8</sup> It is estimated that about 40–45 staff years will be required to process and implement the loan and TA program proposed in the business plan for 2009.

<sup>7</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to India for the Khadi Reform and Development Program*. Manila (\$150 million).

<sup>8</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank 2008–2020*. Manila.

## V. RESULTS-BASED MONITORING

14. The draft CPS for 2009–2012 has been prepared within a results-based framework. Country and sector results frameworks have been aligned closely with the priorities and targets of the 11th FYP. To strengthen monitoring of development results, the design and monitoring frameworks of all ongoing projects are being reviewed and updated. Based on this updating, tripartite portfolio review meetings have been geared up to discuss the status of project outcomes (benefits) and outputs (immediate products of project activities) for both, physical investment and intended reforms, in addition to covering project implementation issues. At the sector level, development targets and the status of achievements are also being better demonstrated in the tripartite portfolio review meetings.

15. As establishing credible correlation between outputs and outcomes of ADB projects and national sector results is difficult in a large country like India, it is proposed to establish such relationships at the state or subsector level. As more state and subsector level development plans are prepared following the 11th FYP, and by fine-tuning the choice of development indicators and collection of data, the development effectiveness of ADB's operations will be demonstrated more clearly. In some states such as Madhya Pradesh where ADB has projects in the transport, urban development, power, and public finance sectors, a comprehensive discussion on the linkage between ADB's projects and the state's development may be meaningful. As a result of close monitoring of portfolio performance by the Government and ADB, a project readiness checklist has been prepared to ensure that projects are ready for implementation upon loan signing. Capacity development of executing agency staff is also being emphasized, and training is being organized several times a year regarding procurement, consultant selection, disbursements, and safeguard measures. These measures are expected to substantially improve the quality and timeliness of project design and implementation, and eventually contribute to improving development effectiveness.

## INDICATIVE ASSISTANCE PIPELINE

**Table A1.1: Indicative Assistance Pipeline for Lending Products, 2009 (MFF Full Facility Basis)**

Sector Project/ Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of Project Preparatory Assistance	Cost (\$ million)						
					Total	ADB			Total	Gov't	Co- financing
						OCR	ADF				
						Loans	Grants				
<b>2009 Firm Loans</b>											
<b>A. Agriculture and Natural Resources</b>											
1. Agribusiness Infrastructure Development Project in Maharashtra and Bihar (MFF)	GI	ECG /PSD	SANS	2007	tbd	250.0	0.0	0.0	250.0	tbd	tbd
2. Assam Flood and Riverbank Erosion Risk Management Investment Program (MFF)	GI	ECG/ ENV/ CAD	SANS	2006	tbd	120.0	0.0	0.0	120.0	tbd	tbd
<b>Subtotal (A)</b>					<b>tbd</b>	<b>370.0</b>	<b>0.0</b>	<b>0.0</b>	<b>370.0</b>	<b>tbd</b>	<b>tbd</b>
<b>B. Energy</b>											
1. Assam Energy Efficiency Enhancement Project (MFF)	GI	ECG /GOV/ ENV	SAEN	2008	tbd	200.0	0.0	0.0	200.0	tbd	tbd
<b>Subtotal (B)</b>					<b>tbd</b>	<b>200.0</b>	<b>0.0</b>	<b>0.0</b>	<b>200.0</b>	<b>tbd</b>	<b>tbd</b>
<b>C. Law, Economic Management, and Public Policy</b>											
1. Mizoram Public Resource Management and Development Program	GI	GOV/ PSD/ ECG	SAGF	2008	tbd	100.0	0.0	0.0	100.0	tbd	tbd
<b>Subtotal (C)</b>					<b>tbd</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>	<b>100.0</b>	<b>tbd</b>	<b>tbd</b>
<b>D. Multisector</b>											
1. Disaster Readiness Enhancement Infrastructure Development Program in Tamil Nadu and Kerala (MFF)	GI	ECG/ ENV/ ISD	SAUD		tbd	50.0	0.0	0.0	50.0	tbd	tbd
2. Inclusive Tourism Infrastructure Development Investment Program (MFF)	GI	ECG /ISD/ ENV	SAUD	2007	tbd	300.0	0.0	0.0	300.0	tbd	tbd
3. India Infrastructure Project Financing Facility II (MFF)	GI	ECG	SAGF		tbd	500.0	0.0	0.0	500.0	tbd	tbd

Sector Project/ Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of Project Preparatory Assistance	Cost (\$ million)						
					Total	ADB			Gov't	Co- financing	
						OCR	ADF				Total
						Loans	Grants				
4. North East Region Capital Cities Development—Phase I (MFF)	GI	ECG/ ENV/ CAD	SAUD	2004	tbd	200.0	0.0	0.0	200.0	tbd	tbd
<b>Subtotal (D)</b>					<b>tbd</b>	<b>1,050.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,050.0</b>	<b>tbd</b>	<b>tbd</b>
<b>E. Transport and Communications</b>											
1. Jharkhand State Roads Project	GI	ECG/ CAD/ PSD	SATC	2006	tbd	200.0	0.0	0.0	200.0	tbd	tbd
2. North Eastern States Roads Investment Program	GI	ECG/ CAD/ PSD	SATC	2005	tbd	200.0	0.0	0.0	200.0	tbd	tbd
3. Railway Sector Improvement II (MFF)	GI	ECG/ CAD/ PSD	SATC	2007	tbd	500.0	0.0	0.0	500.0	tbd	tbd
4. Supplementary Financing for Loan 2029-IND: National Highway Corridor (Sector) I Project	GI	ECG/ PSD/ ENV	SATC	2009	tbd	100.0	0.0	0.0	100.0	tbd	tbd
<b>Subtotal (E)</b>					<b>tbd</b>	<b>1,000.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,000.0</b>	<b>tbd</b>	<b>tbd</b>
<b>Total (2009 Firm)</b>					<b>tbd</b>	<b>2,720.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2,720.0</b>	<b>tbd</b>	<b>Tbd</b>
<b>Subregional Cooperation</b>											
<b>2009 Firm</b>											
1. Improving Connectivity and Destination Infrastructure for Subregional Tourism Development	GI		SAUD		tbd	21.0	0.0	0.0	21.0	tbd	tbd

ADB = Asian Development Bank; ADF = Asian Development Fund; CAD = capacity development; ECG = sustainable economic growth; ENV = environmental sustainability; GI = general intervention; GOV = governance; Gov't = Government of India; ISD = inclusive social development; MFF = multitranches financing facility; OCR = ordinary capital resources; PSD = private sector development; SAEN = South Asia Energy Division; SAGF = South Asia Governance, Finance, and Trade Division; SANS = South Asia Agriculture, Natural Resources, and Social Services Division; SATC = South Asia Transport and Communications Division; SAUD = South Asia Urban Development Division; tbd = to be determined.

Note: Full MFF amounts were agreed with the Government during the 2008 country programming mission. Lending for MFF projects and regular loans will be aligned with ADB's annual work plan and budget framework guidelines.

Source: ADB estimates.

**Table A1.1.1: Indicative Assistance Pipeline for Lending Products, 2009 (MFF Subproject Basis)**

Sector Project/ Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of MFF Facility Approval	Year of Project Preparatory Assistance	Total	Cost (\$ million)					
							OCR	ADB		Total	Gov't.	Co- financing
								Loans	ADF Grants			
<b>2009 Firm Loans</b>												
<b>A. Agriculture and Natural Resources</b>												
1. Agribusiness Infrastructure Development Project in Maharashtra and Bihar - Project 1	GI	ECG /PSD	SANS	2009	2007	tbd	26.0	0.0	0.0	26.0	tbd	tbd
2. Assam Flood and Riverbank Erosion Risk Management Investment Program - Project 1	GI	ECG/ ENV/ CAD	SANS	2009	2006	tbd	32.5	0.0	0.0	32.5	tbd	tbd
<b>Subtotal (A)</b>						<b>tbd</b>	<b>58.5</b>	<b>0.0</b>	<b>0.0</b>	<b>58.5</b>	<b>tbd</b>	<b>tbd</b>
<b>B. Energy</b>												
1. Assam Energy Efficiency Enhancement Project - Project 1	GI	ECG /GOV/ ENV	SAEN	2009	2008	tbd	16.3	0.0	0.0	16.3	tbd	tbd
2. Himachal Clean Power Development Investment Program - Project 2	GI	CAD /ISD	SAEN	2008	2007	tbd	111.5	0.0	0.0	111.5	tbd	tbd
3. Madhya Pradesh Power Sector Investment Program - Project 5	GI	CAD /ISD	SAEN	2007	2006	tbd	143.0	0.0	0.0	143.0	tbd	tbd
4. National Power Grid Development Investment Program - Project 2	GI	ECG /ENV	SAEN	2008	2007	tbd	200.0	0.0	0.0	200.0	tbd	tbd
5. Uttarakhand Power Sector - Project 3	GI	ECG	SAEN	2006	2004	tbd	19.5	0.0	0.0	19.5	tbd	tbd
<b>Subtotal (B)</b>						<b>tbd</b>	<b>490.3</b>	<b>0.0</b>	<b>0.0</b>	<b>490.3</b>	<b>tbd</b>	<b>tbd</b>
<b>C. Law, Economic Management and Public Policy</b>												
1. Mizoram Public Resource Management and Development Program	GI	GOV/ PSD/ ECG	SAGF		2008	tbd	100.0	0.0	0.0	100.0	tbd	tbd

Sector Project/ Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of MFF Facility Approval	Year of Project Preparatory Assistance	Total	Cost (\$ million)					
							OCR	ADB		Total	Gov't.	Co- financing
								Loans	ADF			
<b>Subtotal (C)</b>						tbd	100.0	0.0	0.0	100.0	tbd	tbd
<b>D. Multisector</b>												
1. Disaster Readiness Enhancement Infrastructure Development Program in Tamil Nadu and Kerala - Project 1	GI	ECG/ ENV/ ISD	SAUD	2009		tbd	16.3	0.0	0.0	16.3	tbd	tbd
2. Inclusive Tourism Infrastructure Development Investment Program - Project 1	GI	ECG /ISD/ ENV	SAUD	2009	2007	tbd	32.5	0.0	0.0	32.5	tbd	tbd
3. India Infrastructure Project Financing Facility (IIPFF) I - Project 2	GI	ECG /PSD	SAGF	2007	2007	tbd	130.0	0.0	0.0	130.0	tbd	tbd
4. India Infrastructure Project Financing Facility (IIPFF) II - Project 1	GI	ECG	SAGF	2009		tbd	62.4	0.0	0.0	62.4	tbd	tbd
5. Jammu and Kashmir Urban Sector Development Investment Program - Project 2	GI	ECG /GOV	SAUD	2007	2004	tbd	39.0	0.0	0.0	39.0	tbd	tbd
6. North East Region Capital Cities Development - Phase I - Project 1			SAUD	2009		tbd	20.0	0.0	0.0	20.0	tbd	tbd
7. North Karnataka Urban Sector - Project 2	GI	ECG /ISD	SAUD	2006	2004	tbd	32.5	0.0	0.0	32.5	tbd	tbd
8. Rajasthan Urban Sector Development Investment Program (RUSDIP) - Project 2	GI	ECG /ISD	SAUD	2007	2006	tbd	150.0	0.0	0.0	150.0	tbd	tbd
<b>Subtotal (D)</b>						tbd	482.7	0.0	0.0	482.7	tbd	tbd
<b>E. Transport and Communications</b>												
1. Jharkhand State Roads Project	GI	ECG/ CAD/ PSD	SATC		2006	tbd	200.0	0.0	0.0	200.0	tbd	tbd

Sector Project/ Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of MFF	Year of Project	Total	Cost (\$ million)					
				Facility Approval	Preparatory Assistance		OCR	ADB		Total	Gov't.	Co- financing
								Loans	Grants			
2. North Eastern States Roads Investment Program - Project 1	GI	ECG/ CAD/ PSD	SATC	2009	2005	tbd	32.5	0.0	0.0	32.5	tbd	tbd
3. Railway Sector Improvement II - Project 1	GI	ECG/ CAD/ PSD	SATC	2009	2007	tbd	48.8	0.0	0.0	48.8	tbd	tbd
4. Rural Roads Sector II - Project 4	GI	ECG	SATC	2005	2002	tbd	108.0	0.0	0.0	108.0	tbd	tbd
5. Supplementary Financing for Loan 2029-IND: National Highway Corridor (Sector) I Project	GI	ECG	SATC		2005	tbd	100.0	0.0	0.0	100.0	tbd	tbd
<b>Subtotal (E)</b>						<b>tbd</b>	<b>489.3</b>	<b>0.0</b>	<b>0.0</b>	<b>489.3</b>	<b>tbd</b>	<b>tbd</b>
<b>Total (2009 Firm)</b>						<b>tbd</b>	<b>1620.8</b>	<b>0.0</b>	<b>0.0</b>	<b>1620.8</b>	<b>tbd</b>	<b>tbd</b>

ADB = Asian Development Bank; ADF = Asian Development Fund; CAD = capacity development; ECG = sustainable economic growth; ENV = environmental sustainability; GI = general intervention; GOV = governance; Gov't = Government of India; ISD = inclusive social development; MFF = multitranches financing facility; OCR = ordinary capital resources; PSD = private sector development; SAEN = South Asia Energy Division; SAGF = South Asia Governance, Finance, and Trade Division; SANS = South Asia Agriculture, Natural Resources, and Social Services Division; SATC = South Asia Transport and Communications Division; SAUD = South Asia Urban Development Division; tbd = to be determined.

Note: Full MFF amounts were agreed with the Government during the 2008 country programming mission. Lending for MFF projects and regular loans will be aligned with ADB's annual work plan and budget framework guidelines.

Source: ADB estimates.

Table A1.2: Indicative Assistance Pipeline for Nonlending Products and Services, 2009

Sector Assistance Name	Responsible Division	Assistance Type	Sources of Funding				Total (\$'000)
			ADB		Others		
			Source	Amount (\$'000)	Source	Amount (\$'000)	
<b>2009 Firm TAs</b>							
<b>A. Agriculture and Natural Resources</b>							
1. Capacity Development in Value Chain Management for Agribusiness <sup>9</sup>	SANS	CDTA	TASF	800.0			800.0
2. Community-Based Water Management in Rural Areas	SANS	CDTA	TASF	600.0			600.0
3. Institutional Strengthening for Integrated Flood and River Erosion Management Project—Assam <sup>10</sup>	SANS	CDTA	TASF	750.0			750.0
4. Preparing Integrated Coastal Protection and Management—Tamil Nadu and Other States	SANS	PPTA	JSF	900.0			900.0
	<b>Subtotal (A)</b>			<b>3,050.0</b>			<b>3,050.0</b>
<b>B. Energy</b>							
1. Assam Energy Efficiency Enhancement Project <sup>11</sup>	SAEN	CDTA	TASF	1,200.0			1,200.0
2. Capacity Development of Bihar Electricity Regulatory Commission	SAEN	CDTA	TASF	500.0			500.0
3. Integrated Renewable Energy Development (I)	SAEN	CDTA	TASF	1,200.0			1,200.0
4. State Renewable Energy Development	SAEN	PPTA			CEFPF	1,200.0	1,200.0
	<b>Subtotal (B)</b>			<b>2,900.0</b>		<b>1,200.0</b>	<b>4,100.0</b>
<b>C. Finance</b>							
1. Affordable Housing (Capacity Development)	SAGF	CDTA	TASF	600.0			600.0
	<b>Subtotal (C)</b>			<b>600.0</b>			<b>600.0</b>
<b>D. Law, Economic Management, and Public Policy</b>							
1. Capacity Development for PPP - I	SAGF	CDTA	TASF	1,500.0			1,500.0
2. National Institute for Contract Management (for PPP)	SAGF	CDTA	TASF	1,000.0			1,000.0
3. National Institute for Securities Management	SAGF	CDTA	TASF	500.0			500.0
	<b>Subtotal (D)</b>			<b>3,000.0</b>			<b>3,000.0</b>
<b>E. Multisector</b>							
1. Capacity Development for Project Management for Tourism Infrastructure Development and State Tourism Infrastructure I	SAUD	CDTA	TASF	1,000.0			1,000.0
2. Capacity Development of HUDCO	SAUD	CDTA	TASF	1500.0			1500.0
3. IIFCL Project Development III	SAGF	PPTA	JSF	500.0			500.0

<sup>9</sup> Attached to the Agribusiness Infrastructure Development Project, in Bihar and Maharashtra

<sup>10</sup> Attached to the Assam Flood and Riverbank Erosion Risk Management Investment Program

<sup>11</sup> Attached to the Assam Energy Efficiency Enhancement Project

Sector Assistance Name	Responsible Division	Assistance Type	Sources of Funding				Total (\$'000)
			ADB		Others		
			Source	Amount (\$'000)	Source	Amount (\$'000)	
4. Kolkata Urban Environmental Improvements II	SAUD	PPTA	JSF	400.0		400.0	
5. Mainstreaming Public-Private Partnerships for Providing Urban Amenities in Rural Areas (PURA)	SAGF/ SANS/ SAUD	CDTA	JSF	2000.0		2000.0	
6. Multisector Project Management Capacity Development in North East Region	SAUD	CDTA	TASF	1500.0		1500.0	
7. Study on the Impact of Biofuels on Food Security (Internationally) and Policy Options for India and Other Countries	SAEN	PATA	TASF	800.0		800.0	
8. Support for India's National Climate Change Action Plan	INRM/ SARD/ RSES	PATA	TASF	750.0		750.0	
9. Support to JNNURM—Phase II	SAUD	CDTA	TASF	2500.0		2500.0	
<b>Subtotal (E)</b>				<b>10,950.0</b>		<b>10,950.0</b>	
<b>F. Transport and Communications</b>							
1. Karnataka State Highway Network Investment Strategy	SATC	CDTA	TASF	3,000.0		3,000.0	
2. Madhya Pradesh State Roads III	SATC	PPTA	JSF	600.0		600.0	
3. North East National Highways	SATC	PPTA	JSF	1,500.0		1,500.0	
4. Road Safety Improvement Strategy	SATC	PATA	TASF	1,500.0		1,500.0	
5. Urban Transport	SATC	PPTA	JSF	1,500.0		1,500.0	
<b>Subtotal (F)</b>				<b>8,100.0</b>		<b>8,100.0</b>	
<b>Total (2009 Firm)</b>				<b>28,600.0</b>	<b>1,200.0</b>	<b>29,800.0</b>	
<b>Subregional Cooperation</b>							
<b>2009 Firm</b>							
1. Mainstreaming Climate Change in South Asia	SAEN/SANS	CDTA			TBD	1,000	
2. Regional Project Development Facility	SAGF	PPTA			ICFF	2,000	
3. Hazardous Waste Treatment Plant/Facility	SATC	PPTA	JSF	800		800	
4. Preparing Subregional Transport Logistics and Trade Facilitation	SATC	PPTA	JSF	1,500		1,500	
5. South Asia Rural Broadband Connectivity	SATC	PPTA	JSF	1,000		1,000	
6. Achieving Water Security for South Asia	SAUD	CDTA			ICFF	850	
7. Promoting Good Governance and Knowledge on Urban Development	SAUD	CDTA			e-Asia and KPF	500	

ADB = Asian Development Bank; CDTA = capacity development technical assistance; CEFPF = Clean Energy Financing Partnership Facility; HUDCO: Housing and Urban Development Corporation Limited; IIFCL: India infrastructure finance limited; INRM = India Resident Mission; JNNURM: Jawaharlal Nehru National Urban Renewal Mission; JSF = Japan Special Fund; PATA = policy and advisory technical assistance; PPP: public private partnerships; PPTA = project preparatory technical assistance; PURA: providing urban amenities in rural areas; RSES = Environment and Social Safeguards Division; SAEN = South Asia Energy Division; SAGF = South Asia Governance, Finance, and Trade Division; SANS = South Asia Agriculture, Natural Resources, and Social Services Division; SARD = South Asia Department; SATC = South Asia Transport and Communications Division; SAUD = South Asia Urban Development Division; TASF = Technical Assistance Special Fund; tbd = to be determined.  
Source: ADB estimates.

**PRELIMINARY SUMMARY INFORMATION ON PROPOSED INDICATIVE LENDING AND  
NONLENDING PRODUCTS AND SERVICES FOR THE FIRST YEAR OF THE BUSINESS  
PLAN**

**Table A2.1: Summary Information on Proposed Indicative Lending Products and Services  
for 2009**

Project Name	Description
<b>Agriculture and Natural Resources</b>	
Agribusiness Infrastructure Development Project in Maharashtra and Bihar, (MFF)	<p><b>Impact.</b> Potential impact includes enhancement of income and employment growth for the rural poor in Bihar and Maharashtra, leading to:</p> <ul style="list-style-type: none"> <li>(i) increased rural incomes per capita in the project districts (by at least 10% within 7 years);</li> <li>(ii) improved social indicators in rural areas of project districts (by at least 5% in basic indicators within 7 years); and</li> <li>(iii) reduced incidence of rural poverty in the project districts (by at least 5% within 7 years).</li> </ul> <p><b>Major Components.</b> The project will improve physical and institutional links between various stakeholders along the agricultural value chain mainly by establishing (i) on-farm centers in production areas, (ii) agribusiness centers, and (iii) perishable cargo centers at airports and railways. Major components:</p> <ul style="list-style-type: none"> <li>(i) Minimizing postharvest losses through creating on-farm centers at farm level for providing basic infrastructure including improved harvesting and postharvest treatment equipment, storage, grading, sorting, packaging, and primary processing.</li> <li>(ii) Ensuring market efficiency and quality, reducing intermediaries, and shortening the value chain by establishing agri-business centers in production areas. These will provide competitive trading facilities, marketing intelligence, storage (including pre-cooling and cold store facilities), and facilities for sorting, grading, and processing.</li> <li>(iii) Supporting export and domestic markets, and promoting end-to-end value chain linkages by setting up perishable cargo centers at airports and railway stations and providing cold chain facilities linked to the value chain.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The outcome is the establishment of efficient agribusiness value chains for high-value crops driven by private entrepreneurs and inclusive of smallholders and poor farmers, which will lead to increased production of high-value agricultural commodities, increased value addition in agricultural production, and increased private sector involvement in agricultural marketing. The outputs include:</p> <ul style="list-style-type: none"> <li>(i) establishing 98 private sector-led markets for high-value crops with adequate modern infrastructure;</li> <li>(ii) establishing 20,000 on-farm centers to perform minimum required postharvest activities at the farm level;</li> <li>(iii) establishing nine perishable cargo centers at airports and railway stations to link the production centers to the domestic and export markets;</li> <li>(iv) constructing linking infrastructure (roads, water, energy) around the markets as required;</li> <li>(v) forming producer companies and facilitating contract farming to increase the role of producers along the value chains; and</li> <li>(vi) building capacity and developing skills among agribusiness stakeholders on value chain principles, technologies, management, and operations.</li> </ul>
Assam Flood and Riverbank Erosion Risk Management Investment Program (MFF)	<p><b>Impact.</b> The MFF will enhance sustainable and inclusive economic growth in flood-prone areas along the Brahmaputra River in Assam. It will focus on four priority subprojects to upgrade flood embankment systems protecting urban, suburban, productive agriculture, and other strategic sites, as an initial step toward operationalizing integrated flood and riverbank erosion risk management (IFRERM). Necessary policy, planning, institutional framework, and knowledge bases will be strengthened, including IFRERM planning integrated with catchment and watershed management interventions from a basin perspective, which could be linked up with similar initiatives in the neighboring state of Arunachal Pradesh.</p>

Project Name	Description
	<p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) <b>Part A.</b> Planning and institutional framework and knowledge base development, including (a) policy framework for integrated water resources management and IFRERM, (b) state-level integrated planning and coordination for IFRERM, (c) data and knowledge base development, (d) institutional strengthening, and (e) regional and international networking.</li> <li>(ii) <b>Part B.</b> Comprehensive IFRERM programs, including (a) participatory disaster management institutions at district and local levels; (b) comprehensive structural (improved embankments and associated infrastructure such as sluice gates and drainage channels, innovative riverbank protection works) and nonstructural measures (e.g., flood and river erosion risk mapping, forecasting and warning systems, emergency management systems, adaptive cropping); (c) community-based risk management (e.g., such small community infrastructure as raised platforms and community nonstructural measures); and (d) sustainable infrastructure monitoring, adaptation, and maintenance.</li> <li>(iii) <b>Part C.</b> Project management system, including multi-disciplinary and participatory planning, design, implementation with quality control, and monitoring and evaluation systems.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The outcome of the MFF will be substantially improved reliability and effectiveness of the state's flood and riverbank erosion risk management systems. Specific outputs:</p> <ul style="list-style-type: none"> <li>(i) Policy, planning, and institutional framework: (a) State Water Policy approved; (b) state integrated plan and strategy for IFRERM and watershed management established; (c) institutional setup for integrated water resources management designed and steps taken; (d) Water Resources Department institutional strategy, organizational structure, human resources management enhanced; (e) guidelines improved for IFRERM infrastructure planning, design, and implementation; and (f) sustainable maintenance systems established.</li> <li>(ii) Data and knowledge base: (a) Water Resource Department's database management systems for hydrology, sediment transport, and geomorphology improved; (b) riverbank erosion prediction systems created; (c) flood forecasting and warning system strengthened; (d) relevant hydrological and geomorphological modeling system established.</li> <li>(iii) Comprehensive IFRERM program delivery systems: (a) district and local level participatory disaster management committees established and operational; (b) flood management infrastructure (flood embankments, riverbank protection, and associated facilities) improved in selected subproject sites; (c) floodplain and riverbank erosion risk maps prepared and delivered; (d) flood forecasting and warning systems improved in the project areas; (e) awareness on IFRERM and disaster management systems improved; (f) cropping adaptive to flooding adoption in the project areas; (g) community-based minor infrastructure developed and maintained; (h) the delivered infrastructure, nonstructural measures, and programs sustained with participatory mechanisms; and (i) effective management information system established and operational.</li> </ul>
<b>B. Energy</b>	
Assam Energy Efficiency Enhancement Project (MFF)	<p><b>Impact.</b> The project will support low-carbon power sector development in Assam.</p> <p><b>Major Components.</b> The project will comprise investment components for (i) strengthening the transmission and distribution network to handle the increased power generation capacity as stipulated in Assam's transmission system planning report, and (ii) undertaking various demand-side management measures.</p> <p><b>Expected Outputs and Outcomes.</b> The outputs and outcome will be (i) a low-carbon power sector development roadmap for Assam, (ii) physical capacity addition to the transmission and distribution network, (iii) technical loss reduction, (iv) enhanced demand-side management with segregation of rural and urban distribution circles, and (v) improved institutional capacity.</p>
<b>C. Law, Economic Management, and Public Policy</b>	
Mizoram Public Resource Management	<p><b>Impact.</b> The project will support the Government in keeping to a sustainable fiscal consolidation path consistent with targets under the Fiscal Reform and Budget</p>

Project Name	Description
and Development Program	<p>Management Act.</p> <p><b>Major Components.</b> The seven broad components of the loan will help in (i) broadening the tax base by rationalization and restructuring of state taxes and duties; (ii) enhancing nontax revenues; (iii) improving tax compliance and efficiency of tax collections through strengthened tax administration; (iv) restructuring and reducing state debt; (v) containing state pensions liabilities; (vi) improving service delivery, especially in the areas of health and education; and (vii) improving state budgeting, including automation of treasury functions.</p> <p><b>Expected Outputs and Outcomes.</b> The expected outputs and outcomes include (i) substantial reduction in the ratio of the revenue deficit to gross state domestic product as well as in the ratio of the fiscal deficit to gross state domestic product over 4–5 years, (ii) reduction in the debt service ratio, (iii) improved service delivery in the areas of health and education, and (iv) sustained fiscal consolidation.</p>
<b>D. Multisector</b>	
Inclusive Tourism Infrastructure Development Investment Program (MFF)	<p><b>Impact.</b> The expected impact of the project would be (i) an increase in the number and length of tourists stays, (ii) more widely distributed income and benefits from tourism, and (iii) enhanced management of natural and cultural heritage sites of touristic importance.</p> <p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) Integrated development of high-priority tourism infrastructure in high-potential tourism circuits, resulting in enhanced connectivity and improved environment, utilities, and tourist services.</li> <li>(ii) Improving institutional and regulatory frameworks that will ensure coordinated efforts of multiple agencies, promote environmentally sustainable tourism development, and encouraging private sector and community participation in tourism.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The ensuing project's outputs will include improvements in high-priority circuits of the selected states in</p> <ul style="list-style-type: none"> <li>(i) tourism access and connectivity infrastructure (e.g., roads, transport, airports);</li> <li>(ii) tourism destination utility infrastructure and services (e.g., drainage, sewerage, water supply, and solid waste management);</li> <li>(iii) natural and cultural heritage conservation and support infrastructure and services;</li> <li>(iv) other tourism facilities and services (e.g., tourism service centers, tourist information facilities) and wayside amenities between major destinations and sites (restrooms); and</li> <li>(v) community-based tourism schemes and approaches to enhance multiplier effects and more widely spread tourism's benefits to local communities.</li> </ul> <p>The outputs will also include enhanced institutional and regulatory frameworks for tourism to</p> <ul style="list-style-type: none"> <li>(i) ensure better coordination between different agencies toward common goals;</li> <li>(ii) increase private sector participation in tourism infrastructure development and asset management, as well as in developing complementary facilities (e.g., accommodation);</li> <li>(iii) ensure environmentally and culturally sustainable tourism; and</li> <li>(iv) enhance institutional capacity and human resource development.</li> </ul>
India Infrastructure Project Financing Facility II (MFF)	<p><b>Impact.</b> Because a significant share of the \$514 billion estimated investment requirement during the 11th Five Year Plan needs to originate from the private sector, the second MFF loan to India Infrastructure Finance Company Limited (IIFCL) (facility II) will help to catalyze investment of \$2.0 billion–\$3.0 billion from the private sector for financing 20–30 PPP subprojects. Building on the experience and lessons from facility I, it could pave the way for effective mainstreaming of the PPP infrastructure financing modality in India. It will also help to tap the synergies envisaged from IIFCL's overseas subsidiaries.</p> <p><b>Major Components.</b> Facility II will facilitate infrastructure development through increased private sector participation, thereby promoting economic efficiency and growth. It is also expected to further strengthen IIFCL's institutional capacity for credit risk management and project risk appraisal, thereby enhancing the viability and quality of</p>

Project Name	Description
	<p>infrastructure assets. The development of PPP subprojects by professional project developers and consideration of such subprojects for financing by a consortium of investors and lenders, including IIFCL, will strengthen project preparation and financing skills in India.</p> <p><b>Expected Outputs and Outcomes.</b> The ADB-supported outputs through the facility II are grouped into three areas:</p> <ul style="list-style-type: none"> <li>(i) <b>Creating high-quality and viable infrastructure assets.</b> IIFCL's investment program will create high-quality and viable infrastructure assets, including roads, power, seaports, airports, and urban infrastructure covering the states of Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Sikkim, Tamil Nadu, and Uttar Pradesh.</li> <li>(ii) <b>Cofinancing and international best practice.</b> Facility II will assist IIFCL in catalyzing the flow of foreign institutional and private equity funds into India's emerging PPP space. This ushers in international best practices to both IIFCL and infrastructure financing, including financial products and technology at the subproject level.</li> <li>(iii) <b>Creating institutional capacity.</b> Facility II seeks (a) to enhance IIFCL capacity to implementing the environment and social safeguards framework for screening and monitoring subprojects and developing appropriate reporting formats; and (b) to provide capacity building and institutional development support to strengthen IIFCL's resource management, project risk appraisal capability, and investment policies.</li> </ul>
<p>North East Region Capital Cities Development - Phase I (MFF)</p>	<p><b>Impact.</b> The NER, where the five states of Meghalaya, Mizoram, Nagaland, Sikkim and Tripura are located, is one of the least developed regions of India. The NER is bounded in addition to the mainland of India by Bangladesh, China, Nepal, and Myanmar. The five states have difficult terrain and mountainous periphery. Their economies are characterized by a predominance of agriculture and government services, inadequate exploitation of natural resources, low progress in industry, rather negligible private sector and foreign direct investment, and high unemployment rate. All the states are ranked low in terms of infrastructure index. The development potential created by a latent productive labor force and increasing connectivity in the five capital cities is hampered by poor urban and environmental conditions resulting from inadequate urban infrastructure and services.</p> <p>The expected impact of the Investment Program is improved environment and well-being of urban residents in the five capital cities.</p> <p><b>Major Components.</b> The project is expected to have two components. Part A covers urban infrastructure and services improvement including the rehabilitation, improvement and expansion of (i) water supply, (ii) sewerage and sanitation, and (iii) solid waste management infrastructure. Part B covers Investment Program management and implementation support a comprehensive capacity building assistance to support (i) the accomplishment of the urban institutional and financial reform agenda, (ii) improved utility management (including enhanced planning, operation and maintenance, revenue mobilization, and financial management capabilities of service providers) and (iii) the introduction of regulatory mechanisms; as well as (iv) program management.</p> <p><b>Expected Outputs and Outcomes.</b> The expected outcomes of the Investment Program will be an increased access to better urban services for the 1.5 million people expected to be living in the Investment Program cities by 2015. To this end, the Investment Program will (i) improve and expand urban infrastructure and services in the cities including in slums and (ii) strengthen urban institutional, management, and the financing capacity of the urban institutions, including the urban local bodies. The Investment Program will ensure that the benefits from investments are enjoyed by the poor, women and all other vulnerable groups, and that any negative environmental and social impacts are alleviated. The Investment Program covers five capital cities of the five states namely Agartala (Tripura), Aizawl (Mizoram), Shillong (Meghalaya), Kohima (Nagaland), and Gangtok (Sikkim) and reflects priority investments.</p>
<b>E. Transport and Communications</b>	
Jharkhand State Roads	<b>Impact.</b> This first ADB intervention in Jharkhand's road sector aims to improve transport

Project Name	Description
Project	<p>connectivity within the state and is expected to contribute to balanced development in the country. As Jharkhand is one of India's weak-capacity states, the project is expected to support the development process by improving access to markets and other economic centers, as well as to health and educational facilities.</p> <p><b>Major Components.</b> The project will be designed to assist in (i) rehabilitating and improving about 300 km of state highways and replacing selected bridges; and (ii) strengthening the road sector institutions in planning, development, and management of the road network in the state.</p> <p><b>Expected Outputs and Outcomes.</b> Outputs include (i) some 300 km of rehabilitated and improved state highways, and (ii) strengthened road sector institutions in managing the road network. These, combined with outputs from projects to improve national highways and rural roads being sponsored by the Government, will result in generally reduced travel times and costs for transporting people and goods—and particularly for agricultural produce moved by roadways, which are often the only means of transport in most parts of the state.</p>
MFF - North Eastern States Roads Investment Program	<p><b>Impact.</b> The North Eastern states have long suffered from poverty and impaired economic development, partly because of the chronic shortage of road capacity and weak capacity in effective sector management. This has been an increasingly serious constraint impeding economic growth of the states. The goal of this investment program is to alleviate this problem and contribute to economic growth and poverty reduction in the North Eastern Region.</p> <p><b>Major Components.</b> The project will have two components: an investment component and an institutional development and capacity building component. The investment program will be complementary to the recently announced Special Accelerated Road Development Program for the North Eastern Region (SARDP-NE), a centrally sponsored road investment program to improve road connectivity to state capitals and district headquarters in the North Eastern Region. While the SARDP-NE focuses on improving higher class roads, including national highways and other roads with strategic importance, the investment program is developed to improve intrastate connectivity, mainly to district headquarters and other places of administrative and economic importance in the individual states, and to address the perennial issue of inefficient road asset management.</p> <p><b>Expected Outputs and Outcomes.</b> (i) About 1,100 km of priority road sections improved in the eight North Eastern states; and (ii) capacity building support to the state governments for implementing the road improvement as well as developing capability in road management, road safety, and environmental and social assessment. These, combined with outputs from similar efforts under the ongoing national programs (National Highway Development Program and SARDP-NE) and projects financed by the World Bank in Assam and Mizoram, will result in general reduction in travel time and cost for transporting people and goods, particularly agricultural produce on roadways in the North Eastern Region, which are the only means of transport in most parts of the region.</p>
Railway Sector Improvement II (MFF)	<p><b>Impact.</b> The project will overcome transportation capacity bottlenecks by financing priority investments that are economically and financially viable. It will also improve operational efficiency and safety.</p> <p><b>Major Components.</b> The investment subprojects will be identified jointly by ADB and the Indian Railways.</p> <p><b>Expected Outputs and Outcomes.</b> The project will (i) increase capacity in congested routes, and (ii) assist the Indian Railways in improving its operational and financial performance.</p>
Supplementary Financing for Loan 2029-IND: National Highway Corridor (Sector) I Project	<p><b>Impact.</b> The project will enhance economic efficiency and reduce regional economic discrepancies.</p> <p><b>Major Components.</b> The financing will be used to (i) upgrade the key national arterial corridors connecting the eastern and western ends of India, and (ii) enhance road safety through pilot introduction of a safety zone concept for a part of the national highways</p>

Project Name	Description
	<p>within the east–west corridor.</p> <p><b>Expected Outputs and Outcomes.</b> An immediate outcome will be improved services along the project corridor, including reduced travel time. Outputs include widened stretches between Chittorgarh and Orai into four-lane roads and enhanced road safety measures along a selected pilot section.</p>

ADB = Asian Development Bank, IFRERM = integrated flood and riverbank erosion risk management, IIFCL = India Infrastructure Finance Company Limited, MFF = multitranches financing facility.

Source: Asian Development Bank estimates.

**Table A2.2: Summary Information on Proposed Indicative Nonlending Products and Services for 2009**

Project Name	Description
<b>A. Agriculture and Natural Resources</b>	
Capacity Development in Value Chain Management for Agribusiness	<p><b>Impact.</b> The proposed TA will promote the understanding of stakeholders regarding various agribusiness-related commercial business models and on how integrated value chain management can improve agriculture marketing. It will contribute to improved investment decisions in a commercially viable integrated business model along agricultural value chains developed under the Agribusiness Infrastructure Development Project in Bihar and Maharashtra. At the same time, the TA activities will give greater bargaining power to farmers (including smallholders, female and poor farmers), upgrading their position in the value chain and providing them a greater share in returns accruing from the chain.</p> <p><b>Major Components.</b> Supporting the formation of farmers' groups and producers companies as the first step in setting up efficient integrated value chains for high-value crops in Bihar and Maharashtra.</p> <ul style="list-style-type: none"> <li>(i) Developing mechanisms such as contract farming to coordinate production, distribution, and retail arrangements between different stakeholders along the value chains of high-value crops in Bihar and Maharashtra.</li> <li>(ii) Building capacity on value chain approaches among sector stakeholders by developing their skills in different chain activities and in chain management decision-making.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The TA will help to generate awareness about integrated value chain management. The outputs will comprise (i) better access for producers to markets and facilities for adding value to agricultural produce; (ii) greater bargaining power to producers through collective (group) initiatives, resulting in about 10%–12% higher net price realization for their produce; (iii) better economies of scale for traders and processors by enabling them to deal with groups of producers rather than individual farmers, and improving opportunities for long-term contract farming; and (iv) better quality of produce at lower prices for consumers due to lower wastage during transit and handling.</p>
Community-Based Water Management in Rural Areas	<p><b>Impact.</b> The technical assistance (TA) aims to contribute to accelerating growth and livelihood enhancement of water-scarce and rain-fed rural areas of the country through productive and sustainable water resources management within a community-based integrated approach (including irrigation, watershed management, and other multiple uses with environmental sustainability). Its immediate objective is to assist the Government of India and state governments in enhancing their knowledge and information base to support this end.</p> <p><b>Major Components.</b> Key activities of the TA include developing the knowledge base pertaining to existing and new technologies (covering both surface and groundwater, including streams, check dams, community tanks, and ponds), their management systems, and associated policy and institutional mechanisms that can generate fast and high economic impact in the rain-fed areas suffering from low productivity and water scarcity. National and international best practices will be drawn upon for this purpose. The TA will include the following components:</p> <ul style="list-style-type: none"> <li>(i) Exploration and analysis of existing and new community-based water management options, along with other lessons and best practices.</li> <li>(ii) Assessment of policy, planning, institutional, governance, and financial issues and constraints, as well as development prospects.</li> <li>(iii) Pilot demonstration of promising technologies and community-based management options.</li> <li>(iv) Recommendations on institutional reforms, strategy, and priority programs.</li> <li>(v) Workshops and seminars to disseminate the findings and recommendations.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The TA will develop a comprehensive menu of options and associated policies, strategies, and programs that can be implemented through existing resources or external finance with technical and institutional</p>

Project Name	Description
	<p>innovations. The outputs will contribute to improving the knowledge base on various community-based water management projects and other options available in rain-fed areas of India and the effectiveness of the relevant programs implemented by the Government, state governments, and nongovernment organizations. Promising options that can generate fast and high returns may be packaged as a possible Asian Development Bank (ADB) lending and nonlending program, with the states prepared to provide the necessary policy and institutional environment.</p>
<p>Institutional Strengthening for Integrated Flood and River Erosion Management Project—Assam</p>	<p><b>Impact.</b> ADB has prepared an investment program to enhance integrated flood and riverbank erosion management (IFREM) in Assam by (i) strengthening the institutional capacity for IFREM in government agencies and communities in flood-prone areas, and (ii) introducing comprehensive, cost-effective, sustainable, and adaptive structural and nonstructural measures for flood and riverbank erosion prevention and risk mitigation. The proposed TA will help in improving the institutional capacity for effective implementation and management of the investment program.</p> <p><b>Major Components.</b> Operationalization of IFREM planning and institutional framework, knowledge base, and development of related regulations and procedures.</p> <p>(i) Support for disaster management institutions at the district and local levels for implementing IFREM structural and nonstructural interventions.</p> <p><b>Expected Outputs and Outcomes.</b> (i) Enhanced state-level integrated planning and coordination for IFREM; (ii) training of water resources department staff in IFREM activities and project implementation procedures; (iii) improvement in awareness and commitment to IFREM implementation in subproject areas; (iv) introduction of community-based risk management (e.g., such small community infrastructure as raised platforms and community nonstructural measures); and (v) building capacity for sustainable infrastructure monitoring, adaptation, and maintenance.</p>
<p>Preparing Integrated Coastal Protection and Management—Tamil Nadu and Other States</p>	<p><b>Impact.</b> Building on the coastal zone management interventions in Goa, Karnataka, and Maharashtra, ADB assistance will be extended to new states (to be decided). The project preparatory technical assistance (PPTA) will introduce innovative structural and nonstructural interventions for coastal protection and shoreline management planning, plus associated institutional and financing instruments required for effectively implementing the investment program. The PPTA will contribute to improving the well-being of coastal communities, ensuring sustainability of coastal ecosystems, and reducing the loss of coastal land in selected states.</p> <p><b>Major Components</b></p> <p>(i) Shoreline planning, institutional development, and investment program including (a) a design framework for sustainable long-term shoreline management (e.g., planning, financing, implementation, and enforcement for monitoring and evaluation); and (b) action and investment plans covering institutional development and capacity development, and investment plans for the specific interventions for each stage.</p> <p>(ii) Detailed designs of site-specific subprojects. Detailed assessments of coastal processes operating at each site will be made. Sites from each state will be selected for feasibility analysis of appropriate coastal protection interventions, together with the corresponding social and environmental impacts and associated costs.</p> <p><b>Expected Outputs and Outcomes.</b> The PPTA will develop an investment proposal addressing long-term and medium- to short-term measures for sustainable management of the shoreline in selected states, along with the related policy and institutional framework. The anticipated PPTA outputs will include (i) a framework and action plan for sustainable shoreline management; (ii) an investment program for each state, including economically viable and socially and environmentally acceptable structural and nonstructural interventions; and (iii) financially and environmentally sustainable coastal zone management mechanisms.</p>
<p><b>B. Energy</b></p>	
<p>Assam Energy Efficiency Enhancement Project</p>	<p><b>Impact.</b> The project will enhance the energy efficiency of Assam's power sector by supporting (i) technical loss reduction and physical capacity expansion of the transmission and distribution network, and (ii) promoting demand-side management with segregation of rural and urban distribution circles.</p>

Project Name	Description
	<p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) Institutional capacity development program for financial and technical management.</li> <li>(ii) Promotion of private sector participation to the Assam power sector.</li> <li>(iii) Technology transfer to the Assam power sector.</li> </ul> <p><b>Expected Outputs and Outcomes</b></p> <ul style="list-style-type: none"> <li>(i) Enhanced institutional capacity.</li> <li>(ii) Technology transfer.</li> <li>(iii) Further private sector participation in the Assam power sector.</li> </ul>
Capacity Development of Bihar Electricity Regulatory Commission	<p><b>Impact.</b> The project will assist in effectively operationalizing BERC as an independent electricity regulatory commission.</p> <p><b>Major Components.</b> The TA will support BERC through training and capacity development in the following areas: (i) establishing norms of operation for the sector companies; (ii) segregating the existing tariff into generation, transmission, and retail supply tariffs; (iii) revising the existing grid code; (iv) specifying security of supply, metering, and energy accounting norms; (v) reviewing and ratifying the financing restructuring plan; and (vi) setting up the licensing system. In addition, the TA will help to develop an appropriate “twinning” arrangement between Indian and international regulatory commissions so that BERC members can obtain on-the-job training.</p> <p><b>Expected Outputs and Outcomes</b></p> <ul style="list-style-type: none"> <li>(i) Development of a transparent regulatory framework for the power sector.</li> <li>(ii) Introduction of a transparent pricing mechanism.</li> <li>(iii) Establishment of regulations to achieve cost recovery.</li> <li>(iv) Set up of licensing regulations to ensure safety of power supply and fair business.</li> <li>(v) Education in the heavy financial burden of the power sector on the Government budget through creating a self-sufficient power sector that secures financing for its investment requirements from internal cash generation and on the strength of its balance sheet.</li> <li>(vi) Promoting private sector investment in the power sector development of Bihar.</li> </ul>
Integrated Renewable Energy Development (I)	<p><b>Impact.</b> The project will implement low-carbon energy sector development through renewable energy development in areas where government intervention or gap-financing is needed.</p> <p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) Capacity development program for the Indian Renewable Energy Development Agency and three to four pilot state renewable energy development agencies.</li> <li>(ii) Outreach programs for the project.</li> <li>(iii) Support for technology transfer.</li> </ul> <p><b>Expected Outputs and Outcomes</b></p> <ul style="list-style-type: none"> <li>(i) Enhanced institutional capacity of the Renewable Energy Development Agency and three to four pilot states to appraise solar power projects.</li> <li>(ii) Raised awareness.</li> <li>(iii) Technology transfer.</li> </ul>
State Renewable Energy Development	<p><b>Impact.</b> The project will implement low-carbon energy sector development through renewable energy development in areas where the government intervention or gap-financing is needed.</p> <p><b>Major Components.</b> This PPTA will help in designing the proposed State Renewable Energy Development Project. Major components are (i) project due diligence, (ii) outreach programs for the project, and (iii) support for technology transfer.</p> <p><b>Expected Outputs and Outcomes.</b> The expected outputs and outcomes of the ensuing loan include (i) addition to power generation capacity, (ii) Clean Development Mechanism product, (iii) build capacity of 10 pilot states in appraising solar power projects, (iv) raised awareness, and (v) technology transfer.</p>
<b>C. Finance</b>	
Affordable Housing (Capacity Development)	<p><b>Impact.</b> According to the 11th Planning Commission, the shortage of 24.71 million houses in 2007 will grow to 26.53 million in next 5 years. The TA will assist the</p>

Project Name	Description
	<p>Government of India in implementing the National Urban Housing and Habitat Policy 2007, which aims to promote the goal of “affordable housing for all,” and in particular for economically weaker sections and low-income groups.</p> <p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) Study and develop macroeconomic policies for enabling accelerated flow of resources to the housing sector.</li> <li>(ii) Develop convergence between urban sector initiatives and financial sector reforms.</li> <li>(iii) Develop innovative housing programs/financing schemes (including financial products and a model public-private partnership [PPP]) for meeting the housing shortage with special focus on economically weaker sections and low-income groups.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The TA is expected to assist the Government in creating adequate housing stock on both rental and ownership bases for the economically weaker sections and low-income groups. Development of innovative housing programs and schemes, including a PPP model, will provide easier options for home finance and ensure that affordable housing becomes a reality.</p>
<b>D. Law, Economic Management, and Public Policy</b>	
Capacity Development for PPP - I	<p><b>Impact.</b> The TA aims to assist the Government in promoting private sector participation in the infrastructure sector. This will help the Government to meet its targeted infrastructure spending requirements over the next 5 years which cannot be funded by the Government alone. The overriding impact will be felt through providing better infrastructure to end users and overall improvement in usage of resources, whether capital or natural resources such as energy and water.</p> <p><b>Major Components.</b> The TA will focus on selected state governments and government agencies. It will have three major components: (i) developing the capacity of the selected state governments in identifying and developing PPP projects, and to set up PPP cells in the selected states; (ii) building awareness among relevant stakeholders (government, private sector, employees, consumers) on PPP structures and impact; and (iii) providing assistance in developing PPP concepts and PPP structures for selected sectors or projects in various departments and agencies.</p> <p><b>Expected Outputs and Outcomes.</b> The TA will help in (i) setting up PPP enabling systems, rules, and mechanisms at selected government agencies; (ii) increasing awareness of government officials with respect to PPP structures, benefits, and challenges; (iii) increasing buy-in of employees and the public on greater private sector participation in infrastructure management; (iv) catalyzing capital and/or management inflows from the private sector into infrastructure; and (v) developing a pipeline of PPP projects at government agencies.</p>
National Institute for Securities Management	<p><b>Impact.</b> The TA aims to assist in promoting education and awareness about securities markets and broadening the investor base. This will also provide the Government a platform for rationalizing capital market regulations and deepening securities markets to support further development of the financial sector.</p> <p><b>Major Components.</b> The TA will have several components, including (i) creation of a database and knowledge depository on securities markets, (ii) facilitation of research and dissemination of data and information on securities markets, and (iii) upgradation of the skills of existing professionals in the market.</p> <p><b>Expected Outputs and Outcomes.</b> The TA will help in (i) developing an organized cadre of professionals equipped to study issues relating to the securities market; (ii) designing and implementing a national strategy for investor education and financial literacy; (iii) continuously upgrading regulatory staff members' skills and competencies, enabling them to stay abreast of developments in the Indian securities markets; and (iv) strengthening and raising corporate governance standards.</p>
<b>E. Multisector</b>	
Capacity Development for Project Management for Tourism Infrastructure	<p><b>Impact.</b> The project will result in (i) effective and timely implementation of the proposed loan for Inclusive Tourism Infrastructure Development (2009) and improved performance as reflected in an increase in the number of tourists and length of their stay, (ii)</p>

Project Name	Description
Development and State Tourism Infrastructure I	<p>increased incomes and livelihoods from tourism, and (iii) more efficient management of tourism sites.</p> <p><b>Major Components.</b> The TA will have two phases. The first phase will support the effective implementation of the proposed loan for Inclusive Tourism Infrastructure Development. The next phase will prepare the second phase of the loan covering new states. The TA will:</p> <ul style="list-style-type: none"> <li>(i) review and analyze staff strength of the central, state, and local governments to form a competent project management team at the central, state, and local levels, as well as to recruit staff (if required) from various sources;</li> <li>(ii) help central, state, and local governments become familiar with ADB's procurement procedures, and train them in preparing bidding documents for pre-qualification of contractors as per ADB's guidelines;</li> <li>(iii) assist central, state, and local governments in undertaking advance action to recruit consultants;</li> <li>(iv) guide the selection of project management, design, and supervision consultants to be placed in the project management units;</li> <li>(v) prepare a project implementation manual and provide training to develop implementation and management skills of the project management staff; and</li> <li>(vi) undertake detailed design work required to expedite project implementation and begin disbursements and physical work for parts of the project.</li> </ul> <p>The second phase of the TA will design and assess the feasibility of a tourism infrastructure development project for possible ADB financing.</p> <p><b>Expected Outputs and Outcomes</b></p> <ul style="list-style-type: none"> <li>(i) Improved project management and implementation capacities of executing and implementing agencies.</li> <li>(ii) Enhanced project preparedness for timely project implementation.</li> <li>(iii) Greater public awareness about improved tourism infrastructure and services.</li> <li>(iv) Enhanced public dialogue on the required tourism sector reforms.</li> <li>(v) An agreed design and feasibility for a loan project for tourism infrastructure development in identified high priority circuits of selected states.</li> </ul>
Capacity Development of HUDCO	<p><b>Impact.</b> The project will improve capacity of the Housing and Urban Development Corporation (HUDCO) Limited of India, leading to greater access to credit for low-income families in India to build residential houses.</p> <p><b>Major Components.</b> The TA is conceived in the context of ADB's increasing focus on inclusive development in line with Government emphasis on socially inclusive economic growth in the 11<sup>th</sup> Plan. The second component of the Government of India's flagship urban infrastructure program--Jawaharlal Nehru National Urban Renewal Mission-- is to provide basic services to the urban poor including improvement of slums through integrated provision of shelter, basic infrastructure and services and other civic amenities. The major components of the TA include the following:</p> <ul style="list-style-type: none"> <li>(i) <b>Strengthening the capacity of HUDCO to scale up lending to the urban poor for housing.</b> This component includes improving tracking systems for pro-poor targeting of credit for housing; increasing the effectiveness of pro-poor targeting; developing new strategies for reaching the poor and reducing the default rate among the poor by working with thrift groups and other tested means of sustainable banking relations with the poor; improving HUDCO's capacity to negotiate with local governments in respective areas to address various bottlenecks that impede expansion of the housing stock for the poor.</li> <li>(ii) <b>Strengthening capacity of HUDCO to raise more money for housing for the poor and increasing lending efficiencies.</b> This component will support improving HUDCO's internal efficiencies so that the gains from these efficiencies lead to reduction in lending spreads to the poor and make credit available for the poor at more competitive and affordable rates. This component will also support the capacity development of HUDCO to raise more money for housing for the poor.</li> </ul> <p><b>Expected Outputs and Outcomes</b></p> <ul style="list-style-type: none"> <li>(i) Improved internal efficiency of HUDCO.</li> <li>(ii) Increase availability of credit for the poor for housing at more affordable rates.</li> </ul>

Project Name	Description
IIFCL Project Development III	<p>(iii) Increase in stock of houses for the poor.</p> <p><b>Impact.</b> The project will expand IIFCL's balance sheet and allow it to increase the flow of capital for funding infrastructure projects.</p> <p><b>Major Components.</b> The key activities envisaged in the TA include assessing and enhancing IIFCL's resource management system, financial policies, and guidelines, which would form the basis of its asset-liability management framework. The proposed TA will strengthen IIFCL's in-house risk appraisal capacity, institutionalize due diligence procedures for risk identification, develop a mechanism and template that could be used for risk assessment, and develop pricing tools for covering expected risk. In addition, consulting support would be provided to frame the organization's financial policies and risk management processes and provide inputs for procuring the required hardware and software to enhance treasury functionality. Finally, the proposed TA will enhance IIFCL's capacity in undertaking, implementing, and monitoring safeguards compliance required for subprojects financed under the India Infrastructure Project Financing Facility II.</p> <p><b>Expected Outputs and Outcomes.</b> The outcomes of the proposed TA will support (i) developing capacity within IIFCL to undertake independent risk appraisal of projects, and (ii) strengthening of safeguards compliance. The proposed TA is also expected to have a positive spin-off on overall project risk in the infrastructure finance sector. An enhanced resource management system would enable IIFCL to access the derivative markets on behalf of the project developer in cases where it cannot independently access the derivative markets. Thus, based on project requirements, the project developer may request a change in its liability structure (duration and/or currency) to IIFCL and IIFCL may undertake a hedging transaction based on the borrower's request on a back-to-back basis.</p>
Kolkata Urban Environmental Improvements	<p><b>Impact.</b> The project will improve living conditions and the urban environment for the residents of Kolkata, one of India's most populous cities, by expanding access to sustainable urban services.</p> <p><b>Major Components.</b> ADB has been supporting the state government of West Bengal through the Kolkata Environmental Improvement Project and Supplementary Loan 2293-IND in improving urban sanitation in the outer areas of the municipality. While the Project is being implemented and is due for completion in June 2010, the state government has recently requested ADB, through the Government, to provide further assistance for improving urban sanitation in the remaining boroughs of Kolkata city, not covered by the project.</p> <p>The proposed PPTA will assist the state government in preparing a feasible investment program for ADB loan financing for improving urban services and the environmental condition of Kolkata city. It will have two major components: (i) preparation of the feasibility study for the investment package for ADB financing, and (ii) preparatory activities to improve the program management and implementation capacity and to enhance readiness of relevant agencies for the forthcoming loan.</p> <p><b>Expected Outputs and Outcomes.</b> The outcomes of the ensuing loan are (i) adequate provision of sewerage and drainage facilities for the residents of selected boroughs of Kolkata city, (ii) improvement in environmental conditions and reduced flooding in Kolkata, (iii) enhancement of basic urban services for slum dwellers, and (iv) an improvement in the operational and financial sustainability of Kolkata Municipal Council so that it can meet all operation and maintenance costs of urban services for which it is responsible.</p> <p>The outputs of the PPTA are (i) completion of a feasibility study for ADB's loan financing, including all necessary documents for loan processing; (ii) enhanced project preparedness for implementation; and (iii) capacity development of the proposed executing and implementing agencies.</p>
Mainstreaming Public-Private Partnerships for Providing Urban Amenities in Rural Areas	<p><b>Impact:</b> The impact of the proposed TA will be evidenced not only through improved access to infrastructure services under the PURA scheme but also through increased efficiency in providing such services, local employment generation and reduced pressure on cities.</p>

Project Name	Description
(PURA)	<p><b>Major Components.</b> The TA will have two components: PURA scheme and capacity development, and institutional development.</p> <ul style="list-style-type: none"> <li>• <b>PURA Scheme and Capacity Development</b> <ul style="list-style-type: none"> <li>(i) Developing necessary policy, regulatory and institutional reform frameworks in the infrastructure sector for PURA which will proceed in tandem with a review of constraints of the existing frameworks for infrastructure development, and review and finalization of eligibility criteria, etc.</li> <li>(ii) Developing provision of urban amenities in rural areas (PURA) including (a) parameters and policy objectives for PURA, developing a framework linking reforms to disbursements, and assistance with roll-out scheme; (b) types of infrastructures (“link infrastructure” implemented by Government– road, electricity and bulk water supply, etc. to the village; “essential infrastructure” by private developer– internal pathways, sewerage, drainage, piped water supply etc; “peripheral infrastructure” by private developer– marketing centre, industrial estate for village industries, technical and vocational training institutions etc); (c) assessment of the scope, depth and approach of PURA in consultation with related state governments, selected <i>panchayats</i>, and potential private sector developers; and (d) identification of all the risks and their mitigation measures, etc.</li> <li>(iii) Activities related to (a) determination of training needs; (b) development of relevant management information systems (MIS); (c) development of guidelines and manuals; and (d) support for project preparation, appraisal, and evaluation; and</li> <li>(iv) Knowledge dissemination and awareness of international best practices.</li> </ul> </li> <li>• <b>Institutional Development</b> The second component will assist PPP cells in the Ministry of Rural Development (MORD) to institutionalize the processes through practical application of an enabling framework and lessons learned. There will also be assistance to the PPP cell at DEA to coordinate the process and to do further needs assessments. Refinement of the frameworks and skills updating covering the following, will be undertaken after the assessment of the institutionalization process. <ul style="list-style-type: none"> <li>(i) Refining the PPP policy and regulatory framework;</li> <li>(ii) Meeting compliance and public safety norms;</li> <li>(iii) Developing MIS;</li> <li>(iv) Perfecting bidding document and procedures;</li> <li>(v) Determining risk sharing between public and private partners;</li> <li>(vi) Conducting value added research and analysis; and</li> <li>(vii) Determining adequate monitoring arrangements</li> </ul> </li> </ul> <p><b>Expected Outputs and Outcomes.</b> The outcomes of the TA will include (i) improved legal, regulatory, institutional framework for PURA program design and implementation; (ii) enhanced capacity development in PPP cells within MORD and participating state governments to prepare, evaluate, and appraise PPP projects under the PURA program; (iii) increased awareness among potential private sector partners about project cycle of PPP projects in infrastructure, and Government expectation regarding value for money; and (iv) increased private sector participation in infrastructure development and management throughout India over the long term.</p> <p>Support under this project will be (i) part of the larger Government agenda on economic reforms and institutional development by focusing on a key sector (i.e. infrastructure); (ii) needs driven; (iii) targeted and add value by focusing on relevant capacity development and creating an enabling framework for PPP in a central line ministry (MORD) and relevant state governments; and (iv) focused on specific area, PURA, for using PPP which will have significant impact on the development of essential infrastructure.</p>
Multisector Project Management Capacity Development in North East Region	<p><b>Impact.</b> The project will strengthen managerial, implementation, and institutional capabilities of the five state governments and project management units responsible for implementing ADB-financed programs in India’s North Eastern Region (NER).</p>

Project Name	Description
	<p><b>Major Components</b></p> <ul style="list-style-type: none"> <li>(i) Component 1 will (a) establish an extended office in NER, and (b) create and train a support team for project management.</li> <li>(ii) Component 2 will provide support for (a) preparing a suitable management information system, and (b) introducing efficient project management units.</li> </ul> <p><b>Expected Outputs and Outcomes.</b> The TA's expected outcome will be improved efficiency and effectiveness in managing, implementing, coordinating, and monitoring implementation of ADB operations in the North Eastern states. The TA's outputs include (i) establishment of a multifunctional support office in the NER and (ii) establishment of a cross-sectoral project management and monitoring system for tracking.</p>
<p>Study on the Impact of Biofuels on Food Security (Internationally) and Policy Options for India and Other Countries</p>	<p><b>Impact.</b> The project will study various aspects of biofuel use, and particularly in the context of the food-grain crisis, use of edible items for production of biofuels, diversion of arable land for biofuel cultivation, and the related impact on groundwater availability.</p> <p><b>Major Components.</b> Detailed study and analysis will include the following:</p> <ul style="list-style-type: none"> <li>(i) review of the work on biofuels already carried out in India and elsewhere while assessing international experience with respect to production and use of biofuels;</li> <li>(ii) energy efficiency of different types of biofuels plus research and development issues pertaining to blending; and</li> <li>(iii) competing uses of land and implications for rising biofuel production on food security in India.</li> </ul> <p><b>Expected Outcomes and Outputs.</b> Based on the above studies, a suitable strategy will be suggested toward promoting efficient forms of biofuels that can be used in India without adversely affecting food security.</p>
<p>Support for India's National Climate Change Action Plan</p>	<p><b>Impact.</b> To support GOI in operationalizing the National Action Plan for Climate Change (NCCAP), which was unveiled on 30 June 2008.</p> <p><b>Major Components.</b> The NCCAP has proposed the setting up of 8 National Missions:</p> <ul style="list-style-type: none"> <li>(i) National Solar Mission</li> <li>(ii) National Mission for Enhanced Energy Efficiency</li> <li>(iii) National Mission on Sustainable Habitat</li> <li>(iv) National Water Mission</li> <li>(v) National Mission for Sustaining the Himalayan Ecosystem</li> <li>(vi) National Mission for a Green India</li> <li>(vii) National Mission for Sustainable Agriculture</li> <li>(viii) National Mission on Strategic Knowledge for Climate Change</li> </ul> <p>In consultation with the Ministry of Environment and Forest and other relevant line Ministries, ADB will design a TA program to support (i) the background studies and analysis required for some of these Missions; (ii) draw on international best-practices as relevant for India; and (iii) strengthen the environmental linkages across ADB operations in various sectors – power, transport (including railways and urban transport), urban, agriculture, and water resources management.</p> <p>These National Missions will be institutionalized by respective Ministries and will be organized through inter-sectoral groups which will include, in addition to the related Ministries, the Ministry of Finance, Planning Commission, and experts from industry, academia, and civil society. Each Mission will prepare a detailed roadmap covering the remaining years of the 11<sup>th</sup> FYP and the 12<sup>th</sup> Plan (2012-2017).</p> <p><b>Expected outputs and outcomes.</b> Given its mandate to support climate change adaptation and mitigation in all developing member countries, ADB's close engagement with the relevant Ministries and groups that are implementing the various Missions of the NCCAP is critical. In view of the size and rapid growth of India's economy in recent years, the need for effective implementation of India's NCCAP cannot be over-emphasized for ensuring the success of global efforts towards combating climate change.</p> <p>ADB's India program for 2009-2011 has several proposed operations in the areas of</p>

Project Name	Description
	<p>enhancing hydropower generation capacity, promoting use of solar-photo-voltaic and other renewable energy forms, encouraging energy efficiency, support for railways, urban transport, and sustainable water usage.</p> <p>Through this TA, ADB would be able to (i) support the work of these critical National Environmental Mission through studies, awareness workshops, and incorporation of international best practices learnt from ADB's experience in other DMCs; (ii) identify opportunities and draw lessons for further strengthening the environmental focus of its India lending and non-lending program; and (iii) tap various concessional funding sources that are being created for climate change adaptation and mitigation globally, and channelize these for the benefit of India assistance program.</p>
Support to JNNURM—Phase II	<p><b>Impact.</b> The project will consolidate and continue to support implementation of the Ministry of Urban Development's flagship program, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). The primary impact of the TA will be the effective management and disbursement of JNNURM funds, significant governance reforms at the level of states and urban local bodies (ULBs), efficient processing and implementation of JNNURM-funded interventions at the ULB level, and overall improvement in the urban environment of India's major cities covered under the JNNURM program.</p> <p><b>Major Components.</b> JNNURM comprises two sub-missions: (i) urban infrastructure and governance, and (ii) basic services to the urban poor. The TA will have two broad components:</p> <p>(i) The first component relates to continuing the ongoing support to the Project Directorate of the Ministry of Urban Development (MOUD) in the overall management of JNNURM, including monitoring of the investment and the statutory and optional reforms components of JNNURM; review the achievements of JNNURM vis-à-vis the baseline benchmark data; review and strengthen the linkages between city development plans and the priority investments supported by JNNURM; support the physical and financial audit of JNNURM-supported projects; consolidate and improve the management information systems; advise the cities in accessing other funds to supplement JNNURM grants; and ensure that JNNURM catalyzes greater investment in urban infrastructure from other sources—and especially the private sector.</p> <p>(ii) The indicative areas in the second component would be to support the communications aspect of JNNURM reforms and investments; assess the institutional and financial aspects of JNNURM implementation; and strengthen the stakeholder (civil society, private sector, and nongovernment organizations) participation in implementing and monitoring JNNURM. The second component of the TA will be finalized during a fact-finding mission based on reviewing implementation of the ongoing TA and identifying key gaps to improve the effectiveness of the JNNURM implementation.</p> <p><b>Expected Outputs and Outcomes</b></p> <p>(i) Continue to support a well-staffed project cell set up within MOUD to help effectively and efficiently implement the JNNURM.</p> <p>(ii) Improve the capacity to evaluate and appraise city development plans, detailed project reports, and related policy reforms.</p> <p>(iii) Consolidate and continue to enhance capacity within MOUD to provide technical and advisory support to state and ULB governments in implementing and managing integrated urban development and governance reform programs funded through JNNURM.</p> <p>(iv) Continue to ensure the reach and effectiveness of JNNURM through close monitoring of the overall performance and technical support to ULBs and state governments in implementing reforms and project interventions.</p> <p>(v) A significant increase in private sector participation in urban infrastructure development and management throughout India.</p>
<b>F. Transport and Communications</b>	
Karnataka State Highway Network Investment Strategy	<p><b>Impact.</b> The TA will enhance efficiency of the planning, programming, policy formulation and monitoring of the road sector in Karnataka</p> <p><b>Major components.</b> The TA will upgrade database systems to enable their use in</p>

Project Name	Description
	<p>programming and planning of road upgrading works, install and train the staff to use HDM-4 systems for road planning and programming, prepare tolling strategies for 4 pilot toll road projects, identify a prioritized investment plan in the road sector, and prepare a prioritized list of projects suitable for private sector participation in the core road network maintenance systems to enable planning and programming of road sector capacity improvements and maintenance to be done on a systematic needs-based basis.</p> <p><b>Expected Outputs and Outcomes.</b> The TA will carry out the institutional strengthening of the Karnataka State Highways Traffic and Transport Authority (KSHTTA) to enable integrated planning, programming, monitoring and policy formulation for the roads sector in Karnataka for optimum efficiency. The TA will also assist the State to formulate a core road network in the road sector that can support the socio-economic development of the state considering the needs of the next 10 years. It will help in the reorganization of the Karnataka Public Works Department to have dedicated units in the PWD zones for road sector activities. It will also assist the state road sector agencies to improve their capacity to support increase private sector participation in the roads sector.</p>
Madhya Pradesh State Roads III	<p><b>Impact.</b> The TA will help in preparing the third state highway project for ADB financing. The proposed loan will further enhance connectivity of the state road network by building on achievements of the two ongoing ADB-financed projects.</p> <p><b>Major Components.</b> The TA will assist the executing agency in project preparation (phase 1) and preconstruction activities (phase 2) to enhance overall implementation readiness. The first phase will include the following:</p> <ul style="list-style-type: none"> <li>(i) Feasibility studies</li> <li>(ii) Environmental studies</li> <li>(iii) Social impact assessments</li> <li>(iv) Resettlement impact studies and preparation of resettlement plans, including a detailed action plan for establishing resettlement and rehabilitation</li> <li>(v) Implementation arrangements</li> <li>(vi) Review and finalization of detailed project reports, bidding documents for civil works, and requests for proposals for consultant recruitment</li> <li>(vii) Assessment of further need for institutional strengthening and capacity development of Madhya Pradesh Roads Development Corporation and the Public Works Department</li> </ul> <p>The second phase will include the development of action plans for each stream of preconstruction activities including institutional strengthening, environmental clearances, land acquisition and resettlement, shifting of utilities, procurement of civil works, and recruitment of consultants.</p> <p><b>Expected Outputs and Outcomes.</b> The TA will help in further capacity building of the Madhya Pradesh State Roads Development Corporation. It will undertake comprehensive studies to help in planning and design of follow-on investment projects for improving connectivity of the state road network. The TA will also improve the implementation readiness of the proposed investment projects.</p>
North East National Highways	<p><b>Impact.</b> The TA will help in preparing investment projects to strengthen the national highway system in the North Eastern Region. It will also enhance the implementation readiness of the proposed investment projects through preconstruction assistance.</p> <p><b>Major Components.</b> The TA will assist the executing agency in project preparation (phase 1) and preconstruction activities (phase 2) to enhance overall implementation readiness. The first phase will include the following:</p> <ul style="list-style-type: none"> <li>(i) Feasibility studies</li> <li>(ii) Environmental studies</li> <li>(iii) Social impact assessments</li> <li>(iv) Resettlement impact studies and preparation of resettlement plans, including a detailed action plan for establishing resettlement and rehabilitation implementation arrangements</li> <li>(v) Review and finalization of detailed project reports, bidding documents for civil works, and requests for proposals for consultant recruitment</li> <li>(vi) Institutional studies and capacity development plans</li> </ul> <p>The second phase will include the development of action plans for each stream of</p>

Project Name	Description
	<p>preconstruction activities, including institutional strengthening, environmental clearance, land acquisition and resettlement, utility shifting, procurement of civil works, and recruitment of consultants.</p> <p><b>Expected Outputs and Outcomes</b>            (i) Comprehensive studies for decision making on follow-on investment projects for improving national highways in the North Eastern Region to higher standards that are economically and financially viable, as well as environmentally and socially sustainable.            (ii) A high level of readiness of the ensuing investment projects for implementation.</p>
Road Safety Improvement Strategy	<p><b>Impact.</b> National road safety management system enabling improvement of road safety in the country in a sustainable and cost-effective manner.</p> <p><b>Major Components.</b> Review and strengthening of the road safety management and technical capacity of the central government, development of the National Road Safety Strategy and Action Plan, and development of comprehensive and integrated demonstration road safety programs in high-risk corridors.</p> <p><b>Expected Outputs and Outcomes.</b> The immediate outcomes of the TA will be a national road safety strategy, an action plan, and improved road safety management capacity of the central government. The outputs will include advisory support, on-the-job training and knowledge transfer, review of best practices and measures, and road safety and traffic management programs in high-risk corridors.</p>
Urban Transport	<p><b>Impact.</b> The objective of the TA is to identify and prepare investment projects aimed at improving public urban transport in medium-sized Indian cities with populations of 1 million–4 million. The focus will be on improving the efficiency, attractiveness, safety, and environmental friendliness of public transportation in selected Indian cities.</p> <p><b>Major Components</b>            (i) Feasibility studies            (ii) Environmental studies            (iii) Social impact assessments            (iv) Resettlement impact studies and preparation of resettlement plans, including a detailed action plan for establishing resettlement and rehabilitation implementation arrangements            (v) Review and finalization of contracting arrangements, including bidding documents for civil works and requests for proposals for consultant recruitment, if required            (vi) Institutional studies and development of due diligence mechanisms</p> <p><b>Expected Outputs and Outcomes.</b> These will include comprehensive studies for decision making on upcoming investment projects. Investments may include development of bus rapid transit systems consisting of constructing bus lanes, upgrading bus fleets, operations management, and intelligent transport systems related to bus operations.</p>

ADB = Asian Development Bank, BERC = Bihar Electricity Regulatory Commission, HUDCO = Housing and Urban Development Corporation, IFREM = integrated flood and riverbank erosion management, IIFCL = India Infrastructure Finance Company Limited, JNNURM = Jawaharlal Nehru National Urban Renewal Mission, MOUD = Ministry of Urban Development, NCCAP = National Climate Change Action Plan, NER = North Eastern Region, PPP = public-private partnership, PPTA = project preparatory technical assistance, RCD = Road Construction Department, TA = technical assistance, ULB = urban local body.

Source: Asian Development Bank estimates

**ASSISTANCE PROGRAM FOR CURRENT YEAR**

**Table A3.1: Assistance Pipeline for Lending Products, 2008**

Sector Project/Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of Project Preparatory Assistance	Cost (\$ million)							
					ADB				Total	Gov't	Co- financing	
					Total	OCR	ADF					
							Loans	Grants				
<b>2008 Firm Loans</b>												
<b>A. Agriculture and Natural Resources</b>												
1. Orissa Integrated Irrigated Agriculture & Water Management Investment Program (MFF)	GI	ECG/GOV	SANS	2006	tbd	188.20	0.00	0.00	188.20	tbd	tbd	
<b>Subtotal (A)</b>					<b>tbd</b>	<b>188.20</b>	<b>0.00</b>	<b>0.00</b>	<b>188.20</b>	<b>tbd</b>	<b>tbd</b>	
<b>B. Energy</b>												
1. Himachal Pradesh Clean Energy Development Investment Program (MFF)	GI	ECG/ENV	SAEN	2007	tbd	800.00	0.00	0.00	800.00	tbd	tbd	
2. National Power Grid Development Investment Program (MFF)	GI	ECG/ENV	SAEN	2007	tbd	600.00	0.00	0.00	600.00	tbd	tbd	
<b>Subtotal (B)</b>					<b>tbd</b>	<b>1,400.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,400.00</b>	<b>tbd</b>	<b>tbd</b>	
<b>C. Law, Economic Management, and Public Policy</b>												
1. Assam Governance and Public Resource Management Sector Development Program (Subprogram II)	GI	ECG/GOV	SAGF	2006	tbd	100.00	0.00	0.00	100.00	tbd	tbd	
2. Khadi Reform and Development Program	GI	ECG/GAD	SAGF	2008	tbd	150.00	0.00	0.00	150.00	tbd	tbd	
<b>Subtotal (C)</b>					<b>tbd</b>	<b>250.00</b>	<b>0.00</b>	<b>0.00</b>	<b>250.00</b>	<b>tbd</b>	<b>tbd</b>	
<b>D. Multisector</b>												
1. Urban Water Supply and Environmental Improvement in Madhya Pradesh (Supplementary Loan)	TI	ECG/ENV	SAUD		tbd	71.00	0.00	0.00	71.00	tbd	tbd	
2. Uttarakhand Urban Sector Development Investment Program	GI	ECG/ENV	SAUD	2006	tbd	350.00	0.00	0.00	350.00	tbd	tbd	

Sector Project/Program Name	Targeting Classifi- cation	Thematic Priority	Division	Year of Project Preparatory Assistance	Cost (\$ million)						
					ADB				Total	Gov't	Co- financing
					Total	OCR	Loans	Grants			
<b>Subtotal (D)</b>					tbd	<b>421.00</b>	<b>0.00</b>	<b>0.00</b>	<b>421.00</b>	tbd	tbd
<b>E. Transport and Communications</b>											
1. Bihar State Highways Project					tbd	420.00	0.00	0.00	420.00	tbd	tbd
<b>Subtotal (E)</b>					tbd	<b>420.00</b>	<b>0.00</b>	<b>0.00</b>	<b>420.00</b>	tbd	tbd
<b>Total (2008 Firm Loans)</b>					<b>tbd</b>	<b>2,679.20</b>	<b>0.00</b>	<b>0.00</b>	<b>2,679.20</b>	<b>tbd</b>	<b>tbd</b>

ADB = Asian Development Bank; ADF = Asian Development Fund; CAD = Capacity Development; ECG = sustainable economic growth; ENV = environmental sustainability; GI = general intervention; GOV = governance; Gov't = Government; ISD = inclusive social development; MFF = multitranches financing facility; OCR = ordinary capital resources; PSD = private sector development; SAEN = South Asian Energy Division; SAGF = South Asia Governance, Finance, and Trade Division; SANS = South Asia Agriculture, Natural Resources, and Social Services Division; SATC = South Asia Transport and Communication Division; SAUD = South Asia Urban Development Division; tbd = to be determined. Source: ADB estimates.

**Table A3.2: Assistance Pipeline for Nonlending Products and Services, 2008**

Sector Assistance Name	Responsible Division	Assistance Type <sup>a</sup>	Sources of Funding				Total (\$'000)
			ADB		Others		
			Source <sup>b</sup>	Amount (\$'000)	Source <sup>c</sup>	Amount (\$'000)	
<b>2008</b>							
<b>A. Agriculture and Natural Resources</b>							
1. Agribusiness Infrastructure Development Investment Program	SANS	PPTA	TASF	1,000.0			1,000.0
2. Institutional Development of Integrated Water Resources Management in Orissa <sup>12</sup>	SANS	ADTA			WFGP	250.0	250.0
3. Integrated Flood and River Erosion Management Project - Arunachal Pradesh	SANS	PPTA	TASF	150.0	WFGP	750.0	900.0
4. Preparing the Integrated Flood and Riverbank Erosion Risk Management Project—Assam (Phase 2): Processing and Institutional Strengthening	SANS	PPTA	TASF	150.0	WFGP	750.0	900.0
<b>Subtotal (A)</b>				<b>1,300.0</b>		<b>1,750.0</b>	<b>3,050.0</b>
<b>B. Energy</b>							
1. Developing the Power System Master Plan for Bihar	SAEN	ADTA	TASF	600.0			600.0
2. Energy Efficiency Enhancement Project in Assam	SAEN	PPTA	JSF	1,000.0			1,000.0
3. Facilitating the Operations of Energy Conservation Fund "Energy Smart" in Madhya Pradesh	SAEN	ADTA	TASF		DEN	1,700.0	1,700.0
4. Integrated Renewable Energy Development Project	SAEN	PPTA	TASF	1,400.0			1,400.0
<b>Subtotal (B)</b>				<b>3,000.0</b>		<b>1,700.0</b>	<b>4,700.0</b>
<b>C. Law, Economic Management, and Public Policy</b>							
1. Capacity Building for Reforming the Khadi & Village Industry Subsector <sup>13</sup>	SAGF	ADTA	JSF	2,000.0			2,000.0
2. Preparing the Public–Private Partnerships Pilot Projects Initiative (Mainstreaming PPPs)	SAGF	PPTA	JSF	2,000.0			2,000.0
3. Supporting the Assam Governance and Public Resource Management Sector Development Program (Subprogram II) <sup>14</sup>	SAGF	ADTA	JSF	600.0			600.0
<b>Subtotal (C)</b>				<b>4,600.0</b>			<b>4,600.0</b>

<sup>12</sup> Attached to Loan 38411-01

<sup>13</sup> Attached to Loan 42151-01

<sup>14</sup> Attached to Loan 36308-02

Sector Assistance Name	Responsible Division	Assistance Type <sup>a</sup>	Sources of Funding				Total (\$'000)
			ADB		Others		
			Source <sup>b</sup>	Amount (\$'000)	Source <sup>c</sup>	Amount (\$'000)	
<b>D. Multisector</b>							
1. Capacity Development of the National Capital Region Planning Board	SAUD	ADTA	TASF	2,000.0			2,000.0
2. Knowledge Management for Enhanced Operational Effectiveness	INRM	ADTA	TASF	1,000.0			1,000.0
3. National Capital Region Planning Board Project	SAUD	PPTA	JSF	700.0			700.0
4. Preparing Disaster Readiness Enhancement Infrastructure Development Project	SAUD	PPTA	JSF	225.0			225.0
5. Preparing Nonsovereign & Innovative Municipal Finance Urban Infrastructure Projects	SAUD	PPTA	TASF/ JSF	1,250.0			1,250.0
6. Preparing the Bihar Urban Development Project	SAUD	PPTA	JSF	1,000.0			1,000.0
7. Promoting Inclusive Urban Development in Indian Cities	SAUD	ADTA	TASF	1,000.0			1,000.0
	<b>Subtotal (D)</b>			<b>7,175.0</b>			<b>7,175.0</b>
<b>E. Transport and Communications</b>							
1. Preparing the Bihar State Highways II Project	SATC	PPTA	TASF	700.0			700.0
2. Capacity Building in Enhancing Project Readiness and Monitoring Results in Transport Projects	SATC	ADTA	JSF	1,500.0			1,500.0
3. Institutional Strengthening of the Bihar Road Sector <sup>15</sup>	SATC	ADTA	TASF	1,000.0			1,000.0
4. Preparing and Enhancing Readiness of Proposed North Eastern State Roads Investment Program	SATC	PPTA	TASF	800.0			800.0
5. Preparing the Dedicated Freight Corridor Project (formerly Preparing Railways Project)	SATC	PPTA	JSF	1,500.0			1,500.0
6. Preparing Rural Roads Sector III Project	SATC	PPTA	JSF	1,000.0			1,000.0
	<b>Subtotal (E)</b>			<b>6,500.0</b>			<b>6,500.0</b>
	<b>Total (2008)</b>			<b>22,575.0</b>		<b>3,450.0</b>	<b>26,025.0</b>

ADB = Asian Development Bank; ADTA = advisory technical assistance; INRM = India Resident Mission; JSF = Japan Special Fund; PPTA = project preparatory technical assistance; SAGF = South Asia Governance, Finance, and Trade Division; SANS = South Asia Agriculture, Natural Resources, and Social Services Division; SARD = South Asia Department; SATC = South Asia Transport and Communications Division; SAUD = South Asia Urban Development Division; TASF = Technical Assistance Special Fund.

Source: ADB estimates.

<sup>15</sup> Attached to Loan 41127-01