Concept Paper

Project Numbers: 48434-002 and 48434-005
February 2016

Proposed Multitranche Financing Facility, Policy-Based Loan, and Technical Assistance Grant
India: Visakhapatnam–Chennai Industrial Corridor Development Program

This document is being disclosed to the public in accordance with ADB’s Public Communications Policy 2011.

Asian Development Bank
CURRENCY EQUIVALENTS
(as of 29 February 2016)

Currency unit – Indian rupees (Re/Rs)

Re1.00 = $ 0.015
$1.00 = Rs 68.752

ABBREVIATIONS

ADB – Asian Development Bank
DOI – Department of Industries
GoAP – Government of Andhra Pradesh
GDP – gross domestic product
MFF – multitranche financing facility
PIU – project implementation unit
PMU – program management unit
TA – technical assistance
VCIC – Visakhapatnam–Chennai Industrial Corridor

NOTES

(i) The fiscal year (FY) of the Government of India and its agencies ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2015 ends on 31 March 2015.

(ii) In this report, “$” refers to US dollars.
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Position and Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice-President</td>
<td>W. Zhang</td>
<td>Operations 1</td>
</tr>
<tr>
<td>Director General</td>
<td>H. Kim</td>
<td>South Asia Department (SARD)</td>
</tr>
<tr>
<td>Director</td>
<td>S. Bonu</td>
<td>Urban Development and Water Division, SARD</td>
</tr>
<tr>
<td>Team leader</td>
<td>M. Sharma</td>
<td>Principal Urban Development Specialist, SARD</td>
</tr>
<tr>
<td>Team members</td>
<td>A. Cervantes</td>
<td>Operations Assistant, SARD</td>
</tr>
<tr>
<td></td>
<td>S. Chakravarti</td>
<td>Senior Social Sector Specialist, SARD</td>
</tr>
<tr>
<td></td>
<td>B. Fabe</td>
<td>Project Officer, SARD</td>
</tr>
<tr>
<td></td>
<td>L. George</td>
<td>Energy Specialist, SARD</td>
</tr>
<tr>
<td></td>
<td>K. Iyengar</td>
<td>Senior Regional Cooperation Officer, SARD</td>
</tr>
<tr>
<td></td>
<td>H.Y. Jeong</td>
<td>Senior Economist, SARD</td>
</tr>
<tr>
<td></td>
<td>J. Nam</td>
<td>Urban Development Specialist, SARD</td>
</tr>
<tr>
<td></td>
<td>N. Pajarillaga</td>
<td>Environment Specialist, SARD</td>
</tr>
<tr>
<td></td>
<td>V.S. Rekha</td>
<td>Principal Counsel, Office of the General Counsel</td>
</tr>
<tr>
<td></td>
<td>I. Setyawati</td>
<td>Safeguards Specialist, SARD</td>
</tr>
<tr>
<td></td>
<td>P. Srivastava</td>
<td>Senior Project Officer (Urban), SARD</td>
</tr>
<tr>
<td></td>
<td>L.M. Tai</td>
<td>Senior Transport Specialist, SARD</td>
</tr>
<tr>
<td>Peer reviewers</td>
<td>R. Frauendorfer</td>
<td>Lead Urban Development Specialist, Southeast Asia Department (SERD)</td>
</tr>
<tr>
<td></td>
<td>R. Hasan</td>
<td>Director, Economic Research and Regional Cooperation Department</td>
</tr>
<tr>
<td></td>
<td>S. Mitra</td>
<td>Principal Partnership and Coordination Specialist, European Representative Office</td>
</tr>
<tr>
<td></td>
<td>N. Singru</td>
<td>Principal Portfolio Management Specialist, Central and West Asia Department</td>
</tr>
<tr>
<td></td>
<td>A. W. Kankanamalage</td>
<td>Senior Energy Specialist, SERD</td>
</tr>
</tbody>
</table>

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
CONTENTS

INVESTMENT PROGRAM AT A GLANCE

I. THE PROGRAM 1
   A. Rationale 1
   B. Impact, Outcome, and Outputs 2
   C. Investment and Financing Plans 3
   D. Indicative Implementation Arrangements 3

II. TECHNICAL ASSISTANCE 3

III. DUE DILIGENCE REQUIRED 3

IV. PROCESSING PLAN 4
   A. Risk Categorization 4
   B. Resource Requirements 4
   C. Processing Schedule 4

V. KEY ISSUES 4

APPENDIXES

1. Design and Monitoring Framework 5
2. Problem Tree 8
3. Initial Poverty and Social Analysis 9

SUPPLEMENTARY APPENDIX (available on request)
Comparison of Financing Modalities
### Project Classification Information

**INVESTMENT PROGRAM at a Glance**

#### 1. Basic Data
- **Project Number:** 48434-002 / 48434-005
- **Project Name:** Visakhapatnam–Chennai Industrial Corridor Development Program
- **Country:** India
- **Borrower:** Government of India

#### 2. Sector
- **Subsector(s):**
  - Industry and trade: Large and medium industries ($240.00 million)
  - Energy: Electricity transmission and distribution ($162.00 million)
  - Transport: Road transport (non-urban) ($134.00 million)
  - Water and other urban infrastructure and services: Urban water supply ($90.00 million)

  **Total ADB Financing:** $626.00 million

#### 3. Strategic Agenda
- **Subcomponents:**
  - Inclusive economic growth (IEG)
  - Environmentally sustainable growth (ESG)
  - Regional integration (RCI)

  **Climate Change Information:**
  - Adaptation ($50.00 million)

#### 4. Drivers of Change
- **Components:**
  - Partnerships (PAR)
  - Civil society organizations
  - International finance institutions (IFI)
  - Private Sector

  **Gender Equity and Mainstreaming:**
  - Effective gender mainstreaming (EGM)

#### 5. Poverty Targeting
- **Location Impact:** Nation-wide

#### 6. Risk Categorization
- **Complex**

#### 7. Safeguards Categorization
- **Modality and Sources:**
  - A. Tranche I: B
  - B. PBL: C

#### 8. Financing
- **Modality and Sources:**
  - A. Multitranche Financing Facility

<table>
<thead>
<tr>
<th>Modality and Sources</th>
<th>Indicative Tranches ($million)</th>
<th>Amount ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>ADB</td>
<td>250.00</td>
<td>250.00</td>
</tr>
<tr>
<td>MFF-Tranche (Loan):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary capital resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cofinancing</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Counterpart</td>
<td>215.00</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>107.50</td>
<td>107.50</td>
</tr>
<tr>
<td>Total</td>
<td>357.50</td>
<td>357.50</td>
</tr>
</tbody>
</table>
11. Investment Program Summary

The proposed Visakhapatnam-Chennai Industrial Corridor Development Program (VCICDP) will complement ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance manufacturing sector growth and create high quality jobs in the state of Andhra Pradesh. The VCICDP comprises: (i) a policy-based loan (PBL) to support policy reforms, and institutional development in the state’s industrial sector; and (ii) a multitranche financing facility (MFF) for priority infrastructure projects in the Visakhapatnam-Chennai Industrial Corridor (VCIC).

Impact: an increased contribution of the manufacturing sector to the state’s GDP, trade, and employment, aligned with the National Manufacturing Policy and Government of India Trade Policy (2015-2020).

Outcome: growth and competitiveness of the VCIC enhanced.

Outputs: (i) corridor management strengthened and ease of doing business improved; (ii) VCIC infrastructure strengthened; and (iii) institutional capacities, human resources, and program management strengthened.

Implementation Arrangements: Department of Industries, Government of Andhra Pradesh will be the executing agency.

Project Readiness: Project readiness is high. The government is preparing detailed project reports and bidding documents from its own resources to enhance readiness for project implementation. Advance contracting will be taken up to kick start implementation.

12. Milestones

<table>
<thead>
<tr>
<th>Modality</th>
<th>Estimated Approval</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Multitranche Financing Facility</td>
<td>28 June 2016</td>
<td>31 December 2024</td>
</tr>
<tr>
<td>Tranche I</td>
<td>28 June 2016</td>
<td>31 December 2022</td>
</tr>
<tr>
<td>Tranche II</td>
<td>18 March 2018</td>
<td>31 December 2024</td>
</tr>
<tr>
<td>B. Policy-Based Loan</td>
<td>28 June 2016</td>
<td>30 June 2020</td>
</tr>
</tbody>
</table>

13. Project Data Sheet (PDS)

<table>
<thead>
<tr>
<th>Category</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. MFF PDS</td>
<td><a href="http://www.adb.org/projects/48434-002/main">http://www.adb.org/projects/48434-002/main</a></td>
</tr>
<tr>
<td>B. PBL PDS</td>
<td><a href="http://www.adb.org/projects/48434-005/main#projects-pds">http://www.adb.org/projects/48434-005/main#projects-pds</a></td>
</tr>
</tbody>
</table>

---

*a Multitranche Financing Facility (MFF).
*b For MFF, this refers to the end of the availability period; for tranches, this refers to the tranche closing date.
*c Safeguard documents can be viewed by clicking the Document’s hyperlink in the Project Data Sheet (PDS) page.
I. THE PROGRAM

A. Rationale

1. The proposed Visakhapatnam–Chennai Industrial Corridor Development Program will complement ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance manufacturing and services sector growth and create high quality jobs in Andhra Pradesh.\(^1\) The program comprises (i) a policy-based loan (PBL) to support policy reforms, and institutional development in the state’s industrial sector; and (ii) a multitranche financing facility (MFF) for priority infrastructure projects in the Visakhapatnam–Chennai Industrial Corridor (VCIC).

2. *India’s economic growth.* While India has seen a rapid structural transformation and achieved strong economic growth since 1991, it must continue to create economic opportunities for new entrants to the labor force (about 12 million a year) for sustained economic growth. With limited prospects for job creation in agriculture, one of the most pressing policy challenges is to create more productive and well-paying jobs in manufacturing and services. India’s services sector has had significant growth and increased wages since 1991. Manufacturing, which has higher potential, is lagging and has contributed only 15% of gross domestic product (GDP) and 12% of employment over the same period.\(^2\) India’s National Manufacturing Policy (2011) calls for increasing the manufacturing sector’s contribution to at least 25% of GDP and enhancing job creation in manufacturing to create 100 million additional jobs by 2022.\(^3\)

3. *Challenges to sustaining growth in Andhra Pradesh.* Andhra Pradesh is the 8th largest state in India by area (160,205 square kilometers) and has a population of 49.4 million. It has a rich resource base and achieved average annual growth of 7.1% from FY2005 to FY2015, but is only contributing about 4% to national industrial output.\(^4\) The state’s manufacturing sector contributes 12% to the state’s GDP—lagging nationwide figures. The GoAP has a vision to promote industrialization but faces significant challenges. The enabling environment for private sector development remains weak. Industrial diversification is low and manufacturing sector employment is concentrated in small, labor-intensive, informal enterprises with low skills, productivity, and earnings. The private sector faces significant policy, regulatory, and governance constraints to establish and sustain its operations.\(^5\) Key infrastructure (such as water and power) in industrial clusters remains inadequate and unreliable, and connectivity and urban services are poor.

4. *Planning for growth.* To lay the foundation for a long-term investment program, the Asian Development Bank (ADB) supported the preparation of a conceptual development plan for the VCIC, which included an infrastructure strategy to drive economic growth and the identification of nodes\(^6\) for industrial development, high-potential industrial sectors, and a set of priority projects.\(^7\)

---

1. The design and monitoring framework is in Appendix 1 and the problem tree is in Appendix 2. The program was prepared through resources from the technical assistance projects: ADB. 2010. *Technical Assistance for Support for South Asia Regional Economic Cooperation.* Manila (TA 7491-REG); and ADB. 2012. *Technical Assistance for Enhancing Economic Analysis and South–South Learning.* Manila (TA 8254-REG).
2. Manufacturing in the People’s Republic of China, Malaysia, and Viet Nam contributes 25% or more to their GDPs.
6. Nodes refer to clustered geographic points along the corridor targeted for development.
7. VCIC’s conceptual development plan is available on GoAP’s website:
5. **Targeted investment for transformational growth.** The VCIC approach to industrial development is to build on the existing concentration of economic activity and target investments and policies to increase the density and flow of economic activities. The strategy includes investments in (i) a multimodal transport network for moving goods and people efficiently, (ii) world-class infrastructure for economic nodes and cities, and (iii) logistics infrastructure to support high-volume trade. It also contributes to the Government of India’s “Make in India” initiative, which seeks to promote industrial development and jobs creation.

6. **Regional cooperation.** The VCIC covers more than 800 kilometers of the state’s coastline and is part of the East Coast Economic Corridor, India’s first coastal economic corridor. It is poised to play a critical role in driving India’s new “Act East Policy,” a proactive initiative to integrate the Indian economy with the dynamic global production networks of Asia. As a coastal corridor, the VCIC can provide multiple access points to international gateways. Greater connectivity and economic integration between South Asia and the rest of Asia is likely to contribute significant benefits and foster regional cooperation.³

7. **Alignment with ADB’s partnership strategy.** The proposed program is in line with ADB’s country partnership strategy for India.⁹ The program is included in India’s country operations business plan, 2016–2018.¹⁰

B. **Impact, Outcome, and Outputs**

8. The program will comprise (i) the VCIC development PBL and an attached technical assistance, and (ii) the VCIC development MFF.¹¹ The expected impact of the PBL and the MFF will be an increased contribution of the manufacturing sector to the state’s GDP, trade, and employment, aligned with the National Manufacturing Policy and the Government of India Trade Policy (2015–2020). The expected outcome of the PBL and the MFF will be enhanced growth and competitiveness of the VCIC. The PBL will support output 1, and the MFF will support outputs 2 and 3.

9. **Output 1: Ease of doing business improved.** This will include (i) a strategic road map and support to enhance the ease of doing business; (ii) an e-portal and a single-desk system for issuing business-related licenses, with incentives for women entrepreneurs; (iii) industrial and sector policies to stimulate industrial development, with fiscal incentives and special packages for women; and (iv) improvement in trade facilitation and logistics.

10. **Output 2: Visakhapatnam–Chennai Industrial Corridor infrastructure strengthened.** This will include the development of (i) internal roads, water supply, sewerage, and drainage in selected industrial clusters; (ii) roads for connectivity between industrial nodes, ports, and urban areas, and road safety measures; (iii) the power transmission and distribution system in the industrial corridor; and (iv) urban water supply in Visakhapatnam.

11. **Output 3: Institutional capacities, human resources, and program management strengthened.** This will include (i) capacity development of institutions engaged in corridor...
management; (ii) establishment of project development facility; (iii) skills enhancement of workers and entrepreneurs, especially women; (iv) support for project management; and (v) support for investor promotion.

C. Investment and Financing Plans

12. The PBL of $125.0 million will have two tranches of $62.5 million each. The MFF of $715.0 million will have two tranches. The proposed financing plan is in Table 1.

Table 1: Program Cost, Investment and Financing Plan

<table>
<thead>
<tr>
<th>Source</th>
<th>Program Amount ($ million)</th>
<th>Share (%)</th>
<th>MFF Amount ($ million)</th>
<th>Share (%)</th>
<th>Total Amount ($ million)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Development Bank</td>
<td>125.0</td>
<td>100.0</td>
<td>500.0</td>
<td>70.0</td>
<td>625.0</td>
<td>74.4</td>
</tr>
<tr>
<td>Government</td>
<td>0.0</td>
<td>0.0</td>
<td>215.0</td>
<td>30.0</td>
<td>215.0</td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>715.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>840.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

MFF = multitranche financing facility.
Source: Asian Development Bank estimates.

D. Indicative Implementation Arrangements

13. The State of Andhra Pradesh, through its Department of Industries (DOI), will be the executing agency; and the Directorate of Industries will be the implementing agency for both the PBL and the MFF. Project implementation units (PIUs) will be established in Andhra Pradesh Industrial Infrastructure Corporation, Andhra Pradesh Road Development Corporation, Andhra Pradesh Power Transmission Company, and Greater Visakhapatnam Municipal Corporation; and will be responsible for implementing the MFF. The DOI will recruit consulting firms in accordance with ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time). Procurement of civil works and goods will be carried out in accordance with ADB’s Procurement Guidelines (2015, as amended from time to time).

II. TECHNICAL ASSISTANCE

14. A technical assistance (TA) grant is proposed for Capacity Development of Institutions for Industrial Corridor Management in Andhra Pradesh to support program implementation, especially the policy actions. The TA, estimated to cost $1.0 million will have the following outputs: (i) institutions for corridor management strengthened, (ii) ease of doing business improved, and (iii) capacity building support provided.\(^\text{12}\)

III. DUE DILIGENCE REQUIRED

15. Due diligence will include the following:

(i) **Technical.** As the MFF involves subprojects from several sectors, due diligence will be carried out for each subproject to ensure technical feasibility and suitability for the VCIC in terms of impact on the VCIC’s competitiveness and appropriateness of technology.

(ii) **Economic and financial.** Economic and financial analyses and a financial management assessment of the key agencies will be carried out to determine the

\(^{12}\) The TA will be financed from ADB’s Technical Assistance Special Fund (TASF-Others).
financial viability and sustainability of the PBL and the MFF.

(iii) **Governance.** A governance risk assessment will be carried out for public financial management, procurement, anticorruption, policy, and legal issues.

(iv) **Poverty and social.** The PBL and tranche 1 of the MFF are classified “effective gender mainstreaming.” An initial poverty and social assessment has been prepared (Appendix 3). Due diligence will be carried out to prepare a gender equality and social inclusion action plan and a consultation and participation plan.

(v) **Safeguards.** Tranche 1 of the MFF is provisionally categorized A for involuntary resettlement, B for environment, and B for indigenous peoples. The PBL is provisionally categorized C for involuntary resettlement, environment, and indigenous peoples. Necessary safeguards documents will be prepared in accordance with the ADB’s Safeguard Policy Statement (SPS, 2009).

(vi) **Climate change and disasters.** Due diligence will be carried out for disaster and climate change risk assessment, considering the vulnerability of the coastal areas to climate change and natural disasters.

### IV. PROCESSING PLAN

#### A. Risk Categorization

16. The program is categorized complex as the loan amount exceeds $200 million for the MFF and $50 million for the PBL, and the safeguards categorization for tranche 1 of the MFF is provisionally A for involuntary resettlement.

#### B. Resource Requirements

17. Program preparatory activities are under implementation. The estimated internal resource requirements are: 3 months for mission leader; and 1.5 months each for transport specialist, energy specialist, economist, financial management specialist, environmental safeguards specialist, social safeguards specialist, project implementation specialist, and counsel.

#### C. Processing Schedule

18. The proposed processing schedule is in Table 2.

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact-finding mission</td>
<td>Q4 2015</td>
</tr>
<tr>
<td>Management review meeting</td>
<td>March/April 2016</td>
</tr>
<tr>
<td>Loan negotiations</td>
<td>March/April 2016</td>
</tr>
<tr>
<td>Board consideration</td>
<td>Q2 2016</td>
</tr>
<tr>
<td>Loan signing</td>
<td>August 2016</td>
</tr>
<tr>
<td>Loan effectiveness</td>
<td>November 2016</td>
</tr>
</tbody>
</table>

Source: Asian Development Bank estimates.

### V. KEY ISSUES

19. The GoAP has undertaken preparation of detailed project reports from its own resources, and has requested early processing and quick implementation of the proposed program. The MFF, which is multidisciplinary in nature, will require strong support from stakeholders both in the GoAP and ADB.
### DESIGN AND MONITORING FRAMEWORK

**Impacts the Program is aligned with:**

Growth of the manufacturing sector increased in VCIC (Government of India National Manufacturing Policy [2011]a and VCIC’s conceptual development plan)b  
Rate of job creation increased in VCIC (Government of India National Manufacturing Policy [2011]a and VCIC’s conceptual development plan)b  
Growth of foreign trade accelerated (Government of India Trade Policy [2015–2020])c

<table>
<thead>
<tr>
<th>Program Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>By 2025:</td>
<td>For all indicators: Annual economic surveys of the state; annual reports of the GoAP, DOI, and PIUs; QPRs</td>
<td>Inadequate investments by the government in critical projects in VCIC</td>
</tr>
</tbody>
</table>
| Growth and competitiveness of the VCIC enhanced | a. Manufacturing sector output in VCIC increased to Rs4.2 trillion ($64 billion) (2015 baseline: Rs1.1 trillion [$16.2 billion])  
b. Labor productivity of key industriesa in VCIC increased to Rs2.6 million per employee (2015 baseline: Rs2.3 million per employee)  
c. Share of women employed in manufacturing sector in VCIC increased to 33% (2015 baseline: 28%)  
d. 24-hour power supply made available to 100% of manufacturing firms in VCIC (2015 baseline: 98%)  
e. 24-hour drinking water supply provided to 64,800 households and nonrevenue water reduced to less than 15% in project area in Visakhapatnam (2015 baseline: 0 for 24-hour supply and 50% for nonrevenue water) | | Lack of coordination among various PIUs |
| **Outputs**            | By 2024: | | Increased competition from other states in attracting investors |
| 1. Ease of doing business improved | 1a. State’s rating improved to more than 75% and rank remains in top three states in Ease of Doing Business (2015 baseline: rating of 70.12% and rank of 2 out of 32 states in the country as per the World Bank Ease of Doing Business report)  
1b. New e-portal and single-desk system operational for issuing business-related licenses (at least 20% women applicants) (2015 baseline: not applicable)  
1c. New industrial and sector policies notified and implemented with fiscal incentives and special | 1a. World Bank Ease of Doing Business reports | |
|                         | | For all indicators: Annual economic surveys of the state; reports on ease of doing business; progress reports and annual reports of the GoAP, DOI, and PIUs; QPRs | Lack of political will to continue reforms |
|                         | | | Insufficient trained personnel to operate e-portal |
|                         | | | Delays in legal processes for enforcement of contracts |

---

b. VCIC’s conceptual development plan  

---

**Appendix 1**
<table>
<thead>
<tr>
<th>Program Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting</th>
<th>Risks</th>
</tr>
</thead>
</table>
|                       | packages for women entrepreneurs (2015 baseline: Not applicable)  
1d. Cargo handled by ports increased to 370 MTPA for bulk and 0.95 million TEU for containerized goods (2015 baseline: 141 MTPA for bulk and 0.30 million TEU for containerized goods) | PIUs; QPRs; reports from industry associations |       |
| 2. Visakhapatnam–Chennai Industrial Corridor infrastructure strengthened | By 2024:  
2a. 45 km of internal roads improved, with gender-responsive design features and 47 km of storm water drains constructed in industrial clusters (2015 baseline: 0)  
2b. Four MLD common effluent treatment plants constructed in industrial clusters (2015 baseline: 0)  
2c. 123 km of pipelines, 27 MLD water treatment plants, and 9,100 million liters of storage tanks constructed in industrial clusters (2015 baseline: 0)  
2d. 93.6 km of roads widened, with gender-responsive design features (2015 baseline: 0)  
2e. 10 new power substations and 280 km of new transmission lines installed for industrial clusters using latest technologies (2015 baseline: 0)  
2f. 365 km new drinking water pipelines constructed or rehabilitated and 64,800 meters installed in Visakhapatnam (2015 baseline: 0) | For all indicators: Progress reports and annual reports of the GoAP, DOI and PIUs; QPRs | Inadequate allocation of power and water to meet industrial and urban demand  
Delays in land acquisition  
Low project development and readiness |
| 3. Institutional capacities, human resources, and program management strengthened | By 2024:  
3a. Corridor management institutions established and operational (2015 baseline: Not applicable)  
3b. Skill enhancement programs conducted for 5,000 workers and entrepreneurs (at least 20% women)  
3c. Satisfactory QPRs and audit reports submitted on time (gender-disaggregated data collected) | For all indicators: Progress reports and annual reports of the GoAP, DOI, and PIUs; QPRs | High turnover of DOI and PIU staff |
### Program Results Chain

<table>
<thead>
<tr>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3d. Gender equality and social inclusion plan and consultation and participation plan implemented on time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3e. Capacity development programs, including training on gender and monitoring of gender-disaggregated data, conducted for more than 500 staff of executing and/or implementing agencies (100% women staff participate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3f. Investor promotion plan developed and implemented on time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key Activities with Milestones

1. Ease of doing business improved
   1.1 Comply with tranche 1 policy-based loan conditions (March 2017)
   1.2 Comply with tranche 2 policy-based loan conditions (March 2019)

2. Visakhapatnam–Chennai Industrial Corridor infrastructure strengthened
   2.1 Award first civil works contracts (June 2017)
   2.2 Award all civil works contracts of tranche 1 (December 2018)
   2.3 Acquire land and implement resettlement plan (December 2018)
   2.4 Award all civil works contracts of tranche 2 (December 2020)
   2.5 Complete all construction and commission all facilities of tranche 1 (December 2021)
   2.6 Complete all construction and commission all facilities of tranche 2 (December 2024)

3. Institutional capacities and program management strengthened
   3.1 Initiate capacity-building activities of executing and/or implementing agency staff (January 2017)
   3.2 Deliver and evaluate training courses for skill enhancement (December 2020)

### Program Management Activities

- Establish project management unit with necessary staff (September 2016)
- Mobilize project management consultant and design and supervision consultant (March 2017)

### Inputs

<table>
<thead>
<tr>
<th>Loan</th>
<th>Government</th>
<th>Technical Assistance Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB: $625 million (policy-based loan of $125 million, MFF of $500 million)</td>
<td>$215 million</td>
<td>ADB: $1.0 million (TASF-Others)</td>
</tr>
</tbody>
</table>

### Assumptions for Partner Financing: Not applicable

ADB = Asian Development Bank, DOI = Department of Industries, GoAP = Government of Andhra Pradesh, km = kilometer, MLD = million liters per day, MTPA = million tons per annum, PIU = project implementing unit, QPR = quarterly progress report, TEU = twenty-foot equivalent unit, VCIC = Visakhapatnam–Chennai Industrial Corridor.


d The key industries are textiles, food processing, chemicals and petrochemicals, metallurgy, electronics, automobiles, and pharmaceuticals.

PROBLEM TREE

EFFECTS

- Low manufacturing output and low GDP of the state
- Low productivity and poor employment opportunities
- Increased pressure on existing urban and transport infrastructure

CORE PROBLEM

- Constrained growth and competitiveness of the manufacturing sector in VCIC

CAUSES

- Inadequate capacities
- Insufficient urban, transport and industrial infrastructure
- Complex processes of doing business

- Lack of proper institutions and skilled personnel
- Lack of capital investments
- Poor maintenance of existing infrastructure
- Absence of harmonized standards and guidelines, and lack of proper enforcement

- Lack of focus on skill development of personnel
- Limited focus on corridor management institutions
- Inadequate public sector funding
- Limited private sector participation
- Absence of harmonized standards and guidelines, and lack of proper enforcement

- Inadequate coordination with national institutions
- Poor integration with global production networks
- Unrealized latent potential of land
- Lack of willingness to charge and pay for services
- Inadequate user charges (e.g., urban services)

- Lack of focus on skill development of personnel
- Limited focus on corridor management institutions
- Inadequate public sector funding
- Limited private sector participation
- Absence of harmonized standards and guidelines, and lack of proper enforcement

- Multiple laws and regulations and overlaps for compliance
- Duplication of compliance effort by enterprises due to limited coordination among government agencies
- Absence of common monitoring standards and practices; manual compliance processing activities leading to delays

GDP = gross domestic product, VCIC = Visakhapatnam–Chennai Industrial Corridor.
INITIAL POVERTY AND SOCIAL ANALYSIS

| Country: | India |
| Project Title: | Visakhapatnam–Chennai Industrial Corridor Development Program |
| Lending/Financing Modality: | Multitranche Financing Facility and a Policy-Based Loan |
| Department/Division: | South Asia Department/Urban Development and Water Division |

### I. POVERTY IMPACT AND SOCIAL DIMENSIONS

**A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy**

The Government of India’s (GOI) 12th Five Year Plan, 2012-2017 calls for an inclusive approach to development, and stresses the need to improve infrastructure and reduce poverty in India's cities and towns. The country partnership strategy, 2013–2017 of the Asian Development Bank (ADB) for India is closely aligned with the plan, and aims to improve infrastructure and promote economic growth to provide employment. The GOI’s approach paper to the plan identifies infrastructure bottlenecks and lack of adequate long-term funds for infrastructure as key binding constraints to realizing more equitable and sustainable growth and bridging the division between regions, sectors, and peoples. The program is consistent with the country and ADB priorities, as it will indirectly contribute to poverty reduction in the state of Andhra Pradesh by support to the Government of Andhra Pradesh (GoAP) for infrastructure development, enabling policy, and institutional reforms to stimulate economic growth and employment generation. The program will support the GoAP in removing bottlenecks and enhancing the ease of doing business, which would make the Visakhapatnam–Chennai Industrial Corridor (VCIC) more competitive in attracting investments. ADB will also engage with the GoAP as a strategic partner for master planning and large-scale brownfield investments in the medium term and for developing new economic nodes or cities in the long term.

**B. Poverty Targeting**

- General intervention
- Individual or Household (TI-H)
- Geographic (TI-G)
- Non-Income MDGs (TI-M1, M2, etc.)

The program focuses on creating a globally competitive manufacturing sector supported by world-class infrastructure, logistics facilities, and a liberal policy regime that will support economic growth in Andhra Pradesh. It will help achieve higher levels of per capita income and greater opportunities for well-paid jobs for people, including the poor, vulnerable groups, and women. The proposed infrastructure investments will create a higher demand for skilled labor across multiple sectors. In coordination with Andhra Pradesh State Skill Development Corporation, the program will prepare a skill development road map for the state to cover capacity building of workers, entrepreneurs, and students, with special focus on women. In addition, citizens of the VCIC will benefit from adequate urban civic amenities, improved social infrastructure, higher incomes, and more job opportunities.

**C. Poverty and Social Analysis**

1. **Key issues and potential beneficiaries.** Andhra Pradesh, with an area of 160,205 square kilometers, is the 8th largest state in India. It accounts for 4.08% of the country’s population, at 49.4 million, making it the 10th most populous state. Of the total state population, scheduled castes constitute 17.10% and scheduled tribes 5.33%. Unemployment in both urban and rural areas is high, and 9.20% of the population lives below the poverty line (rural and urban). The program is designed to support the Government of India’s gender development and poverty reduction strategy by (i) providing enhanced accessibility to various skill development and employment opportunities for all vulnerable groups, including women; (ii) engaging the indigenous population and ethnic minorities during project construction and operation; and (iii) increasing accessibility to improved amenities and services through inclusive development and sustained economic growth.

2. **Impact channels and expected systemic changes.** The program will have a direct impact on trade and commercial ventures, and specific industries being developed in the identified industrial nodes. Residents of the areas in the VCIC, including women, will benefit from positive changes through improvements in governance and accessibility to infrastructural amenities such as good roads; liberal taxation; reliable power; water supply; other municipal services; and transport facilities. Both direct and indirect growth opportunities will facilitate skill development and employability in the state, especially for women.

3. **Focus of (and resources allocated in) the PPTA or due diligence.** Adequate resources have been provided in the program preparatory technical assistance (PPTA) to carry out social and poverty analysis. Special efforts will be made in the project design to make the program pro-poor; socially inclusive through consultation with and the participation of major stakeholders; and to incorporate activities, opportunities, and strategies in the project design that are pro-poor, benefit women and children, and address their concerns. Measures will be included to encourage hiring of the local population during implementation, and providing equal job opportunities to men and women. Relevant issues will be identified by the civil society organizations (CSOs), nongovernment organizations (NGOs), and self-help groups at the grassroots level, as needed.
4. Specific analysis for policy-based lending. The policy-based lending will enable policy, institutional, and governance reforms to promote accelerated industrial development. This, in turn, will encourage skill development, increased employability of the local population, and multisector interventions for inclusive economic growth and social development.

II. GENDER AND DEVELOPMENT

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project or program? Women, especially from indigenous communities and other vulnerable groups, are likely to face marginalization if the program design fails to take into account gender issues and concerns, especially involuntary displacement. The program impact zone is vulnerable to coastal disasters and other climate change impacts, and women and children are likely to face the maximum impact of hardships resulting from disasters.

2. Does the proposed project or program have the potential to make a contribution to the promotion of gender equity and/or empowerment of women by providing women’s access to and use of opportunities, services, resources, assets, and participation in decision making? Yes ☐ No ☐ The program will improve skill development; employability of women; and provide better connectivity to health services, higher levels of education, economic opportunities, and social infrastructural facilities for women. This will encourage financial and socioeconomic empowerment, and inclusion in the mainstream development process. Women will also be encouraged to take an active role in the program design phase, during information dissemination, community consultation, operation and maintenance of civic infrastructures, and overall implementation monitoring to ensure the inclusion of gender-specific issues and concerns. A gender equality and social inclusion (GESI) action plan will be prepared to ensure the participation of women and socially excluded groups in the program, and adequate resources and an implementation mechanism will be provided under the program for effective implementation of the GESI.

3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality? Yes ☐ No ☐ During any resettlement planning, due diligence will be exercised to ensure that (i) women’s access to traditional livelihood opportunities, especially those linked to land rights and access to assets, are minimally affected; and (ii) permanent disruptions, if unavoidable, will have associated safety nets to bring the affected women to a similar position on the development curve, if not better, in the post-project period.

4. Indicate the intended gender mainstreaming category:
☐ GEN (gender equity) ☐ EGM (effective gender mainstreaming)
☐ SGE (some gender elements) ☐ NGE (no gender elements)

III. PARTICIPATION AND EMPOWERMENT

1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how they will participate in the project design. The program will prepare a consultation and participation plan focusing on (i) identification of stakeholders and target groups, and baseline surveys; (ii) key message selection and use of information, education, and communication programs; and (iii) outreach to communities, schools, slums, and workers through various media and consultation activities for sharing information and obtaining feedback to refine the program design and implementation, as appropriate. A GESI action plan will be prepared to ensure the participation of women and socially excluded groups in the program. The program strategy focuses on an integrated approach to industry, trade and corridor development, and management. Key stakeholders include the executing and implementing agencies of the GoAP, NGOs, community-based organizations (CBOs), cofinanciers, private sector entrepreneurs, affected people including the poor, women, children, indigenous peoples, ethnic minorities, the media, and public and political representatives.

2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries, particularly the poor, vulnerable and excluded groups? What issues in the project design require participation of the poor and excluded? The economic and social benefits of development depend on the capacity of the service providers to offer equitable services successfully to all sections of the community and the ability of the community to access such services. Consultation with all social groups, especially with marginalized and excluded communities, will inform on issues associated with voluntary or involuntary resettlement and other social issues such as HIV/AIDS, human trafficking, child labor, environment and social safeguard issues, as well as disclosure of information.

3. What are the key, active, and relevant civil society organizations in the project area? What is the level of civil society organization participation in the project design?
☐ Information generation and sharing ☐ Consultation ☐ Collaboration ☐ Partnership
The number of active CSOs, in terms of presence and involvement, in different social issues is quite high in the state. Their participation in the Program design and implementation is crucial for information dissemination; facilitating collaboration with community units and structures; mobilizing support for the program; and encouraging positive public opinion by building partnerships, and creating an enabling environment for the consultations, meetings, and workshops and the successful participation and consequent community empowerment.

4. Are there issues during project design for which participation of the poor and excluded is important? What are they and how shall they be addressed? Yes ☐ No ☐ Inclusion of the socially excluded and poor is important: (i) the participation of women and the poor for access to urban services at an affordable cost, and (ii)
skill development for better job opportunities. The consultation and participation plan will be effectively designed and implemented to ensure widespread and meaningful participation of the poor and the excluded.

IV. SOCIAL SAFEGUARDS

A. Involuntary Resettlement Category

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>F</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic displacement?</td>
<td>Yes</td>
<td>No</td>
<td>The program is category ‘A’ for involuntary resettlement. The impacts of involuntary resettlement will be addressed through appropriate design and effective implementation of the resettlement plans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What action plan is required to address involuntary resettlement as part of the PPTA or due diligence process?</td>
<td>Resettlement plan</td>
<td>Resettlement framework</td>
<td>Social impact matrix</td>
<td>Environmental and social management system arrangement</td>
<td>None</td>
</tr>
</tbody>
</table>

B. Indigenous Peoples Category

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>F</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain?</td>
<td>Yes</td>
<td>No</td>
<td>The program is likely to be category C for indigenous peoples. Due diligence will be carried out to assess the impacts on indigenous peoples.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Will the project require broad community support of affected indigenous communities?</td>
<td>Yes</td>
<td>No</td>
<td>Due diligence will be carried out to assess the impacts on indigenous peoples.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What action plan is required to address risks to indigenous peoples as part of the PPTA or due diligence process?</td>
<td>Indigenous peoples plan</td>
<td>Indigenous peoples planning framework</td>
<td>Social Impact matrix</td>
<td>Environmental and social management system arrangement</td>
<td>None</td>
</tr>
</tbody>
</table>

V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design?

- Creating decent jobs and employment
- Adhering to core labor standards
- Labor retrenchment
- Affordability
- Increase in human trafficking
- Increase in vulnerabilities to natural disasters
- Creating political instability
- Creating internal social conflicts
- Others, please specify

2. How are these additional social issues and risks going to be addressed in the project design? Program designs will consider natural disasters and climate change vulnerabilities.

VI. PPTA OR DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the PPTA (or other due diligence) contain key information needed to be gathered during PPTA or due diligence process to better analyze (i) poverty and social impact; (ii) gender impact, (iii) participation dimensions; (iv) social safeguards; and (v) other social risks. Are the relevant specialists identified? | Yes | No | Program preparatory experts—including a social and gender expert and a social safeguards expert—have been mobilized to carry out due diligence. The team will ensure it is carried out in accordance with ADB procedures. |
| 2. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social and/or gender analysis, and participation plan during the PPTA or due diligence? Program preparatory experts—including a social safeguards expert, an environment expert, and a social and gender expert—have been mobilized to carry out due diligence. The team will ensure it is carried out in accordance with ADB procedures. Adequate resources have been provided to conduct surveys, consultations, and workshops.

---


c Determined by the Government of India at Rs1,000 monthly per capita expenditure for the urban population and Rs816 for rural areas (Government of India, Planning Commission. 2013. *Press Note on Poverty Estimates, 2011-2012*. Delhi.).