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ORISSA

# Investment Climate Assessment 2005



Finance and Markets  
South Asia Region  
The World Bank

Sector Development Unit

## Towards a High Performing State

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## INVESTMENT CLIMATE ASSESSMENT 2005

*Towards a High-Performing State*



Finance and Private Sector Development Unit  
South Asia Region  
The World Bank

## TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS .....	i
ACKNOWLEDGMENTS .....	ii
FOREWORD .....	iii
EXECUTIVE SUMMARY .....	iv
AT A GLANCE: INVESTMENT CLIMATE IN ORISSA .....	ix
MAP OF ORISSA .....	x
 <b>Chapter 1: ORISSA: BUILDING BLOCKS FOR REALIZING THE STATE'S POTENTIAL .....</b>	 <b>1</b>
Introduction .....	1
Performance and Structure of Industry .....	2
Investment and Productivity .....	4
Turning Over a New Leaf: Orissa Reform Vision and Strategy .....	6
Investment Climate Assessment .....	6
 <b>Chapter 2: OVERVIEW ANALYSIS OF ORISSA'S INVESTMENT CLIMATE .....</b>	 <b>10</b>
Introduction .....	10
Overview of Orissa's Investment Climate in Comparison with the Rest of India .....	11
Governance and Regulation .....	12
Provision of Infrastructure .....	15
Access to Finance .....	17
 <b>Chapter 3: REDEFINING THE ROLE OF THE STATE .....</b>	 <b>22</b>
Introduction .....	22
Access to Land: Environmental and Social Considerations .....	23
Skills and Training .....	24
Quality Standards .....	25
Technology Acquisition and Development .....	26
Calibrating the Role of the Government in the Economy .....	26
Conclusion .....	27
 <b>Chapter 4: CONCLUSION AND POLICY RECOMMENDATIONS .....</b>	 <b>31</b>
Introduction .....	31
Policy Recommendations I: .....	32
Streamline and Modernize Regulations and Improve Governance .....	32
Improving Infrastructure .....	34
Access to Finance .....	36
Policy Recommendations II: Rolling Back the State and Leveling the Playing Field .....	38
Rolling Back the State from the Remaining Sectors .....	38
Leveling the Playing Field .....	41
Policy Recommendations III: Strengthening State's Regulatory and Strategic Role .....	41
Resolving Environmental and Social Issues .....	41
Establishing Credibility and Tracking Reform Efforts .....	42
 Annex 1: Orissa Investment Climate Survey .....	44
Annex 2: Industry and Services in Orissa: A Sectoral Profile .....	46
Annex 3: Orissa IC Summary Tables .....	51
 BIBLIOGRAPHY .....	65

## ACRONYMS AND ABBREVIATIONS

ARR	Annual Revenue Requirement	NCDS	NabhaKrushna Choudhary
ASI	Annual Survey of Industries		Institute of Development
BDS	Business Development Services		Studies
CAGR	Compound Annual Growth	NGOs	Non-Governmental
	Rate		Organizations
C:D	credit:deposit ratio	NHAI	National Highway Authority of
CIFA	Central Institute of Freshwater		India
	Aquaculture	NSIC	National Small Industries
CII	Confederation of Indian		Corporation
	Industry	OERC	Orissa Electricity Regulatory
CMIE	Centre for Monitoring Indian		Commission
	Economy	OHPC	Orissa Hydro-Power
CRZ	Coastal Regulation Zone		Corporation
CSO	Central Statistical Organization	OMC	Orissa Mining Corporation
DFID	UK Department for	OSCHC	Orissa State Cooperative
	International Development		Handicrafts Corporation
DPRP	Drugs and Pharmaceuticals	OSEB	Orissa State Electricity Board
	Research Program	OSFC	Orissa State Financial
EDB	Economic Development Board		Corporation
FDI	Foreign Direct Investment	OSIC	Orissa Small Industries
FRAC	Food Research and Analysis		Corporation
	Centre	OTDC	Orissa Tourism Development
GDP	Gross Domestic Product		Corporation
GoI	Government of India	PPI	Private Participation in
GoO	Government of Orissa		Infrastructure
GRIDCO	Grid Corporation of Orissa	PPP	Public-Private Partnership
GSDP	Gross State Domestic Product	PSU	Public Sector Undertaking
GVA	Gross Value Added	R&D	Research and Development
ICA	Investment Climate Assessment	R&R	Resettlement and Rehabilitation
ICS	Investment Climate Survey	RBI	Reserve Bank of India
IDA	Industrial Development	RRL	Regional Rural Laboratory
	Authority	SCB	Scheduled Commercial Bank
IDCO	Industrial Development	SEZ	Special Economic Zone
	Corporation of Orissa	SIDBI	Small Industries Development
IMFA	Indian Metals and Ferro Alloys		Bank of India
IPICOL	Industrial Promotion and	SME	Small and Medium Enterprise
	Investment Corporation of	SOE	State-Owned Enterprise
	Orissa	SSI	Small-scale Industry
IPR	Industrial Policy Resolution	SWA/OSS	Single-Window Agency/One-
MIDA	Malaysian Industrial		Stop Shop
	Development Authority	TD	Tourism Department
MMTC	Minerals and Metals Trading	TFP	Total Factor Productivity
	Corporation	TISCO	Tata Iron and Steel Company
MOU	Memorandum of Understanding	TYFP	Tenth Five-Year Plan
MPEDA	Marine Products Export	UNIDO	United Nations Industrial
	Development Authority		Development Organization
NALCO	National Aluminium Company		

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## FOREWORD

**Orissa Investment Climate Assessment** (ICA) is the **first** full-fledged **subnational** ICA report undertaken by the World Bank (see box). The demand for a state-level ICA in India emerged out of the private sector development dialogue being carried out under the programmatic Orissa Development Policy Lending. The state-level counterparts are increasingly seeking the World Bank's assistance in developing investment climate strategies that offer a more comprehensive road map for reform. The nationwide India ICAs, covering a wide range of states, do not lend themselves to

focusing in depth on particular states, as they are predominantly diagnostic in nature. The value of a state-level ICA is that it provides the flexibility to use a mix of instruments to reflect the particular characteristics and needs of the state, and allows in-depth analysis leading to a richer menu of policy options for reform. It should be noted that Orissa was not covered in the previous two nationwide ICAs.

**Disclaimer:** The Government of Orissa's reform program under implementation is dynamic and evolving, and the document may not fully capture the most recent developments by the time it goes for publication.

### What Is an Investment Climate Assessment?

Investment climate assessments systematically analyze the conditions for private investment and enterprise growth in a country, *drawing on the experience of local firms to pinpoint the areas where reform is most needed to improve the private sector's productivity and competitiveness*. By providing a practical foundation for policy recommendations and involving local partners throughout the process, the assessments are designed to give greater impetus to policy reforms that can speed the private sector's growth, leading to faster economic growth and poverty reduction.

Produced by the World Bank Group in close partnership with a public or private institution in each country, the investment climate assessments are based on a survey of private enterprises to find out what difficulties they encounter in starting and running a business—and, if the business fails, in exiting. The survey captures firms' experience in a range of areas: financing, governance, regulation, tax policy, labor relations, conflict resolution, infrastructure services, supplies and marketing, technology, and training. All these are areas where difficulties can add substantially to the cost of doing business. The survey attempts to quantify these costs. Using a standard methodology, the assessment then compares the survey findings with those in similar countries to evaluate how the country's private sector is faring and how well it can compete.

The findings of the survey, combined with other relevant information from other sources, provide a practical basis for identifying the most important areas for reform aimed at improving the investment climate. *The assessments look in detail at policy, regulatory, and institutional factors that hamper the provision of good-quality infrastructure services and the functioning of product, financial, and other markets, linking the constraints to firms' costs and productivity.*

In each country/region, the investment climate assessments draw on the guidance and expertise of local partners in government and the business community. The findings and policy recommendations emerging from the assessments are discussed extensively with the private sector and other stakeholders in the country. This broad dissemination of the findings is aimed at engaging not only policymakers but also business leaders, investors, nongovernmental organizations, and the donor community in shaping the national private sector development strategy, forging consensus on the priorities for reform of the investment climate, and laying the groundwork for concrete responses to the problems identified. Updates of the assessment can help track progress in improving the investment climate.

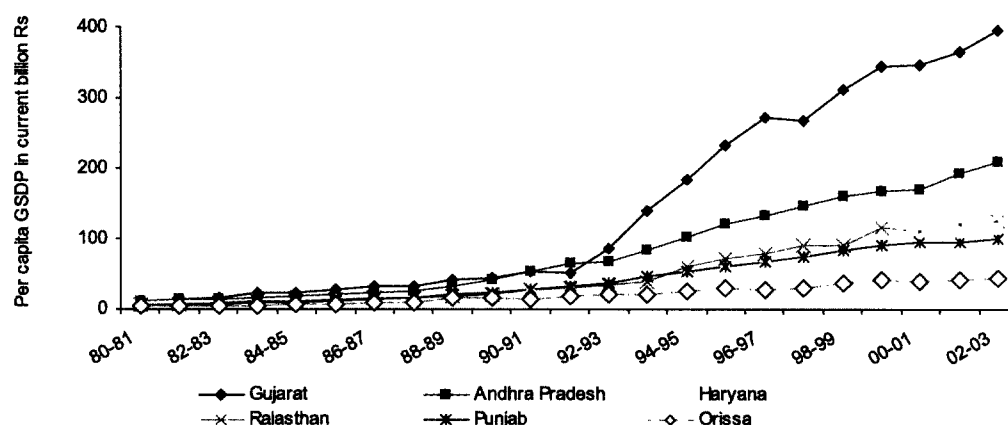
India, considered by many a rising giant, has experienced remarkable growth over the past two decades. While some states—such as Gujarat, Andhra Pradesh, and Karnataka—have grown fast; others, like Orissa, Uttar Pradesh, and Bihar, have lagged. The gap between the faster and slower growing states is widening over time. Reversing this trend has become a central focus of the Indian growth strategy. This requires a thorough understanding of the factors that are holding back the slow-growing states. Focusing on Orissa, one of the major poorest state, the study attempts to contribute to this understanding. This is the first subnational investment climate assessment (ICA) undertaken by the World Bank. By focusing on the dynamics of growth and the development of regions within a country, it may help (1) shed light on the kind of policies that can assist in the development of other lagging states in India, and (2) provide insights and lessons for subnational work in other countries.

## EXECUTIVE SUMMARY

1. Orissa is a land of unrealized potential. Situated along the eastern coast of the Indian peninsula, the state is endowed with rich mineral (metals and nonmetallic) resources, pristine beaches, forests and biodiversity, and a rich cultural heritage. Compared with many parts of India, Orissa enjoys political stability and law and order - critical factors for potential investors.

metric (incidence of poverty, infant mortality, literacy, and sanitation), Orissa's fortunes are at variance with those of high-performing states in India and comparable to those of low-income countries (table 1). Orissa is one of the least industrialized states in India and would be even less industrialized if not for a number of large mineral-based enterprises in the state. Orissa's manufacturing growth story is also one

Fig. 1 Growth Divergence – Orissa vs. Fast Growing States (1980-2003)



Source: Orissa Investment Climate Survey, The World Bank, 2004

2. Despite its promise, Orissa has the dubious distinction of being one of the poorest state in India. Half of Orissa's population of 37 million lives below the official poverty line. Annual per capita income in the state (about US\$250) is not much different from what it was 20 years ago. Many states that were equally poor in the early 1980s have marched ahead, leaving Orissa far behind (figure 1). On almost every development

of being left behind (figure 2). Investment and productivity remain low, with new private sector investments as a proportion of gross domestic product (GDP) much lower in Orissa compared with other Indian states. An average firm in Orissa is less productive than an average Indian firm, with the average manufacturing worker in the state earning 24 percent less than the average worker elsewhere in India.

**Fig. 2 Manufacturing GSDP: Orissa vs. Other States (1980/81-2002/03)**



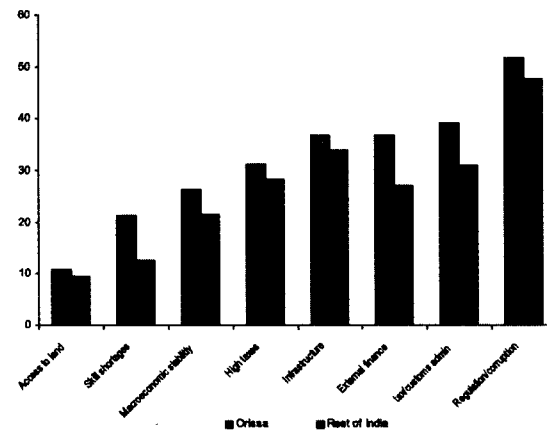
Source: Orissa ICS, The World Bank, 2004

3. There are many explanations for why Orissa lags behind other states. It suffers from disadvantageous initial conditions: poor social indicators, weak entrepreneurship skills, underdeveloped institutions, and the “bad neighborhood” effect of being surrounded by other lagging states. The effects of poor initial conditions have been compounded by deficiencies in the investment climate that affect *industrial growth and development through their influence on firm performance*. This report focuses on this important determinant of Orissa’s future. Although the term “investment climate” is often used broadly, here it is taken to mean the policy, regulatory, institutional, and governance environment that supports (or fails to support) entrepreneurship and efficient markets.

4. To better understand the factors that make it difficult for firms to do business in Orissa and that affect their productivity, the assessment uses micro-level data from a survey of more than 260 firms conducted in six urban centers in Orissa in 2004. The urban-based survey covered formal establishments, of which 90 percent were small and medium-sized enterprises (SMEs), in manufacturing (food processing, mineral processing, metal work and other industries) and the tourism sector. A separate survey of handicrafts, covering the informal sector, was also undertaken. The assessment of Orissa’s investment climate draws upon these surveys as well as sector-specific studies that provide further insight into investment climate issues.

5. *Key findings:* Like its counterparts in other states in India, Orissa’s business community is most concerned about the *governance* and *regulatory* aspects of the investment climate. More than half of the respondents in the Orissa survey identified *regulation* and *corruption* as major or severe bottlenecks to business operations or expansion. *Poor infrastructure* and problems of *access to finance* are next in order of importance as impediments to business operation and growth. A significant proportion of respondents complained about problems of *access to land* and *skill shortages*, which are compounded by the associated spillover effects that lead to a divergence between the private and social costs for firms (see figure 3).

**Fig. 3 Orissa – Major Bottlenecks in Investment Climate**



Source: Orissa ICS, The World Bank, 2004

6. The sector-specific analysis reveals that the Government of Orissa (GoO) maintains a significant role in the ownership and management of commercial and industrial enterprises in the strategic sectors of the economy. In addition, GoO attempts to provide many services that are not strictly of a “public good” nature. Such an extension in the role of the government has been motivated by a need to address the divergence between the interests of industry and those of society as a whole. Because of Orissa’s *natural resource endowments* and *backward economy*, the spillover effect of an individual firm’s actions on other firms and stakeholders outside the industry is likely to be even more pronounced. For example, exploitation of mineral resources has significant *environmental* and *social* implications. Similarly, a supply of poor-quality products by one firm may



adversely affect the prospects of an entire industry, especially in a sector such as food processing, where quality considerations are paramount. The backwardness of the Orissan economy means that there is much need for innovative activities (e.g., new products, new processes, and new markets) that could have significant positive spillover effects. However, firms are often reluctant to pursue innovative activities because they have to bear all the risks of failure and then share the benefits of success with many others; this attitude results in a lack of entrepreneurship. Firms have little or no compulsion to protect the environment, maintain product quality, and upgrade technologies.

7. In the past, GoO has attempted to address this challenge—to limit negative spillover and generate positive spillover—through direct participation in the productive sectors and by using the mechanism of direct support to private firms via protection and subsidies. But this model has been roundly discredited. Moreover, the significant role of the state in commercial activities has compromised the level playing field. For example, the differing rules of the game being applied to state-owned enterprises (SOEs) and private sector enterprises in mining may lead to crowding-out of the private sector. Moreover, the government involvement in running commercial enterprises (managing hotels, for example) may not be the most optimal use of scarce public sector resources and capacity. At the same time, the regulatory role of the state to limit negative spillover has not been discharged effectively because of weak implementation capacity and poor performance of environmental protection institutions.

8. *The case for investment climate reforms.* The analysis shows that the performance gap between industry in Orissa and its comparators has a great deal to do with differences in investment climate (IC). Adverse geography and the legacy of history partly explain Orissa's laggard status. But, as the experiences of other places show, these disadvantages can be offset by aggressive improvements in the investment climate. The policy message is clear. As one of the poorest state, Orissa cannot afford myriad and severe deficiencies in its business environment, especially when it is compared with regions that possess

natural or historical advantages that make them attractive to domestic and foreign investors. The case for improving the investment climate in low-growth or low-FDI (foreign direct investment) states is strong not only because their investment climate is bad but because IC improvements are the only way to offset inherent disadvantages over which they have no control.

9. *Policy recommendations.* To achieve an economic growth target of over 6 percent, a much higher level of private investment would be required; for that, significant improvements in investment climate would be a prerequisite. Recently, there has been increased private sector interest in large-scale investments, primarily in steel and other mineral based manufacturing. The most notable example of this being the planned US\$ 12 billion investment by the South Korean steel company POSCO - the largest ever foreign direct investment project in India. The real challenge is to sustain and manage the growing private investor interest towards achieving broad-based and inclusive economic growth. This would require addressing the barriers to investment faced by small and medium-scale enterprises (SMEs). Cognizant of this, GoO has initiated reforms in some key areas of IC constraints, including governance and regulation, and in the power sector. Some progress is being made but the initiatives are still at an early stage of implementation. Much more work needs to be done to build investor confidence.

10. Improving the investment climate will involve change in a comprehensive manner across sectors and institutions. In making investment and operational decisions, investors look at the package of reforms, not just individual actions or reforms. The analysis suggests that IC reforms in Orissa will have to be guided by three fundamental objectives: (1) reducing the regulatory uncertainty and the cost of doing business; (2) making the playing field more level; and (3) strengthening the state's regulatory and strategic role.

### **Reducing the regulatory burden and the cost of doing business**

11. *Streamline and modernize regulations and improve governance.* Priority areas for action include (1) making procedures for entry and exit of firms simpler and more transparent; (2) increasing accountability of government institutions and departments that enforce

and regulate industry in Orissa; and (3) modernizing and streamlining sector-specific regulations and laws.

- *Improving infrastructure*, particularly the reliability of power supply, roads, rural connectivity, railways, and port facilities. This is critical to reduce the cost of doing business and increase market access. Priority areas for action are (1) finalizing the draft policy framework for public-private partnership (PPP) that is currently under preparation; and (2) encouraging PPP in infrastructure, ownership, and management. However, the experience of PPP in other countries is mixed. Reducing regulatory uncertainty, particularly concerning the tariff regime, and strengthening independent regulators are the key policy reform areas for the medium term.

- *Improving access to finance*. While many of the policy recommendations relating to access to finance are dealt with at the central government level, particularly with regard to the policy/regulatory and institutional framework for SME financing, several enabling policies can be taken up at the state level to create a more conducive environment for market-based financing to SMEs by the formal financial sector. Possible medium- to long-term actions involve the following:

- Improving the credit evaluation and risk management skills of banks and other financing institutions to improve lending practices. This will involve building institutional capacity to reduce transaction costs and reduce/manage risks related to SME lending. A risk-sharing facility to accelerate commercial bank lending to SMEs could be explored wherein the facility could provide partial credit guarantees for commercial bank loans to SMEs.

- Improving credit information (positive and negative information) on SMEs through assistance to commercial banks and financial institutions to verify and collate historic data on SMEs.

- Addressing the problem of collateral by improving and updating land and property records, which currently impede the use of land as collateral, and promoting the use of collateral substitutes.

- In parallel, strengthening business development services and market linkage programs for SMEs, thereby helping SMEs improve their profitability and competitiveness, and become more creditworthy.

### **Making the playing field more level**

12. To ensure that the private sector plays the central role in investment and growth, direct state participation in economic activity needs to be further curtailed, through privatization, divestments, and/or withdrawing from the management role. In areas where public investments are deemed necessary (for instance, infrastructure-related enterprises), efficiency needs to be increased through private participation in infrastructure (PPI), an enhanced regulatory framework, and private management contracts.

13. Because government's role in commercial activity affects market competition, it is important to have greater transparency in the role of the government. Clear business objectives of government enterprises reduce conflicts of interest and increase the effectiveness of management. It would also help private sector businesses in Orissa if public sector competitors do not have any artificial cost advantages and there were more direct competition between the public and private sectors. International experience suggests that advocacy by government, civil society, and private sector participants, and the use of competition law are some of the ways that efficient and fair competition can be encouraged between public and private sector businesses. A detailed analysis of the role and interaction of the public enterprises with their private sector counterparts will help in designing specific solutions for improving the competitiveness, fairness, and, therefore, efficiency of businesses in Orissa.

### **Strengthening the state's regulatory and strategic role**

14. The rationalization of the role of government will also involve strengthening capacity in a number of areas related to public policy formulation and implementation. A major objective of this effort will be to encourage entrepreneurship, with firms having an incentive to protect the environment, maintain product quality, and upgrade technologies.

15. New and dynamic mechanisms for addressing the issue of technological, informational, and coordination externalities need to be devised. As opposed to the earlier model of direct support to firms in the area of skills development, technology upgrades, and quality assurance, the state must play a more *strategic role in coordinating and bringing together different public and private stakeholders* to address these issues.

16. Building capacity for effective enforcement of environmental protection legislation and regulations, and the adoption and implementation of clear resettlement and rehabilitation (R&R) policies are needed, especially if investment is to be encouraged in the sectors in which Orissa is deemed to have a comparative advantage (i.e., mining, mineral-based manufacturing, tourism, and marine-based industries). Based on close stakeholder consultation and consensus, GoO needs to finalize and implement the draft R&R policy, and raise the capacity and performance of environmental protection institutions.

17. In carrying out the program of investment climate reform, three things will have to be kept in mind:

- While it is important to reduce the costs, risks, and barriers faced by private investors, it is also critical to *strike the right balance between private and social interests* so that both interests are mutually reinforced and growth is equitable and inclusive. The task of balancing private and social interests is a particular challenge for Orissa because of its legacy of mining and industrial development in the 1960s–1970s, which caused significant environmental degradation and social deprivation and continues to cause doubts about the broad-based benefits of the investment and growth agenda. Demonstrating the ability of government institutions to resolve this conflict for future

investments will be key to creating a more balanced and stable economy.

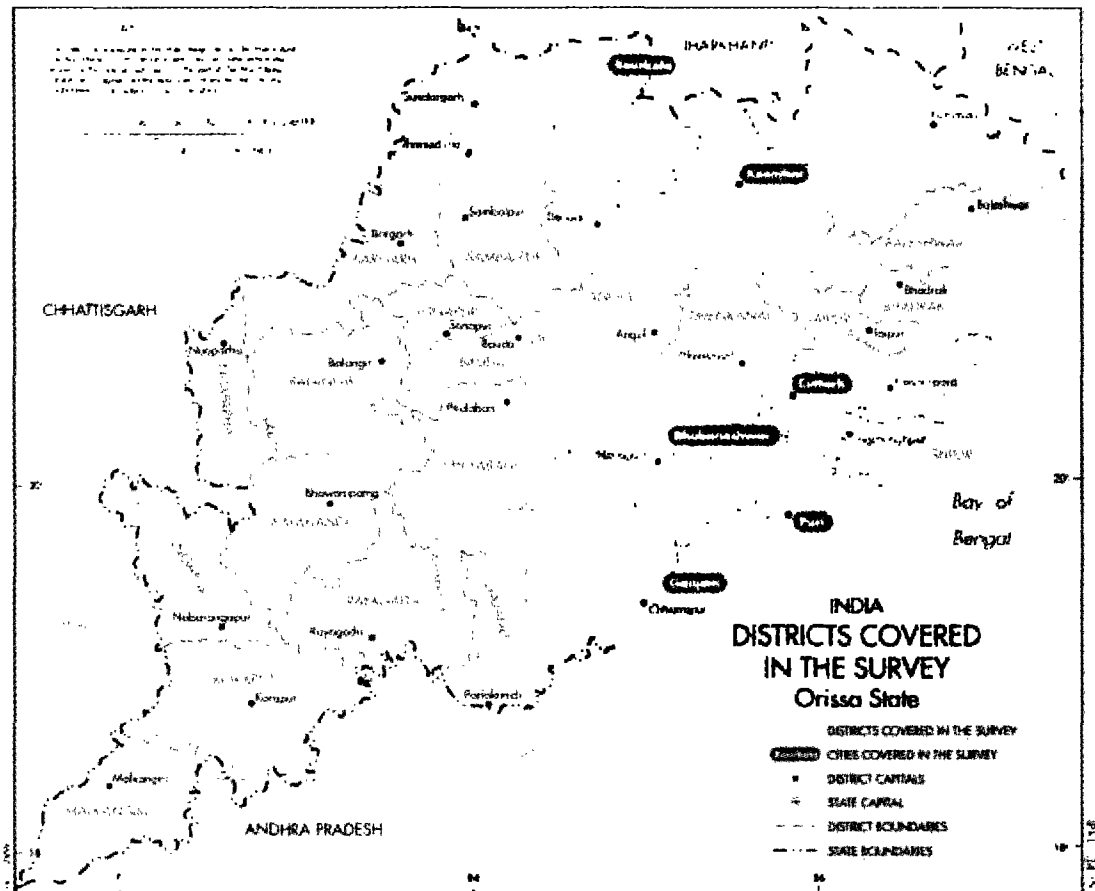
- While there is a need for a comprehensive action plan, both the implementation capacity of government and the political economy of reforms will require appropriate *prioritization of reforms* with a clear identification of short-, medium-, and long-term actions. Building capacity in the public sector to analyze IC issues and formulate and implement policies will have to be an integral part of the reform process.
- Since investment decisions have long-term implications, the *credibility of policies and reform programs is key*. The investment decisions of firms are affected by their confidence in government policies. Thus, the policymakers must put their full force behind a *speedy and robust implementation* of the reforms, by developing a credible action plan with time-bound outcomes and a monitoring mechanism to track reforms. When a government effectively delivers what it promises, public trust and the legitimacy of the government are fostered, and this influences the location decisions of firms. By focusing on picking the “low-hanging fruit,” GoO can regain credibility that has eroded over time, with both the private sector and the public at large. Obtaining feedback from the private sector in both the reform formulation stage and the implementation stage, and acting on this feedback, is very important for credibility. Strengthening capabilities in government to administer and guide reforms will underpin successful implementation.

18. To catch up with the high-performing states and counter its “image” problem, Orissa must step up its reform efforts and establish credibility. With a renewed mandate to reform and consensus among key players to capitalize on the state’s rich potential, the timing is right to forge ahead.

# AT A GLANCE: INVESTMENT CLIMATE IN ORISSA

	Orissa	India
<b>Macro environment</b>		
GSDP/GNP per capita, 2002 (US\$)	250	470
Population, midyear 2000 (millions)	37	1016
GDP growth, 1991–2000 (avg %)	4.1	6.1
<b>Social indicators</b>		
Poverty headcount, 1999–00 (%)	47	26
Infant mortality rate, 1999–00 (per 000 live births)	81	68
Prevalence of underweight children, 1999–00 (%)	54	47
Access to water, 1999–00 (%)	65	78
Literacy rate, 1999–00 (%)	64	65
FDI inflows, 2000–01 (net, %GDP)	0	0.7
<b>Governance</b>		
Number of visits by government officials, average per year	12.1	6.7
% of senior manager time with government officials (SMEs only)	13.3	11.9
<b>Infrastructure</b>		
Share of firms with own generator, %	60	61
Telephone lines, March 2003 (per 1,000 people)	2.2	5.1
<b>Entry/Exit and Operation</b>		
Median number of days to start a business (January 2004)	79	89 (Mumbai)

# MAP OF ORISSA



## CHAPTER 1

### ORISSA: BUILDING BLOCKS FOR REALIZING THE STATE'S POTENTIAL

*With its abundance of mineral resources, long coastline and inland waters, the biodiversity of its forests, and a rich cultural heritage, Orissa ought to become a privileged destination for industrial investment.*

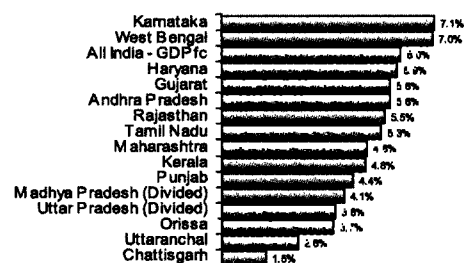
Industrial Policy of Orissa, Government of Orissa, 2001

#### I. INTRODUCTION

1.1 *Land of plenty yet poor outcomes.* The striking and paradoxical feature of India's eastern coastal state of Orissa is its overwhelming poverty and low growth rate, juxtaposed with its rich endowments that remain largely untapped. Orissa is rich in mineral resources,<sup>1</sup> possesses significant tourism potential,<sup>2</sup> and has promising prospects in marine-based and agro-processing industries. Some would also argue that the state's geographic proximity to Southeast Asia, combined with its low-wage labor, could make it an attractive platform for export-oriented growth. Compared with many parts of India, the state enjoys political stability and law and order—critical factors for potential investors. Yet new private sector investment as a proportion of GDP is much lower in Orissa than in other Indian states.

1.2 *Bottom of the rung among Indian states.* Orissa is one of the poorest states in India, with a growth performance that continues to lag behind the all-India average (figure 1.1). Half of Orissa's population of 37 million lives below the official poverty line.

Fig 1.1 Real GSDP Growth Rates: 1993/94-2002/03



Source: Central Statistical Organization

Annual per capita income in the state (about US\$250) is the same as that in Andhra Pradesh and Gujarat almost 20 years ago. The state lags the rest of the country on most indicators of human development and is comparable to a low-income country. Regional disparity is marked, with a relatively well-off coastal area that has historically benefited more from trade and public investment and an extremely poor and isolated interior, populated largely by tribal forest dwellers.

1.3 *Despite recent improvements,<sup>3</sup> the challenges remain significant.* As table 1.1 indicates, the overall gross state domestic product (GSDP) growth rate falls far short of the 6.2 percent target set for the 2002-07 period by the Government of Orissa (GoO)<sup>4</sup> and the all-India average target of 8 percent GDP growth per year over the next decade. Growth is also limited to a few sectors. Given the disparity within the state, *broad-based growth is key.* This will require

Table 1.1 Orissa Real GSDP Growth Rates (%)

	1993/4- 1997/98	1997/98- 2003/04	1993/94- 2003/04 CAGR
<b>Agriculture and allied</b>	1.6	0.7	1.1
Agriculture	1.0	0.5	0.7
Forestry and logging	2.1	2.5	2.3
Fishing	9.2	1.4	4.5
<b>Industry</b>	4.9	4.7	4.8
Mining and quarrying	13.2	6.9	9.4
Manufacturing	3.1	5.1	4.3
Registered	1.3	8.1	5.3
Unregistered	8.5	-5.1	0.1
Construction	2.8	1.3	1.9
Electricity, gas and water supply	-1.0	4.4	2.2
<b>Services</b>	7.3	6.5	6.8
<b>State domestic product</b>	4.5	4.2	4.3

Source: CSO, CAGR estimates

growth in agriculture, among other things.<sup>5</sup> However, the prospects for agriculture to grow at a dynamic and sustainable rate are not particularly bright, given the state's vulnerability to droughts and floods.<sup>6</sup> Many argue that Orissa should strive to reduce its dependence on agriculture, but given the current level of dependence, any vision of overall growth cannot discount the importance of this sector. A key element of the strategy for agricultural growth may involve diversification away from water-intensive rice cultivation to cash crops and horticulture, and enhanced focus on the development of agro-processing industries, removal of regulatory constraints on private investment in marketing yards and storage facilities, investment in irrigation, and better roads.<sup>7</sup>

1.4 *A more dynamic and sustainable strategy for getting Orissa out of the poverty trap calls for creating opportunities away from agriculture and toward the nonagricultural sector, particularly industry.* Sustained agricultural growth itself may require growth in industry; this is particularly true if a strategy of agricultural diversification is to be followed, including the development of an agro-processing industry. More significantly, industrial growth may be needed to raise overall productivity in the state.

1.5 Mirroring the overall growth trends in Orissa, the industrial development record has been less than stellar, with low investment and productivity levels.<sup>8</sup> Why Orissa's potential has not been effectively realized is a puzzle that plagues government and researchers alike. There is no dearth of explanations, ranging from disadvantageous initial conditions of poor social indicators, weak entrepreneurial skills, underdeveloped institutions,<sup>9</sup> and the "bad neighbor" effect of being surrounded by other lagging states.<sup>10</sup> The effects of poor initial conditions have been compounded by deficiencies in the investment climate that affect *industrial growth and development through their influence on firm performance*. This report focuses on this important determinant of Orissa's future, and argues that *the key economic institutions and policies shaping the investment climate in Orissa have led to a pattern of development that manifests*

*itself in low-equilibrium outcomes and a vicious cycle of poverty.* Although the term "investment climate" is often used broadly, here it is taken to mean the policy, regulatory, institutional, and governance environment that supports (or fails to support) entrepreneurship and efficient markets. When making investment decisions, firms of all types and sizes look at these measures as part of an overall package— including regulation and taxation, provision of infrastructure such as electricity, telecommunications, and roads; the functioning of markets for finance and for labor; and governance, including corruption— that shapes the attractiveness of a particular investment opportunity. These factors affect the opportunities and incentives facing a firm through their influence on three key but interrelated dimensions: costs, risks, and barriers to competition. All three matter for firms—and for growth and poverty (WDR 2005).

1.6 Section II of this chapter provides a brief background on the performance and structure of industry in Orissa, and the role of the private sector in the state's economy. The focus of the discussion in section III is on private sector investment and productivity levels in Orissa in comparison with the rest of India. Section IV spells out the state's vision and strategy for broad-based growth, given the multifaceted challenges at hand. Section V sets the investment climate framework.

## II. PERFORMANCE AND STRUCTURE OF INDUSTRY

1.7 Orissa is one of the least industrialized states in India and would be even less so if it were not for a number of large mineral-based enterprises in the state (table 1.2).

Table 1.2: Orissa: Less Industrialized Than the Rest of India

Percentage share of GDP, 2000-01	Orissa	India
Agriculture	24.7	22.2
Mining and quarrying	8.0	2.3
<b>Manufacturing</b>	<b>9.5</b>	<b>17.2</b>
Trade, hotels and restaurants	10.4	14.6

Source: Orissa ICS, The World Bank, 2004

1.8 *Industrial growth and structure.* Industrial growth in Orissa was modest to poor during the 1960s and 1970s, but it accelerated in the 1980s. Cognizant that relying on agriculture alone could not possibly get Orissa out of its cycle of abject poverty, successive governments actively encouraged industrial growth through a succession of industrial policies,<sup>11</sup> and campaign slogans such as “1000 industries in 1000 days using 1000 crores.”<sup>12</sup> The state-led industrialization strategy was based on liberal provision of a variety of incentives—mainly in the form of subsidized capital and power—and administrative measures to expedite assistance to large and medium-scale industries through various promotional agencies. The strategy did not encourage sustainable industrial growth but led to rent-seeking by influential firms and public officials, and consolidation of the power of vested interests. The growth that ensued was predominantly artificial or inefficient. No surprise then, that after the onset of liberalization in the 1990s, industrial growth slowed down considerably,<sup>13</sup> and many industrial units were declared “sick” (table 1.3).

**Table 1.3: Small Scale Industries in Orissa (1995-2003)**

Year	SSI Units Set Up (cumulative)	Investment (Rs. in crore)	Number of SSI Units Identified as Sick (cumulative)
1995-96	49,589	74.82	1,458
1996-97	52,687	104.53	1,464
1997-98	55,873	134.09	1,489
1998-99	59,057	190.06	1,493
1999-00	62,530	162.94	1,508
2000-01	66,206	153.18	1,519
2001-02	70,125	165.23	1,524
2002-03	74,133	155.14	1,527

Source: Economic Survey Of Orissa 2003/04, Directorate of Industries, Orissa

1.9 The slowdown in growth in the 1990s was widespread, with the broad sectors of the state's economy—agriculture, industry, and services— all registering lower growth (table 1.4). The decline was sharpest in the case of

industry. After rising in the 1970s and 1980s, the share of industry in GSDP in Orissa stagnated in the 1990s at around 27 percent .

**Table 1.4 : Orissa's Economic Growth, 1980s and 1990s (%)**

	Annual Growth Rate*		Contribution to Growth	
	1980-89	1991-00	1980-89	1991-00
<b>Primary</b>	2.8	2.0	41	20
Agriculture and livestock	3.1	0.5	35	1
Fishing and forestry	- 0.9	2.4	-	4
Mining and Quarrying	9.7	11.6	6	15
<b>Industry</b>	7.1	3.7	22	20
<b>Services</b>	7.5	6.6	37	60
<b>Total GSDP</b>	5.0	4.1	100	100

Notes: \*Trend rates using a semi-log regression on GSDP data at 1993/94 prices

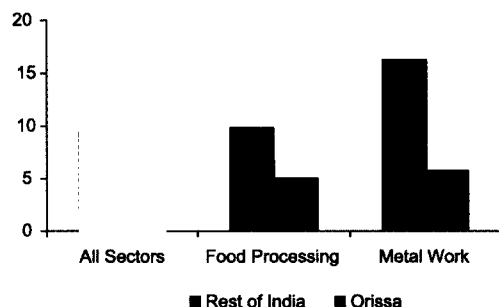
Source: CSO data

1.10 Mining and nonagricultural primary activities—which include forestry, fishing, and aquaculture—are the only subsectors of the economy that grew faster in the 1990s than in the previous decade. Limited backward linkages of some of these subsectors have restricted the impact on employment and poverty in the state.

1.11 The slow growth of industry is confirmed by the firm-level Orissa Investment Climate Survey (ICS) carried out for this report (annex 1).<sup>14</sup> The average manufacturing business covered by the Orissa ICS grew at an annual rate of only 4.6 percent in the two years leading up to the survey, against a corresponding growth rate of 9.6 percent in a similar survey that covered 12 other Indian states (figure 1.2). Similar gaps are observed even when the comparison is confined to the two industries covered commonly by the two surveys. Thus, the differences in growth rates cannot be explained by sector-specific variables but by state-specific ones. The IC work shows that differences in rate of investment in fixed assets have less to do with the contrast between the growth performance of industry in Orissa and that in the rest of India than with differences in total factor productivity (TFP) growth rates.



**Figure 1.2 Annual business sales growth rates (%):  
SMEs only**



Source: Orissa ICS, The World Bank, 2004.

1.12 *Narrow industrial base.* Orissa's dependence on its rich mineral resource endowments and its failure to diversify are reflected in its industrial structure. A few sectors account for the bulk of industrial activity. In 1996-97, basic metals and alloys led the list, accounting for 48 percent of gross value added (GVA). The top five two-digit categories accounted for as much as 89 percent of GVA.<sup>15</sup>

1.13 *Significance of mines and minerals.* Orissa has significant geological potential and is sixth in overall production of minerals in India.<sup>16</sup> The state accounts for almost all of India's chromite production and a little less than three-fourths of its bauxite output. Orissa has important reserves of manganese ore and nickel and is likely to have major resources of base metals and diamonds. The mines and minerals sector has grown fairly rapidly in recent years; between 1991-92 and 2000-01, the annual growth rate of this sector was 10.4 percent, compared with 4 percent for the rest of India.<sup>17</sup>

1.14 Even though Orissa is richly endowed in minerals, the mineral riches have not helped development in the state. Like other extractive industries, mining tends to be capital-intensive, to rely on a small number of skilled workers, and to be geographically concentrated. Hence, it cannot have much direct impact on poverty reduction. However, mineral riches can help

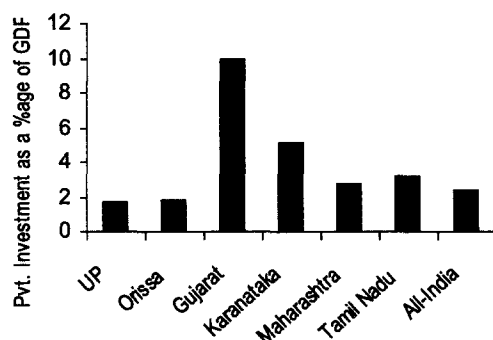
reduce poverty indirectly in two ways: (1) by catalyzing growth in downstream (e.g., sponge iron) and upstream (e.g., mining equipment) industries; and (2) by generating revenues that can be used by government to improve the investment climate; for example, by funding infrastructure development. Successive governments in Orissa have taken the view that mining is not an industry that can make a direct significant contribution to Orissa's growth and poverty alleviation, and that mining development would be of little benefit for the development of the state unless it is directly linked to downstream industrial activities. However, these expected activities have not materialized on a significant scale. Backward links have been limited partly as a result of the central government's freight equalization policy, which subsidized buyers of mineral inputs for transport costs, thus inadvertently encouraging them to set up mineral-processing units near market centers outside Orissa. With the removal of this freight equalization, there is now greater incentive for private mining investors to set up processing units near the mines in the state.<sup>18</sup>

1.15 The emphasis on the development of ancillary industries has led to the neglect of another route through which the mining sector could have an impact on growth and poverty reduction. An aggressive desire to catalyze ancillary industries may have prevented the development of a political will that was necessary to reform the mining sector. Without this reform, Orissa lacks the appropriate environment to attract the private investment badly needed for the mining sector to become a driver of development in the state. However, with such large mineral reserves, mining occupies an important position in the state's growth vision. Despite its mining tradition, Orissa is still a relatively unexplored state.

### III. INVESTMENT AND PRODUCTIVITY

1.16 *Private investments low.* A major factor explaining the poor industrial growth performance in Orissa is low levels of investment and productivity. Figure 1.3 suggests that new private sector investment in medium-to-large projects in the industry and service sectors, as a proportion of GDP, is much lower in Orissa compared with other Indian states.

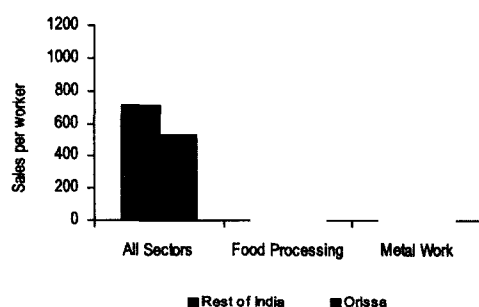
Fig. 1.3 Private Investment in New Medium and Large Project (1997-2002)



Source: CMIE, includes projects with project costs above Rs 10 million only. Primarily includes investment in industry and some in services sector

1.17 *Poor productivity levels.* However, few now accept the simplistic view that greater investment levels alone will lead to higher growth; instead, the prevailing emphasis is on building a productive environment in which private businesses can flourish. *An average firm in Orissa is less productive than an average Indian firm.* The average productivity of the firms responding to the Orissa ICS was three-fourths that of the sample covered by a similar all-India survey (figure 1.4).<sup>19</sup> Thus, in the survey year, sales revenue per worker (an admittedly crude indicator of productivity) averaged Rs528,000 for the Orissa sample against Rs710,000 for the sample for the all-India survey. Part of the productivity shortfall could reflect differences in the structure of industry between Orissa and the rest of India. As indicated above, much of the industrial

Fig. 1.4 Indicators of Productivity in Rs '000: annual (SMEs only)



Source: Orissa ICS, The World Bank, 2004.

activity in Orissa occurs in resource-based or low-tech industries to the exclusion of the medium- to high-tech industries that may have pulled up average productivity for the 12-state survey sample. However, a comparison of sales per worker between the Orissa ICS sample and the 12-state ICS sample in industries covered by both surveys suggests that this factor is not likely to account for the entire productivity gap between the two samples. One indication is that, for the food processing sector, sales per worker in Orissa are about half that of the 12-state sample. Labor productivity in metal works is far closer between the two samples, but in this case also, sales per worker are 12 percent lower in the Orissa sample.

1.18 Part of Orissa's labor productivity shortfall reflects the lower capital-intensity of production in Orissa. However, this factor is unlikely to fully explain the shortfall, as production is more than 90 percent as capital-intensive in the Orissa sample as it is in the all-India sample. On the assumption of a relative share to capital of output per worker of 30 percent to 70 percent, this would leave a significant part of Orissa's sales per worker unexplained by shortfall in capital per worker. Economists often refer to this unexplained component of labor productivity as total factor productivity (TFP) or overall productivity.

1.19 The adverse effect of Orissa's TFP shortfall on its competitiveness relative to the rest of India and to other countries is to some extent compensated by Orissa's lower wages. The average manufacturing worker in Orissa earns 24 percent less than the average worker in the rest of India. Only to the extent that Orissa manages to bridge its TFP gap with other regions in India can its businesses afford to pay their workers as well as their counterparts in the other states do. *A key premise of this report is that improving Orissa's investment climate is one of the ways in which this can be done.*

1.20 The Government of Orissa (GoO) is cognizant of the importance of a sound investment climate for attracting private sector investment and accelerating economic growth and poverty reduction. We now briefly present the key elements in GoO's ongoing reform program, as articulated in its Industrial Policy Resolution

(IPR) 2001, the Tenth Five-Year Plan (2002–07), and the draft Orissa Vision 2020.

#### IV. TURNING OVER A NEW LEAF : ORISSA REFORM VISION AND STRATEGY

1.21 Facing up to its multifaceted development challenges, the GoO since early 2001 has put in place economic and institutional reforms that aim to establish the foundations of an open, modern, and prosperous state through broad-based growth by (1) increasing per capita income in Orissa so that the widening gap between the state per capita income and the national average is first arrested and then reduced; and (2) ensuring equitable distribution of the benefits from economic revival to reduce interregional, gender, and other interpersonal differences (see box 1).

1.22 At the core of the government's IPR 2001 and Vision 2020, *the private sector is envisaged as the main vehicle for growth, with the state providing a level playing field and acting as facilitator*. The strategy aims at achieving faster growth in sectors such as mining, tourism, handicrafts, and other manufacturing subsectors, with a significant presence of small and medium-scale producers, and where Orissa has potential comparative advantage. Historical experience (i.e., the failed attempts at industrialization through liberal provision of subsidies) and the private sector's assessment of the critical bottlenecks suggest that, to be effective, the strategy will have to address deficiencies in Orissa's overall investment climate.

#### V. INVESTMENT CLIMATE ASSESSMENT

1.23 The objective of the Orissa Investment Climate Assessment (ICA)<sup>20</sup> is to systematically identify and analyze the IC bottlenecks that deter investment and productivity growth in enterprises in the state.<sup>21</sup> Understanding firms' perceptions of the major business obstacles they face provides a solid basis for examining Orissa's prevailing investment climate. Entrepreneurs and prospective entrepreneurs make decisions depending on how they perceive the climate

#### Box 1. Government of Orissa's Vision and Strategy articulated in its draft Vision 2020, Tenth Five-Year Plan (2002–07), and Industrial Policy Resolution 2001

- Encourage private sector growth in economic sectors in which Orissa has strategic comparative advantages (e.g., tourism, mineral processing, horticulture, marine products, high-quality rice, handicrafts).
- Strengthen integration among regions of the state and with the rest of the world.
- Enhance the quality and quantity of public investment in human and social capital so that the benefits of income growth are more equitably distributed than in the past.

#### Industrial Policy Resolution 2001

With the goal of harnessing its vast natural resources, generating employment, developing the backward regions, and promoting rural development, the Government of Orissa, in its 2001 Industrial Policy Resolution (IPR), articulated its wish to create a conducive business climate for attracting investment and establishing competitive industry. The main objectives to achieve these goals are to

- Encourage private initiative and restrict state intervention to areas where it enjoys a distinct comparative advantage
- Invite private investment for the development and operation of quality infrastructure.
- Promote the image of Orissa as an attractive destination for investment and tourism.
- Assume a proactive role in selected sectors, such as
  - mineral-based industries;
  - craft products;
  - agro- and marine-based industries and industries based on medicinal herbs and minor forest produce;
  - tourism; and
  - electronics, information technology, and biotechnology.
- Encourage the creation of small-scale industry clusters in similar lines of business.
- Proceed decisively with the restructuring and consolidation of sick industrial units.
- Leverage the potential in Special Economic Zones to build a concentration of technologically advanced manufacturing industries.

Source: Government of Orissa.

for investment. Drawing on the experience of local entrepreneurs, the Orissa Investment Climate Survey (ICS) highlights the key constraints in investment climate in Orissa that may help explain the state's shortfall in the level and growth of

productivity in industry and services.<sup>22</sup> Information on firms' perceptions is complemented by data on a wide range of objective measures that allow us to assess the burden imposed by these constraints on firm performance. Drawing on the analysis, the report provides specific policy recommendations to assist the Government of Orissa in its ongoing efforts to address these constraints and develop a more investor-friendly policy and regulatory environment to enhance investment and growth rates, as articulated in the state's Tenth Five-Year Plan, 2002–07 (TFYP) and the draft Orissa Vision 2020 strategy.<sup>23</sup>

1.24 The following chapters are organized as follows: chapter 2 reviews and analyses the nature of Orissa's investment climate issues, based predominantly on the findings of the IC survey; chapter 3 discusses some issues related to externalities that are an important aspect of the investment climate, especially in a backward, natural-resource-rich economy such as that of Orissa. Finally, chapter 4 makes specific policy recommendations to improve the investment climate.

## ENDNOTES:

- <sup>1</sup> Orissa has 26 percent of India's iron ore, 23 percent of its coal, 70 percent of its bauxite reserves, and 90 percent of its chrome.
- <sup>2</sup> Orissa has long, unspoiled stretches of beach, as well as ecotourism potential along the coast and in its forests. It also has the cultural attraction of indigenous crafts, arts, and heritage sites. The state has extensive craft-based industries, with a heritage of over 100 living crafts.
- <sup>3</sup> The reform measures put in place by the government are beginning to show some initial results in terms of increased growth rate and enhanced private investor interest, including the largest foreign direct investment proposal in all of India by the South Korean steel company Posco.
- <sup>4</sup> The Tenth Five-Year Plan (TFYP) seeks to achieve a GSDP growth rate of 6.2 percent during the 2002–07 period.
- <sup>5</sup> The state is predominantly rural—about 85 percent of the population (and a similar proportion of the poor) lives in the countryside—and most of the labor force depends on agriculture.
- <sup>6</sup> The state is highly disaster-prone, with cyclones and floods regularly inundating the coastal areas while drought and famine threaten the tribal belt.
- <sup>7</sup> Orissa Socio-Economic Development Program Document, September 2004.
- <sup>8</sup> Details discussed in the next section.
- <sup>9</sup> Differences in institutions are considered one of the fundamental causes of differences in economic development (North and Thomas, 1973). Economic institutions determine the incentives and constraints on economic actors and shape economic outcomes (Acemoglu, Johnson, and Robinson, April 2004).
- <sup>10</sup> The team thanks Deepak Mishra for raising this point and coining the phrase.
- <sup>11</sup> The first industrial policy was developed in 1980. Changes were made or new policies developed in 1986, 1989, 1996, 1992, and 2001.
- <sup>12</sup> One crore is equivalent to 10 million Indian rupees.
- <sup>13</sup> India's overall growth performance improved following the initiation of economic reforms in the early 1990s. However, the aggregate growth masks increasing divergence in per capita incomes, poverty, and other social indicators between richer and poorer states. From 1990–91 to 2000–01, for example, Orissa grew at 4.1 percent per year, compared with an all-India growth rate of 6.1 percent. As a result, per capita income in Orissa decreased as a proportion of the national average, from 62 percent in 1993–94 to 52 percent in 1999–2000.
- <sup>14</sup> The Orissa ICS sample was drawn from Bhubaneswar and five other urban centers that account for the bulk of industrial activity and tourism in the state (annex 1, table A1). A little over a fifth of the sample are hotels and restaurants, the remainder are manufacturing establishments drawn mainly from food processing, mineral processing, and metal work (annex 1, table A2). Although they are only a fraction of the sample in the 12-state survey, the manufacturing industries of the Orissa survey are covered sufficiently in the other survey to facilitate comparison of responses. As in the 12-state survey, the vast majority of respondents to the Orissa survey are small and medium-sized enterprises (SMEs), which we define as those with fewer than 150 workers. Some 90 percent of the SMEs employed 10–100 workers (annex 1, table A3). This assessment is one of the first to take a comprehensive look at a country's business environment by including an analysis of entrepreneurship in the formal manufacturing sector along with sector-specific case studies in the informal rural sector. The two rounds of investment climate surveys carried out for India did not cover Orissa.
- <sup>15</sup> Industrial Policy Resolution 2001 of the State of Orissa, vol. II: Industrial Growth and Socioeconomic Progress in Orissa. UNIDO.2001.
- <sup>16</sup> Study on Issues of Mining in Orissa, Verve Consulting Private Limited, draft report submitted to the World Bank, 2003.
- <sup>17</sup> *Orissa Vision*. Ravishankar, Wes, and Churamani. November 18, 2004.
- <sup>18</sup> This may have been a factor behind a renewal of interest in the sponge iron sector in the state. The other factor may be the recent firming of international steel prices. Reportedly, the state government has received inquiries from some 29 sponge iron concerns. According to a Centre for Monitoring the Indian Economy (CMIE) report, investment projects (public and private) accounted for 10.6 percent of GSDP in Orissa during 1997–2001, compared with 6 percent for all of India.
- <sup>19</sup> The All-India Investment Climate Survey—like the Orissa ICS—was carried out jointly by the World Bank and the Confederation of Indian Industry (CII). About 1,900 manufacturing businesses in 11 of India's major states and Delhi were surveyed, using a similar instrument and sample design, from March through July 2003. In both surveys, the instrument was a written questionnaire administered to business managers and accountants in face-to-face interviews by trained enumerators. Some items of the questionnaire sought to gauge the

manager's evaluation of the business environment across states. A second set of questions generated data on a wide range of objective indicators of investment climate and financial variables at the establishment level. The other states covered by the 12-state ICS are Andhra Pradesh, Gujarat, Haryana, Karnataka Kerala, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, West Bengal, and Uttar Pradesh. Throughout this section, and the whole report the phrase "rest of India" is used with apologies as shorthand to refer to the 12 states in the survey.

- <sup>20</sup> Despite greater awareness of the importance of the investment climate, little work has been done until recently to systematically gather objective measures of the investment climate or to link these measures directly to firm performance. Together with governments in Asia and in other regions and development partners, the World Bank is undertaking a series of investment climate assessments (ICAs) based on a representative survey of national enterprises. The ICAs measure how conducive a country's investment climate is to the creation of economic growth and benchmark the climate against those of its neighbors and competitors.
- <sup>21</sup> The report is based on an IC survey undertaken in Orissa in 2004 that focused predominantly on the manufacturing sector and the tourism industry. The report does not deal directly with investment climate issues pertaining to the agricultural sector, although agro-processing and fisheries and marine food processing are included as part of the manufacturing sector in the survey. Rural areas are partially covered through a separate handicrafts study.
- <sup>22</sup> The focus is on the manufacturing sector and the hotel and restaurant industry.
- <sup>23</sup> The report is being undertaken at the request of the Government of Orissa and will serve as a timely input for the Orissa Vision 2020 document to be completed by October 2005.

## CHAPTER 2

### OVERVIEW ANALYSIS OF ORISSA'S INVESTMENT CLIMATE

#### I. INTRODUCTION

2.1 The investment climate influences investor behavior by affecting the costs and risks of doing business and the competitive pressure that creates incentives for innovation and productivity improvement. The Orissa Investment Climate Survey (ICS) covered eight important dimensions of the investment climate; they can be categorized into three groups, depending on whether their most significant impact is on (1) entry, which affects the degree of competitive pressure; (2) operations, growth, and profitability (affecting, for example, the average rate of return); or (3) uncertainty (affecting the variance in, rather than average rate of return). Table 2.1 summarizes these categories. The categorization is inevitably arbitrary—many elements of the investment climate affect enterprises through more than one channel. An example is access to finance, which affects entry, operations, and growth prospects. Nonetheless, as we shall see below, the categories can help us detect useful patterns.

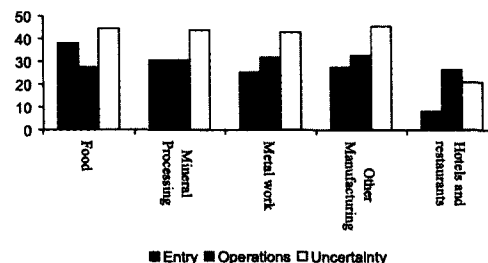
**Table 2.1. The Effect of Investment Climate Factors on Firms**

Access to land	Entry
External finance	Entry, growth
Infrastructure	Growth, profitability
Skill shortages	Growth, profitability
High taxes	Profitability
Regulation/corruption	Uncertainty
Tax/customs administration	Uncertainty
Macroeconomic stability	Uncertainty

2.2 While the investment climate in a country or region has several dimensions, firms typically reveal overriding concern with just a few bottlenecks. In order to identify these priority constraints, the Orissa ICS and the 12-

state ICS both asked managers to identify the factors they thought were the strongest obstacles to the growth of their businesses.<sup>1</sup> As we can see from figure 2.1, enterprises in all manufacturing sectors identify investment climate elements that affect *uncertainty* (macroeconomic instability, regulations, corruption and tax/customs administration) as the most problematic. More than 40 percent of the respondents cited these factors as posing a major or severe constraint for them. By contrast, only about 20 percent of the hotels and restaurants covered by the survey identify these factors as important constraints.

**Fig. 2.1 Percent of Respondents Identifying Bottlenecks**



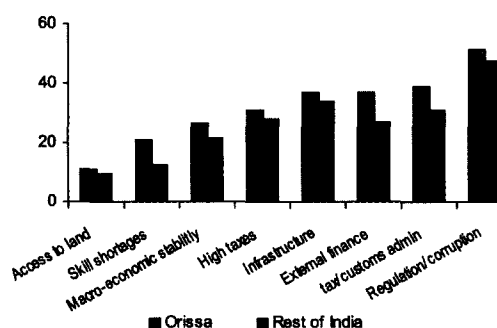
Source: Orissa ICS, The World Bank, 2004

2.3 Factors that affect entry (access to land and external finance) are the least problematic for all sectors except food processing, where these factors constitute the second most important category of investment climate constraints. Nonetheless, these are important issues for the other manufacturing sectors, where at least one out of four respondents reported them as a major or severe constraint. Entry issues appear to be much less a problem for hotels and restaurants. Here the most important constraints are those that affect operations (infrastructure, in particular).

## II. OVERVIEW OF ORISSA'S INVESTMENT CLIMATE IN COMPARISON WITH THE REST OF INDIA

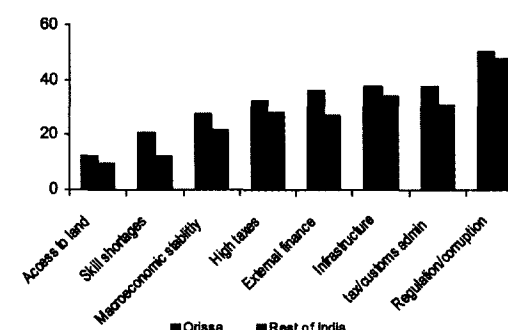
2.4 The snapshot data above suggest several problems with the investment climate in Orissa. The rest of the chapter explores these problems, starting with a comparison of Orissa and the rest of India. This comparison is important, as much of the potential investment in Orissa is likely to originate out of state, and whether these investors are attracted or not will depend to a great extent on how they see Orissa's investment climate vis-à-vis those of other states. Figure 2.2 indicates that on all dimensions studied, investors give lower marks to Orissa than to the average Indian state. The relative importance of the various constraints does not differ much, except that poor access to finance ranks higher as a problem in Orissa than in the average Indian state. Like its counterparts in other states in India, Orissa's business community is most concerned about *governance* and *regulation*. More than half of the respondents in the Orissa survey identified regulation and corruption as a major or severe bottleneck to business operations or expansion. A little over 40 percent had the same view of tax and customs administration. *Poor infrastructure* and problems of *access to finance* are next in order of importance as impediments to business operations and growth. Then follow high taxes and macroeconomic instability, which are rated as major bottlenecks by a quarter to a third of the respondents. *Skill shortages* and problems of *access to land* are also mentioned by a significant proportion of respondents. The order of importance of bottlenecks does not change if we confine our

Fig. 2.2: Managers Identifying Factor as Major or Severe Bottlenecks: all Survey Sectors, all Business Sizes



Source: Orissa ICS, The World Bank, 2004.

Fig. 2.3: Managers Identifying Factor as Major or Severe Bottlenecks: All Survey Sectors, SMEs



Source: Orissa ICS, The World Bank, 2004.

attention to responses of managers of small and medium-sized enterprises (SMEs), which constitute nearly 90 percent of the survey sample (figure 2.3).<sup>2</sup>

2.5 *Priorities vary by sector of industry.* Notably, governance and regulation seem to be far more of a problem than infrastructure in the food

Table 2.2: Respondents Identifying Factor as Major or Severe Obstacle: Orissa, SMEs

	Food	Mineral Processing	Metal work	Other Manufacturing	Hotels and restaurants
Regulation/corruption	58.1	65.0	57.4	55.0	27.3
Infrastructure	25.8	45.0	41.0	38.3	36.4
Tax/customs admin	41.9	40.0	41.0	51.7	16.4
High taxes	31.0	17.6	38.5	40.4	18.2
External finance	54.8	55.0	32.8	45.0	12.7
Access to land	20.7	5.9	17.6	9.8	3.0
Skill shortages	25.0	29.4	15.4	19.2	24.2
Macroeconomic stability	33.3	26.7	29.5	29.2	18.8

Source: Orissa ICS, The World Bank, 2004.

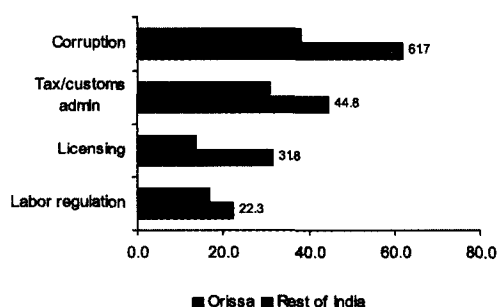


processing industries in Orissa than in metal works. Governance and regulation are also perceived to be serious obstacles by more businesses in manufacturing than in the hotel and restaurant industry (table 2.2). Likewise, access to land does not seem to be as serious a problem in mineral processing and hotels and restaurants as it is in food processing and metal work. These issues are explored in greater detail below.

### III. GOVERNANCE AND REGULATION

2.6 In the category of regulation and governance, *corruption is by far the most serious problem* cited by businesses in Orissa. Almost two-thirds of the managers (62 percent) rate corruption as a major or severe obstacle to business operations and business growth (figure 2.4). About 45 percent put the *bureaucratic hassle* associated with tax and customs administration in the same category, followed by the delays and hassle of *licensing procedures* (32 percent) and those of *labor regulation* (22 percent). This relative ranking of the governance/regulation-related constraints is more or less similar to that of India as a whole. However, a significantly higher proportion of firms in Orissa than in India overall cite all factors as serious problems, with the most striking differences in the categories of corruption and licensing.

Fig. 2.4. Managers Identifying Regulation as a Major or Severe Obstacle to Growth: SMEs in all Survey Sectors



Source: Orissa ICS, The World Bank, 2004

2.7 The *relative rating* of these various components are more or less *similar across industries*, corruption being the factor most

complained about and labor regulation and licensing procedures attracting the fewest complaints (table 2.3). However, the *incidence* of a particular problem *may differ significantly across sectors*. Thus, corruption is a major issue in the mineral processing sector, where more than three out of four (77 percent) managers identify it as a major or serious bottleneck. By contrast, only 40 percent of managers of hotels and restaurants cite corruption as a serious or major obstacle. For the other factors, too, there are fewer complaints from this sector than others. Less than 20 percent of respondents rate labor regulation, licensing, and tax and customs administration as major or serious obstacles to business growth in the hotel and restaurant industry, in contrast to 27–40 percent of respondents in food processing, mineral processing, and metal work. Interestingly, labor regulation is not cited by any firm in the mineral processing sector as a major or serious problem. In the handicrafts sector, there are complaints about harassment by government officials and the difficulty of interpreting policies and regulations (see box 2.1)

Table 2.3 Managers Rating Regulation/Corruption as Major Obstacle: Orissa SMEs (%)

	Percentage Rating as Major or Severe Obstacle			
	Labor regulation	Licensing	Tax/customs admin.	Corruption
Food processing	33.3	28.6	41.9	50.0
Mineral processing	0.0	29.4	40.0	76.5
Metal work	26.9	30.8	41.0	61.5
Other manufacturing	19.2	35.3	51.7	63.5
Hotels and restaurants	15.2	15.6	16.4	39.4

Source: Orissa ICS, The World Bank, 2004.

2.8 *Regulatory inspections.* A proxy for the magnitude of the overall burden of regulation on industry is the frequency of inspection visits that government officials make to business premises as part of the enforcement process. Many of the rules and regulations that the inspections are supposed to enforce are probably not much different from those that governments in the developed economies implement routinely. However, in India, as in much of the rest of the

**Box 2.1. Regulatory Hassles Faced by Small Players: The Case of Handicrafts**

In the handicrafts sector, some of the surveyed trader and artisan entrepreneurs complain about hassles involved in export, not being well versed in export management, and customs duties. They also complain about harassment by *Ostroi* and lower-level police functionaries when bringing raw materials from, or sending finished products to, other places. The artisan and trader entrepreneurs do not see any serious problems in interpreting most government policies; however, there are exceptions. Some survey respondents were unsure when the tax exemption announced by the government on all handicrafts would go into effect and what it would cover. The exemptions from entry tax and sales tax were meant for cooperatives and artisan entrepreneurs who were procuring raw materials (such as silk yarn and cane) and were paying taxes. It is, therefore, necessary to issue a notification immediately exempting all handicrafts from sales tax and eliminating the entry tax on raw materials meant for the production of handicrafts.

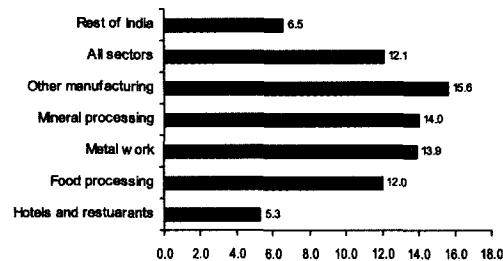
*Source: Survey of artisans and traders in the handicrafts sector carried out for this study, 2004.*

developing world, individual government officers often have too much discretion in deciding which rules to enforce, on whom, when, and sometimes how. In many cases, inspection visits are arbitrary or too frequent and are viewed by businesspeople as a veiled demand for a bribe as the price of avoiding future visits. Often the bribe is worth paying, since visits can disrupt plant operations and cost valuable staff time, including that of senior management.

2.9 Respondents to the Orissa ICS reported an average of 12 inspection visits in the year leading up to the survey. This is almost double the overall India average of 6.5 visits a year (figure 2.5). As indicated above, such visits can be costly. Managers in Orissa report spending, on average, 13 percent of their time dealing with such visits (figure 2.6). This is not too different from the all-India average but quite high by international standards, comparing, for instance, with 7.8 percent for SMEs in China and 7.2 percent for those in Brazil. There are also significant differences among industries within Orissa,

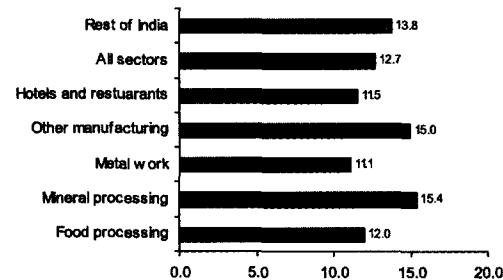
with businesses in mineral processing faring significantly worse than others.

**Fig. 2.5 Inspections Per Year: SMEs**



*Source: Orissa ICS, The World Bank, 2004*

**Fig. 2.6 Management Time Dealing with Regulations (%)**



*Source: Orissa ICS, The World Bank, 2004*

2.10 *Labor regulation.* It is not surprising that more than a fifth of respondents to the ICS identify labor regulation as a major or severe bottleneck to growth. As is the case elsewhere in India, the labor market in Orissa has always been heavily regulated on the basis of three federal laws: the Industrial Employment Act of 1946, the Industrial Disputes Act of 1947, and the Contract Labor Act of 1970. All three severely limit the autonomy of management in hiring, firing, and workforce deployment decisions in businesses that employ more than 100 workers. The first law effectively requires that all significant changes in the allocation of employees among tasks or locations be subject to collective bargaining. The second law gives state governments the power of veto over management decisions to close plants or cut workers. The third law empowers state governments to disallow contract labor in any industry or locality.

2.11 The outcome of the implementation of these acts and the supporting legislation has been to restrict the ability of businesses to flexibly adjust the size and composition of their workforce in response to developments in products, markets, or technology. Businesses are believed to have responded to the restrictions by concentrating their resources on activities of low economies of scale, by operating at suboptimal scales, or by retaining a larger workforce than can be justified by business cycle contingencies. Because the labor legislation is national law, these effects are observed throughout India. However, the discretion with which state governments enforce individual provisions and the Contract Labor Act has produced significant variation across regions in the degree of flexibility of the labor market.

2.12 Unfortunately, in Orissa's case, government discretion has historically been used to increase rather than lighten the burden of labor regulation on business. In the only major amendment that the State of Orissa made to the Industrial Disputes Act, it extended the rule requiring state government permission for layoff, retrenchment, and closure to smaller firms and gave power of appeal to workers to overturn a management decision to close down a firm. Besley and Burgess (2002) compared the amendments made to the Industrial Disputes Act since 1967 by a number of states; they classify Orissa as a "pro-worker" state, along with Gujarat, West Bengal, and Maharashtra. These states have adopted labor policies that increase compliance costs to business. In contrast, the "pro-employer" states of Andhra Pradesh, Karnataka, Kerala, Madhya Pradesh, Rajasthan, and Tamil Nadu have made amendments that lowered compliance costs to business. In their analysis of the economic performance of India's states from the late 1950s to the early 1990s, Besley and Burgess show that industry grew more slowly in pro-worker states because of the greater burden of labor regulation in those states.<sup>3</sup>

2.13 *Entry regulation.* The longer it takes to formally register a business, the higher the barrier to entry to lines of business that are

profitable to incumbents. In this situation, that line of business is less productive from the point of view of the state economy, because the entry barriers protect high-cost incumbents from potentially lower cost competitors. Ironically, exit barriers also function as a form of entry barrier: Potential investors are less likely to commit resources to currently profitable activities if they run the risk of tying up assets should the activities become unprofitable. This risk would be higher the longer bankruptcy procedures last.

2.14 Often businesses respond to high private costs of registration or exit as formal entities by operating informally. Thus, the social cost of high entry or exit barriers may not be as high as it would be if barriers completely deterred new entry. The social cost is nonetheless significant to the extent that informal firms may incur costs to avoid detection by government agencies (e.g., tax agencies). Even in the absence of risk of detection by authorities, informality often means operating at suboptimal scales.

2.15 *Weak property rights.* A sector-specific example of a poor regulatory regime is provided by the *mining* sector, where investor interest is significantly affected by the nature of mining rights.<sup>4</sup> In Orissa, mining rights are overly constrained by the state through (1) discriminatory eligibility criteria for the granting of mining rights; (2) limitations in the transferability and mortgageability of mining rights; and (3) a cumbersome permitting process for exercising mining rights. The existing system for accessing and exercising mining rights in Orissa does not encourage private investment.<sup>5</sup>

2.16 Other constraining factors include the granting of discretionary power to the central and state governments to terminate mining rights for safety or environmental reasons or other undefined purposes. A private company's mining lease may also be terminated if the holder fails to undertake mining operations for a period of two years. By contrast, large amounts of land have been reserved for state-owned enterprises (SOEs) to mine in the future; SOEs have no obligation to commence mining within a specified period.<sup>6</sup> Holders of mining rights require approval from state and central governments to transfer or mortgage their mining rights, or to have third

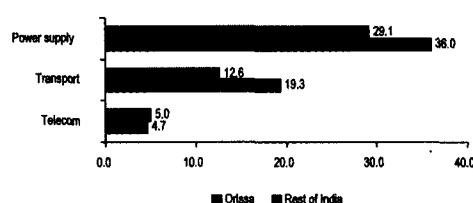
parties as major suppliers of funds in their mining undertakings. The approval processes are usually as onerous as those for acquiring mining rights in the first place.<sup>7</sup> These restrictions conflict with the financial and technological requirements of the modern global mining industry and the fact that mining is a highly capital-intensive industry.

2.17 GoO's policy is that private mining should be instrumental in establishing value-added activities in the state. As a result, mining rights are not granted to applicants who have not already set up a processing or finishing plant in the state, or committed to do so. The insistence on value-added activities discriminates against foreign mining investors who specialize in the production of mineral products or commodities that are sold or processed in the global economy. This policy also has a significant effect on the competitiveness of domestic producers. In several cases, Indian companies are obstructed by this policy in the efficient use of their own facilities set up in other states.<sup>8</sup> Small and medium-size mining companies, which are crucial for the development of a dynamic domestic sector, are mostly left out because they lack the financial capacity and technological capabilities to build value-addition facilities. In addition, *the playing field is uneven, since these restrictions do not apply to SOEs*. In brief, the policy of treating mining as an ancillary industry may compromise the development of a dynamic privately led mining industry in Orissa.

#### IV. PROVISION OF INFRASTRUCTURE

2.18 The lack of adequate infrastructure is a major bottleneck that constrains private investment in Orissa. As in other states in India (and in most developing countries), firms in Orissa cite inadequate infrastructure as a serious bottleneck to business operations and growth. Figure 2.7 shows how they rate power supply, transport, and telecommunications as problem areas. Some 36 percent of the managers surveyed cited power supply problems as a major or severe obstacle to business growth. The infrastructure index computed by the Twelfth Finance Commission

Fig. 2.7: Managers Rating Infrastructure Problems as Major/Severe Bottlenecks (%): SMEs



Source: Orissa ICS, The World Bank, 2004

(Government of India 2004) also reflects the relatively low ranking of Orissa on account of poor access to physical infrastructure (table 2.4).

Table 2.4. Infrastructure Index: Ranking of Indian States

##### High

Goa, Maharashtra, Punjab

##### High middle

Gujarat, Haryana, Kerala, Tamil Nadu

##### Middle

Andhra Pradesh, Karnataka

##### Lower middle

Himachal Pradesh, Madhya Pradesh, Orissa, U.P., Uttaranchal, West Bengal

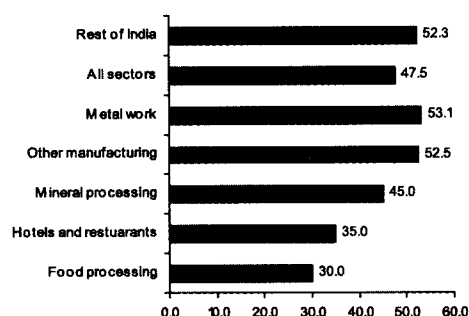
##### Low

Arunachal Pradesh, Manipur, Meghalaya, Jharkhand, Mizoram, Nagaland, Assam, Chhattisgarh, Sikkim, Tripura, J&K, Bihar, Rajasthan

Source: Report of the Twelfth Finance Commission, 2005-10.

2.19 At the moment, the basic *power supply* problem in Orissa, as in the rest of India, is one of *shortages and unreliability*, reportedly stemming more from deficiencies in the transmission and distribution system than in generation. One indicator of a power shortage is the average number of days it would take a business to get connected to the public grid. In the two-year period preceding the Orissa ICS, it took the average SME 48 days to get connected to the public grid (figure 2.8). This is not too bad by Indian standards—the all-India average is 52 days—but is outrageous by the standards of other large developing economies. Average connection times are reported to be about 21 days for SMEs in China and 23 days for those in Brazil.

**Fig. 2.8: Days to Get Connected to the Public Power Grid: SMEs**



Source: Orissa ICS, The World Bank, 2004

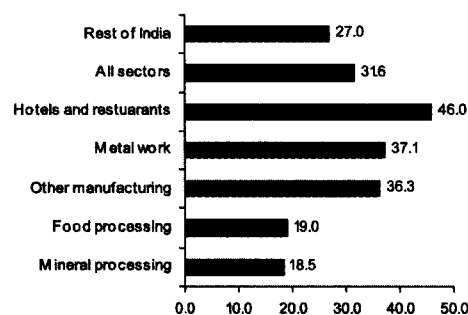
2.20 Next in importance to power supply in the infrastructure bottleneck is **transport**. This is cited as a major or severe obstacle to business operations or growth by 19 percent of the ICS respondents (figure 2.7). As in the rest of India, road transport is the dominant transport mode for both passenger and freight traffic in the State of Orissa. *Capacity and quality constraints on road transport in Orissa are indicated* by the fact that the state has *one of the least developed road networks* (especially in terms of paved roads) in India, with only about *22 percent of the total road length being paved, compared with the all-India average of 58 percent*. For a population close to 40 million over a territory of 155,707 square km, Orissa has a road network of only 32,500 km. Of these roads, only 67 km are expressways; 1,625 km are national highways; and 4,014 km are state highways. Inadequate density and carrying capacity of the road network, combined with persistent maintenance funding shortages, have led to a significant deterioration in riding quality. Orissa currently spends less than 50 percent of what it should on required road maintenance, according to Tenth Finance Commission norms.

2.21 A second dimension of the transport bottleneck in Orissa is the *inadequacy of the port facility*. With a 480-km coastline at its disposal, Orissa should be a major maritime state, but it has only one major port at Paradeep and one minor active port.<sup>9</sup> The port at Paradeep faces serious congestion, which

could pose a significant barrier to the potential implementation of large investment projects in the mining and metal processing industries.<sup>10</sup> This situation makes more urgent the advancing of initiatives in the port sector laid out in the framework of the port policy announced in 2003.

2.22 **Telecommunications** is a distant third as a bottleneck, drawing complaints from just under 5 percent of respondents. Again, the key problem is one of access or shortage rather than the quality of existing services. A new SME start-up can expect a waiting period of about 32 days in Orissa to get a fixed line phone connection (figure 2.9). This is only about 5 days longer than the average for the rest of India but four times as long as the waiting time in China. At 2.22, the teledensity in Orissa ranks in the lower half of the states in the country,<sup>11</sup> with urban teledensity at 11.33 and rural teledensity at 0.87.

**Fig. 2.9: Days to Get Phone Connection: SMEs**



Source: Orissa ICS, The World Bank, 2004

2.23 While all sectors are affected by infrastructure bottlenecks, the nature of the problem differs by sector. For the mining sector, power and telecommunications are less of a problem than transportation. Lack of railroads and highways with several tracks/lanes have raised the costs of transporting minerals. Cheaper and more efficient alternatives, such as river-based transportation, have not been exploited despite their potential. Another important area of concern for mining companies is telephone connectivity.<sup>12</sup>

2.24 **Tourism** infrastructure, especially *air and road connectivity*, is very poor in Orissa, resulting in serious under-utilization of Orissa's tourism

potential.<sup>13</sup> There are hardly any proper international air links to Orissa. Indian Airlines, the only domestic airline that operates flights to Orissa, does not offer concessional fares as it does to some other destinations. Private airlines do not have good links to Orissa because of the lack of corporate and tourist traffic. Road connectivity is poor, too. For example, lack of proper road connectivity to neighboring centers have prevented places like Gopalpur or Sadpada (in Chilika) to realize their enormous tourism potential.

2.25 Besides air, road, and rail connectivity, the state also needs to invest in water, power, sanitation, and environmental management, all of which will benefit tourism. Municipalities should focus on services to areas that affect tourism. Inadequate public investment in basic infrastructure has discouraged private investors.<sup>14</sup> The tourism-related service industry identified poor infrastructure as the most important constraint on its operations.

2.26 The *fisheries* industry also suffers from inadequate infrastructure. While four fishing harbors, 66 fish landing centers, and 23 jetties have been established along the coastline in Orissa, most of them are not well maintained. Only one major fishing harbor, Paradeep, is functional and is being used by trawlers and other fishing boats. Most of the remaining harbors, landing centers, and jetties are not properly operated due to lack of complementary infrastructure, such as approach roads, drinking water, and power supply. Lack of quality road and rail facilities hinders the development of the *shrimp processing* industry, as the output is tradable, with much of its final market outside the state.

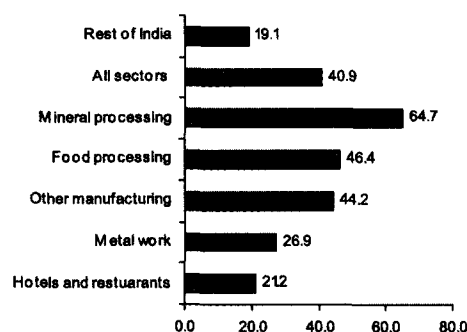
2.27 The various players in the *handicrafts* sector do not cite public utilities (such as electricity, telephone, and transport services) as a major problem. Telephone services are available in most of the artisan clusters or close by. The few complaints about utility services reflect the unsophisticated nature of handicraft production in Orissa rather than high standards of utility provision. Demand for utility services is low because artisans typically use very little power, modern equipment, or

highly sophisticated machines. However, the handicrafts sector did voice a need for *centralized facilities*. The dispersed nature of handicraft clusters often makes it difficult to supply services and raw material in a cost-effective manner.

## V. ACCESS TO FINANCE

2.28 Access to finance should be as important a concern for policymakers in Orissa as the deficiencies in the provision of physical infrastructure. Inadequate access to finance is a common complaint all over India, with 20 percent of firms surveyed citing this as a major or serious obstacle to growth. The problem seems more severe in Orissa, where 41 percent of SMEs responding to the Orissa ICS consider it a major to severe bottleneck to business growth (figure 2.10). Firms in Orissa identify access to finance as the second most serious constraint after regulations/corruption. In Orissa, the problem is most acutely felt in the *mineral processing and food processing industries*.

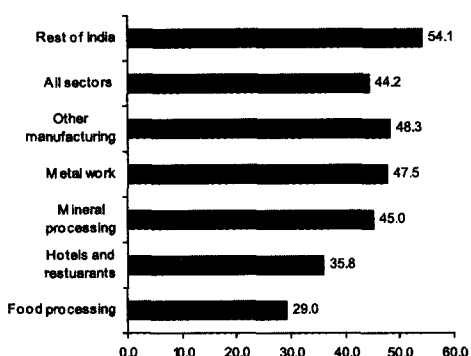
Fig. 2.10 Managers Rating Problems of Access to Finance as Major/Severe Obstacle to Business Expansion: SMEs (%)



Source: Orissa ICS, The World Bank, 2004

2.29 One (admittedly rough) indicator of ease of access to formal external finance is the proportion of businesses that have active bank credit lines. According to the Orissa ICS, this figure is 44 percent for SMEs among the Orissa survey respondents (figure 2.11). This percentage is significantly smaller than that for the rest of India (54 percent) and compares even more unfavorably with the 72 percent reported for manufacturing SMEs in Brazil.<sup>15</sup>

Fig. 2.11 Business with Active Bank Credit Line (%):  
SMEs



Source: Orissa ICS, The World Bank, 2004

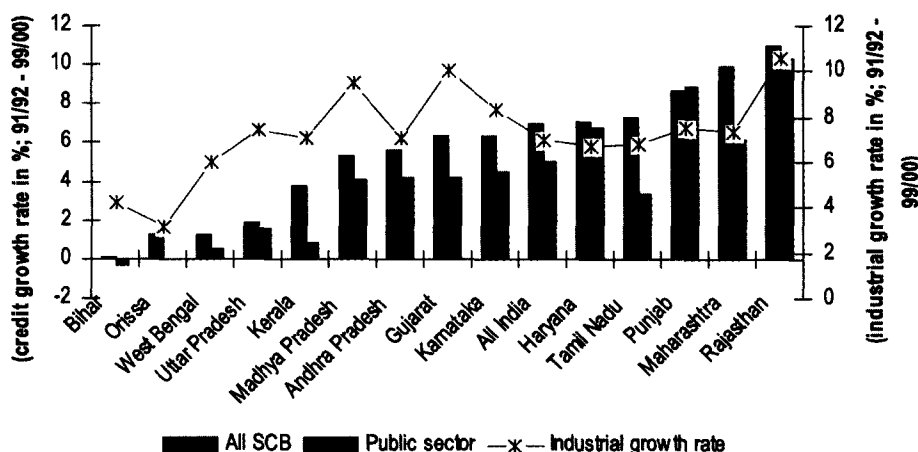
2.30 Twice as large a proportion of businesses rate lack of access to credit as a major bottleneck in Orissa as in the rest of India. This is consistent with the small-scale industry (SSI) sector credit flow data in figure 2.12. The data covers credit to SSI units in 14 major states by all scheduled commercial banks and public sector banks for the period 1991–92 to 1999–2000. It is worth noting that in spite of a 3 percent annual average growth rate of industrial output in Orissa during the period, credit from public sector banks actually contracted and commercial bank lending rose by only 1.2 percent a year. This contrasts with

an all-India SSI credit growth rate of 7 percent a year for commercial banks and 5 percent a year for public sector banks. Orissa performs better than only Bihar among the 14 states covered by the data. It is not surprising that Orissa's share of credit to the all-India SSI sector has fallen since 1996, while the shares of states such as Maharashtra, Rajasthan, Punjab, and Tamil Nadu have increased.

2.31 Yet another indicator of low credit flows in Orissa is that the state has one of the highest deposit ratios among major states in India but the lowest credit ratios. On the other hand, states such as Maharashtra, Tamil Nadu, and Rajasthan received a greater share of all-India credit during the 1990s. To illustrate, the credit:deposit (C:D) ratio increased from 42:51 in 1998–99 to 47:75 in March 2003, which is much less than the all-India average of 59:38. It is interesting to note that the public sector banks contribute to most of the activity in the banking sector in the state. This is evident from the higher deposit figures as well as the higher C:D ratio (Rs 17,156.57 crore in deposits and C:D ratio of 52:12). Private sector banks account for only Rs 691.31 crore in deposits and have a C:D ratio of only 11:48, indicating that the *credit activity of the private/foreign banks in Orissa is at a very low level.*

2.32 Another indicator related to access to finance is the relative contribution of different

Fig. 2.12 Growth in Credit and Industrial Output in Indian States (1991/92 – 1999/00)



Source: Orissa ICS, The World Bank, 2004

sources of financing. The Orissa ICS asked firms to rank different source of funds used for working capital and new capital investments from among sources such as internal resources/retained earnings, banks, and public equity; and informal sources such as money lenders (table 2.5). On average, internal funds constituted 43.7 percent of financing for working capital over the period of one year. Local commercial banks are the second largest source at 21.4 percent for working capital needs, but they contribute only 14 percent of new investment. The contribution of foreign banks at only 0.7 percent is not entirely unexpected given the high levels of sickness among the small firms in Orissa compared with firms in other states. Family and friends rank third in terms of contribution, and trade credit is fourth. It is apparent from table 2.5 that the leasing industry is far from developed: Only 0.4 percent of the firms' working capital needs are met through leasing arrangements.

**Table 2.5 Average Contribution from Different Sources of Financing for Working Capital and New Investment Requirements of the Firms Surveyed (%)**

Source of Funds	Working Capital	New Investment
Internal funds or retained earnings	43.7	15.4
Local commercial banks	21.4	14.0
Foreign-owned commercial banks	0.7	0.2
Leasing arrangement	0.4	0.0
Investment funds/special development funds/state services	1.2	0.4
Trade credit	3.4	0.5
Credit cards	0.2	0.0
Equity, sale of stock	0.6	0.5
Family, friends	4.9	5.5
Informal source (e.g., moneylender)	0.9	2.3
Other	3.8	6.4

Source: Staff calculations from the Orissa ICA, The World Bank, 2004.

2.33 To the extent that low credit flows are a supply side problem, they reflect the financing constraints faced by SMEs and can

be attributed to the high transaction costs and greater default risk associated with bank loans to small enterprises. The transaction costs related to SME lending are high, as most banks use the same lending technologies for small business financing as they do for large corporations but do not have the necessary credit information on SMEs to assess credit risk. Also, credit shortages can be exacerbated by lenders' perception that the default risk associated with lending to small business is high, as these firms often lack collateral to secure loans. Problems in using land as collateral (lack of updated land records and titles), nonrecognition by lenders of other types of collateral, difficulty in collateral enforcement and loan recovery, and a bankruptcy framework that does not allow for the easy exit of troubled firms further drive up the risk of default. All these factors lead to higher interest costs for borrower and are perhaps behind the lower credit flows to SMEs in Orissa by lending institutions. Further study of the constraints in the financial sector may provide greater clarity regarding whether these are supply side constraints or demand side issues. Either way, improving access to finance should be one of the priority reforms on the Government of Orissa's policy agenda.

2.34 One indicator of the ease of enforcement of credit contracts in the Doing Business database (World Bank, 2005) is the time it takes to recover a debt through the courts or an equivalent administrative procedure. For Orissa, the number of days to recover a debt of about Rs 18,000 is 765. This is a shorter time than recovery of the same debt would take in some states in India but nearly twice as long as the time for Maharashtra and significantly longer than in high-growth states such as Andhra Pradesh, Karnataka, and Tamil Nadu.<sup>16</sup> Longer duration of payment disputes indicates higher average cost of credit per transaction, which has the effect of a higher risk premium on interest rates.

2.35 While poor access to credit affects all sectors, it hits the *shrimp fishing and processing* sector especially hard. In that sector, the inability to resolve moral hazards regarding disease and infection has reduced the supply of formal credit (box 2.2).



**Box 2.2. Problems in Access to Finance in the Shrimp Industry**

In the shrimp industry, credit is constrained partly by the existence of serious moral hazard problems. Lenders cannot ascertain whether default by prospective borrowers (entrepreneurs) is due to negligence in ensuring disease-free farming or exposure to infection beyond the control of the entrepreneur. Experimentation by banks in this regard has failed miserably, resulting in bad loans. Thus, erring on the side of caution, the banks now practice rationing as far as credit provision is concerned.

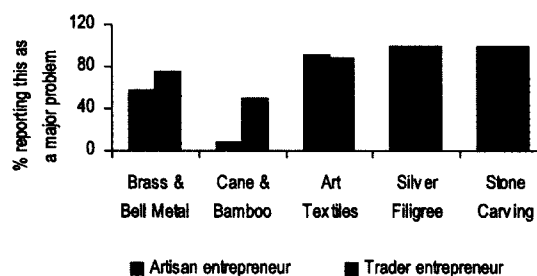
Lack of credit to the fishers and entrepreneurs when it is needed is a major factor constraining growth in the sector. The credit need is high for both investment and working capital. Formal sources currently account for only about 20 percent of credit and are characterized by procedural delays. Informal sources, which account for 80 percent of credit, are easier to access, have very good outreach, and provide timely and adequate credit for consumption, contingencies, and social functions. Traders charge interest on loans indirectly by buying fish at a lower price than the prevailing market price. Lack of liquidity and nonavailability of loans in adequate quantity is a major reason why very few local entrepreneurs have come forward to set up processing units.

2.36 The inadequacy of working capital is a major hurdle in both the production and marketing of *handicrafts* (see figure 2.13). Artisans, traders, and especially artisan entrepreneurs lack an asset base to offer as collateral to banks. Because of the small average size of these businesses, banks are reluctant to grant cash-credit loans against hypothetical stock. The inadequate supply of working capital forces many artisans to remain underemployed (i.e., working at suboptimal capacity) and affects their ability to market their products. In particular, it limits the ability to stock a large variety of crafts for long periods of time—a serious constraint, because

handicrafts, particularly those with more aesthetic and artistic value, must be stocked and displayed in wide varieties to cater to the varied needs and tastes of potential buyers.<sup>17</sup> With inadequate access to formal sources of credit, artisans typically fall back on these three options: (1) costly, informal financing sources that keep them perpetually in debt; (2) trade advances from middlemen or business houses; and (3) receiving their inputs in kind from the middlemen.<sup>18</sup> This creates a dependence on the middlemen and reduces the artisans' bargaining power relative to the intermediaries, in turn affecting their vertical mobility (from artisan worker to artisan entrepreneur).

2.37 The analysis in this chapter, based primarily on the findings of the ICS, underlines the need for GoO to step up its efforts to improve the investment climate in the state if private sector investments are to be increased. Chapter 3 expands on the IC framework, drawing on sector studies to discuss issues related to externalities that are particularly important in a backward, natural-resource-rich economy such as that of Orissa.

**Fig. 2.13 Access to Credit in the Handicrafts Sector**



Source: Orissa Handicrafts Survey, The World Bank, 2004

## ENDNOTES:

- <sup>1</sup> Specifically, respondents were asked to rate each item in a long list of possible candidates on a scale of 0 (= no obstacle) to 4 (= severe obstacle).
- <sup>2</sup> Orissa has predominantly SMEs; this was reflected in the Orissa ICA sample in which 87 percent of the firms are SMEs and only 13 percent are large firms.
- <sup>3</sup> For details, see Besley and Burgess (2004).
- <sup>4</sup> Mineral processing is the sector in which respondents to the investment climate survey complained most about regulations and corruption (76% cited this as a major or severe constraint). This may have quite a bit to do with the mining rights allocation regime in Orissa.
- <sup>5</sup> It very much resembles the mining sector regimes prevailing in Latin America up to the early 1990s. As happened in Latin America, if Orissa is to tap into its significant geological potential to reduce poverty by fostering economic growth, it must reform its mineral sector.
- <sup>6</sup> Even though the Orissa Mining Corporation (OMC) is not a fiscal burden, private investment in it will encourage an optimal allocation of its resources. It has benefited from the reservation of large areas with significant geological potential and laws that permit it to mine exclusively without any obligation to undertake value-added activities.
- <sup>7</sup> Accessing mining rights and, particularly, executing a mining lease is a protracted and cumbersome process. A mining investor needs to obtain 28–40 clearances, which usually takes three to four years. Currently, GoO is considering the adoption of a single-window clearance system that may significantly streamline this process. However, obtaining clearance from the Indian Forest Department may still delay the mining permitting process, because the Forest Department must first identify comparable land for reforestation.
- <sup>8</sup> This would be the situation of Tata Steel, for example.
- <sup>9</sup> The port at Paradeep was set up in 1966. The only active minor port in Orissa is Gopalpur, which is a fair-weather anchorage port operating from mid-October to mid-March. Preliminary development work is also in progress at Dharma. Ten other port sites have yet to be developed: Palur, Bali-harichandi, Asarang, Bahuda Muhan (Sonapur), Chudamani, Inchuri, Chandipur, Subarnakeha Mouth (Kirtania), Bahabalpur and Jatadhar Muhano Jagatsinghpur (Port Policy, Government of Orissa, 2003).
- <sup>10</sup> These include those that are reported to be entertained by Posco, the Australian company BHP Billiton, and Mitsui of Japan. In addition, over a dozen Indian companies, including the Tata Iron and Steel Company, have submitted proposals to set up a steel plant.
- <sup>11</sup> Other states that have a teledensity of less than 5 are Uttaranchal (3.95), West Bengal (3.72), Rajasthan (3.40), Madhya Pradesh (2.88), and Uttar Pradesh (2.13). Assam, Jharkhand, Chattisgarh, and Bihar have a teledensity of less than 2.
- <sup>12</sup> However, significant improvements in the telecommunications system have taken place in the past few years.
- <sup>13</sup> Although Bhubaneswar and some other places have the potential to become major Buddhist tourist spots, the tourism industry has failed to exploit Orissa's Buddhist connections and bring Orissa into the "Buddhist circuit."
- <sup>14</sup> The other point of concern is the lack of maintenance of historical monuments, beaches, and other natural tourist spots. Hardly any concerted effort on the part of the government or the industry is put forth toward their upkeep.
- <sup>15</sup> The investment climate survey also asked firms to estimate the contribution of various sources of funds for working capital and new capital investments from among sources such as internal resources/retained earnings, banks, and public equity, and informal sources such as moneylenders. It was found that, on average, internal funds constituted 43.7 percent of the source of financing over the period of one year. Local commercial banks are the second largest source, at 21.4 percent for working capital and 14 percent for new investment. The small contribution of foreign banks (0.7%) is not entirely unexpected given the high levels of sickness among the small firms in Orissa compared with firms in other states. Family and friends rank third as a financial resource, and trade credit is fourth. It is apparent from table 2.5 that the leasing industry is far from developed—only 0.4 percent of the firms' working capital needs are met from leasing.
- <sup>16</sup> This is on the assumption that "the plaintiff has fully complied with the contract [when filing] the lawsuit to recover the debt, the debtor attempts to delay and raises opposition to the complaint, the judge decides every motion for the plaintiff [and] there are no appeals." The reference venue for the Orissa estimate is Bhubaneswar; the figures for Maharashtra, Andhra Pradesh, Karnataka, and Tamil Nadu refer to Mumbai, Hyderabad, Bangalore, and Chennai, respectively.
- <sup>17</sup> Except for the utility items, most crafts are pieces of art. The greater the number and variety that can be displayed, the greater the attraction for the customer and, hence, the more sales. Lack of space to display large and varied stock results in lower turnover and, hence, lower profits.
- <sup>18</sup> In cane and bamboo, access to capital has not been reported as a serious problem by artisan entrepreneurs, because the supply of raw material (cane) is totally controlled by a syndicated group functioning as a cooperative.

## CHAPTER 3

### REDEFINING THE ROLE OF THE STATE

#### I. INTRODUCTION

3.1 This chapter goes beyond the investment climate survey for an in-depth look at some sectoral issues. A sector-specific analysis reveals that GoO still maintains a significant role in the ownership and management of commercial and industrial enterprises in the strategic sectors of the economy, and attempts to provide many services that are not strictly of a "public good" nature.

3.2 Such an extension in the role of the government has been motivated by a need to address the divergence between the interests of industry and those of society as a whole. Because of Orissa's *natural resource endowments* and *backward economy*, the spillover effect of an individual firm's actions on other firms and stakeholders outside the industry is likely to be pronounced. For example, exploitation of mineral resources has significant *environmental* and *social* implications. The negative externalities arising from mining activities need to be addressed adequately, and the efficiency of government regulations, procedures, and institutions dealing with environmental and social considerations has a strong impact on investment and is therefore an integral aspect of the investment climate.

3.3 Similarly, poor-quality products from one firm may adversely affect the prospects of an entire industry. If the pioneering exporters from a country or state compromise on the quality of a product, that may significantly set back the prospects of other potential exporters of the same or similar products from that country or state. Such negative externalities are particularly pronounced in sectors in which quality is critical, such as food processing.

3.4 The backwardness of the Orissan economy means that there is a great need for innovative activities (e.g., new products, new processes, and new markets) that could have significant positive spillover effects on other firms. However, firms are often reluctant to innovate, because they will bear all the risks of failure only to possibly share the benefits of success with many others. In the industrial sector, backwardness is reflected in many ways, including the range of productive activities pursued, the technologies used, and the markets exploited. As discussed in Chapter 1, Orissa's industrial sector is relatively undiversified, and many products are either not produced at all or produced in small amounts. The use of modern technology is limited, and most products are sold in local markets. In such a situation, the actions of a prime mover (be it a product or process innovator) or the discovery of new markets may have tremendous effects. In Bangladesh, for example, spillover effects from the first garment factory established in the early 1980s led to the development of a substantial industry within a short period of time. In an area of scarce skills, investment in worker training is often constrained by the fear of rapid turnover.

3.5 In the past, GoO has attempted to address this challenge (i.e., limit negative spillover and generate positive spillover) through direct participation in the productive sectors and direct support to private firms via protection and subsidies. However, this model has been roundly discredited. Moreover, the inordinately large role of the government has compromised the level playing field. For example, in mining, the application of different rules to state-owned enterprises (SOEs) and private sector enterprises may lead to a crowding-out of the private sector. Also, government involvement in running commercial enterprises (managing hotels, for example) may not be the optimal use of scarce public sector resources and capacity. At the same time, the regulatory role of the state to limit negative spillover has not been discharged

effectively because of weak implementation capacity and the poor performance of environmental protection institutions.

3.6 This chapter discusses issues related to access to land, skills and training, quality standards, and technology acquisition and development that affect private sector investment and growth in Orissa.

## II. ACCESS TO LAND: ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

3.7 About 14 percent of the Orissa ICS respondents cite access to land as a major obstacle (table 2.2). From this, it would appear that allotment of land for industrial use is not a major concern for small enterprises, except possibly in the food processing and metal work sectors, where a larger proportion (21 percent and 18 percent, respectively) cited this as a major problem. However, land access and allotment procedures are more complicated for *large players* in Orissa. Here, environmental and regulatory procedures, such as forestry clearance and the public hearing process, and unclear resettlement and rehabilitation (R&R) policies often impede the process of land acquisition for industrial purposes. Industrial growth has been inhibited by social resistance to initiatives that harm the environment, displace people, disrupt the traditional way of living, and block income-earning opportunities.

3.8 Such concerns are not unjustified, as large industrial projects typically require the acquisition and consolidation of the private land holdings of many poor people, causing widespread loss of livelihood. Industrialists are required to pay full compensation according to rates set by the government. This, by itself, is not necessarily a problem for investors as long as the requirements are reasonable, well-defined, and enforced transparently. However, industrialists complain that demands are often excessive and unpredictable (see box 3.1).<sup>1</sup> Lack of clear rules and government reluctance to arbitrate has often forced industrialists to accept such demands, leading to deterioration in performance. At the same time, opponents of such projects complain that the compensation packages from mining projects

are inadequate and that employment in this sector will benefit only a few members of the local and tribal communities.<sup>2</sup>

### Box 3.1. Social Resistance to Large-Scale Investments

Even when the amount of land lost is not too great, displaced people often protest about other inconveniences caused by the newly established industrial plants. For instance, when the National Aluminum Company (NALCO) acquired a fairly long stretch of land to set up its own rail line from the mines to the plant, the company faced allegations from the displaced villagers that the new railway tracks were causing waterlogging in the remaining portions of their cultivable fields, adversely affecting their livelihood. Similarly, when NALCO took water from the Brahmani River for its water supply, locals alleged that this had a negative impact on their water supply and demanded compensation. When they were refused extra compensation in both cases, the villagers protested by sitting on the railway tracks and stopping water flow by breaking pipes and closing valves. These protests caused great inconvenience to the company.

Yet another roadblock is presented by the public hearings organized by the relevant department of the state government for environmental/cultural heritage clearance involving district and taluka-level functionaries, panchayats, and local people. Various objections are raised at these meetings. In an effort to solve this problem, NALCO has resorted to the ingenuous practice of mobilizing local people before the meeting, treating them in good hotels, explaining the issues to them, and generally making them understand that raising objections will benefit neither party. NALCO takes these steps in the hope that if people understand the situation, they will abstain from agitating and let the project proceed unhindered.

3.9 Not surprisingly, this is a particularly serious problem in the *mining* sector. Here, large projects, which typically need to be located on forest land, often face fierce opposition from local and tribal people.<sup>3</sup> Clearance from local authorities is required before any mining lease is granted. This has become increasingly hard to obtain and is proving to be a major impediment to investment in the sector. Sometimes, social resistance to industrial initiatives persists beyond the stage of land acquisition; in this case, investors may

abandon a project after the land has been acquired.<sup>4</sup>

3.10 Another industry constrained by problems with access to land is *shrimp farming/processing*, an industry in which Orissa should have a comparative advantage because of its extensive coastline.<sup>5</sup> Vast stretches of land are available along the entire coastline of Orissa, but they are owned in small plots by poor farming households. Such households find it difficult to enter into shrimp farming because of lack of affordable credit and the riskiness of the venture.<sup>6</sup> At the same time, huge transaction costs (both in terms of money and effort) have discouraged the acquisition and consolidation of small plots. Efforts to consolidate farmland also attract opposition from NGOs protesting against the displacement and loss of livelihood of local inhabitants, as well as environmental degradation. This situation is exemplified by the case of TISCO's Chilika project, a joint venture with an Orissa public sector unit in which attempts to establish a large-scale integrated hatchery-farming-processing unit were abandoned because of huge protests.<sup>7</sup>

3.11 Access to land for the *tourism* sector is also affected by environmental regulations. For instance, development of beaches as tourist spots runs the risk of violating the Coastal Regulation Zone (CRZ) clause of the Environmental Protection Act, while development of forests as wildlife sanctuaries and national parks may run into problems vis-à-vis the Forest Act (box 3.2).

3.12 It is important to note that environmental legislation is national, and Orissa's regulations closely follow national guidelines and are similar to those adopted elsewhere in the country, including "good investment climate" states. However, implementation of these regulations appears to be particularly difficult in Orissa. The state has significant environmental problems and a high level of environmental activism, but the capacity of its regulatory institutions is weak. The success of sectors such as mining and fish processing rests, to a substantial extent, on strengthening the state's environmental

**Box 3.2. Regulatory Framework for Environmental Protection: Too strong or too ineffective?**

The need to make environmental institutions, processes, and procedures more effective and efficient appears to be more urgent in Orissa than in many other states, since much of its comparative advantage lies in activities with potentially serious environmental implications, such as mining and shrimp processing<sup>8</sup>. Given the long stretch of coastal land and large pockets of forestland in Orissa, the most relevant laws are the two acts of the central government: the Environmental Protection Act, incorporating the Coastal Regulation Zone (CRZ) clause, and the Forest Act.<sup>9</sup> In February 1991, under Sections 3(1) and 3(2) V of the Environmental Protection Act, the government declared certain stretches of the coast to be CRZs and regulated industrial activities in these areas<sup>10</sup>. Setting up new industries and expanding existing industries are prohibited in these areas, except for those directly related to waterfront and requiring shoring activities, and projects of the Department of Atomic Energy. The CRZ regulation was amended by the Government of India in 2002, establishing Special Economic Zones (SEZs) within the CRZs. The amendment specifies that nonpolluting industries such as information technology and other service industries can be established within the CRZs. This amendment has potential to encourage states like Orissa to diversify into service activities of a nonpolluting nature; however, it has attracted sharp criticism from several environmental groups. Conflicts and public litigation over the interpretation and implementation of environmental regulations often discourage investors from investing in industrial projects that might conflict with these regulations and thus ultimately be abandoned. Ensuring greater regulatory clarity and certainty with respect to environmental legislation is critical for an improved investment climate in Orissa.

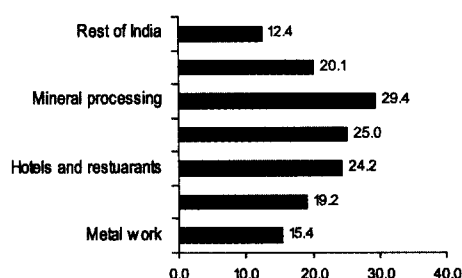
management capacity, including greater efficiency and transparency in applying existing regulations.

**III. SKILLS AND TRAINING**

3.13 Among the Orissa firms that responded to the ICS, about one in five reported a shortage of skilled workers. This is worse than the all-India figure of one in eight (figure 3.1).<sup>11</sup> In Orissa the mineral processing, food processing, and hotel and restaurant sectors seem to be facing a shortage of skilled labor, which could be part of the reason for lower productivity. Overall, except for the hotel industry, the time it takes to fill a vacancy is about the same in Orissa as in India: about three weeks (figure 3.2). Sectoral studies confirm the need for skilled workers. For example, in the *handicrafts*

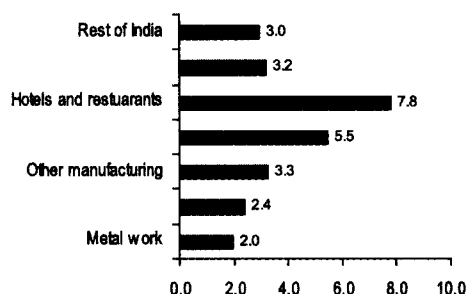
sector, most artisans emphasized the need for skill upgrading through training, although there are differences in the preferred mode of training. A large number are not keen on institutional training and would prefer on-the-job training or training after a normal day's work so that they do not lose earnings.

**Fig. 3.1 Managers Rating Skill Shortages as Major/Severe Obstacle (%): SMEs**



Source: Orissa ICS, The World Bank, 2004

**Fig. 3.2 Weeks to Fill a Skilled Vacancy: SMEs**



Source: Orissa ICS, The World Bank, 2004

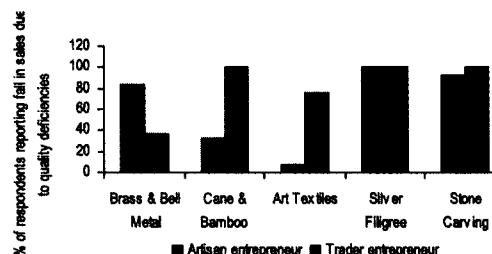
3.14 Orissa has many technical training institutions, including some accredited engineering colleges that produce high-quality engineers who are subsequently employed all over India. However, there are also many low-quality training institutes, both government and private, that offer training courses that are out of line with industry requirements. Many industrial houses provide in-house training.<sup>12</sup> Firms in certain industries—such as shrimp processing, metals, and minerals—do not face

much shortage of trained manpower, at least at the level of supervisors and operators. In the shrimp business, graduates and postgraduates in fishery courses are employed as supervisors to oversee experimental processes as well as daily operations. Plenty of local labor, amenable to training, is available for the labor-intensive parts of the production process, and some workers are given short-term training by the firms.

#### IV. QUALITY STANDARDS

3.15 The government provides little in the way of quality control and testing facilities, and there is no separate legal and institutional framework at the state level for quality assurance—the national and international quality frameworks are applicable to Orissa. Globally, quality assurance systems and standards are becoming increasingly important for all sectors, but they are particularly critical for *food and other agro-based* industries. Orissa's ability to develop its agro-based and fishery industries will be severely constrained in the absence of a good quality assurance system. Quality is also a factor in the *handicrafts* sector. The special survey of the handicrafts sector carried out for this report revealed that most entrepreneurs consider craft quality a major determinant of demand (figure 3.3). Entrepreneurs engaged in the various crafts (other than cane and bamboo work) feel the need for quality control through quality certification.<sup>13</sup>

**Fig. 3.3 The Impact of Quality on Sales**



Source: Orissa ICS, The World Bank, 2004

3.16 There is some minor interface of the industry with government agencies such as the Regional Rural Laboratory (RRL) in Bhubaneswar, the Marine Products Export Development Authority (MPEDA), and the Central Institute of Freshwater Aquaculture (CIFA). RRL Bhubaneswar is mandated to provide testing facilities, especially mineralogical and physico-

chemical testing facilities, while MPEDA is responsible for quality control in aquaculture. In particular, MPEDA monitors seafood quality in landing and preprocessing centers, and provides infrastructure facilities such as preprocessing centers and mini-laboratories for the purpose of quality assurance. It also evolves standards for compliance regarding the export of fish and fishery products to various developed countries based on standards/norms stipulated by those countries. However, these facilities are inadequate.

3.17 In the absence of adequate government provision of testing facilities in the state, industries have set up in-house quality control facilities. For the most successful industrial units, quality assurance does not appear to be a problem. In addition to their world-class in-house facilities, certain export-oriented firms also enjoy the benefits of privately owned accreditation, quality monitoring, and testing facilities (mostly commissioned by the foreign buyers) at exit points like Vizag and Paradeep. However, other local entrepreneurs face problems in maintaining and upgrading quality standards because of financial constraints. Barely managing to break even, these firms lack the time or resources to focus on quality upgrading and are, consequently, trapped in a vicious cycle of low-quality production, restricted markets, and limited prospects for sales and growth. The lack of testing facilities in Orissa's core competence sectors poses a serious constraint in exploiting to the fullest extent the comparative advantages of the state. Common testing facilities are required.

## **V. TECHNOLOGY ACQUISITION AND DEVELOPMENT**

3.18 Like many other states, Orissa does not have a separate policy framework for technology. Technology policy is governed by the Ministry of Science and Technology, Government of India, and is applicable to all states uniformly. However, Orissa's Industrial Policy Resolution 2001 explicitly addresses the issue of technology generation and upgrading, perhaps for the first time, under modernization schemes for the Small Industries Development

Bank of India (SIDBI), the National Small Industries Corporation (NSIC), the Orissa State Financial Corporation (OSFC), the Industrial Promotion and Investment Corporation of Orissa (IPICOL), cooperative banks, commercial banks, and statutory financial institutions. Firms are encouraged to obtain accreditation from international quality testing agencies to make themselves internationally competitive. Additional plans include strengthening the technology cell (TBIIP) that has been set up in OSFC with the help of the United Nations Industrial Development Organization (UNIDO).

3.19 In the absence of a formal state technology policy, large and successful enterprises have set up businesses with the help of imported technology, mostly through collaborations with foreign partners. A number of them have also established in-house research and development (R&D) setups for adaptive and absorptive capability-building. Small industries, however, are usually technologically backward because of the financial constraints that stand in the way of technology upgrading.<sup>14</sup>

## **VI. CALIBRATING THE ROLE OF THE GOVERNMENT IN THE ECONOMY**

3.20 Externalities or spillover effects often imply the need for collective action, although, as Coase (1937) famously argued, private actors can sometime negotiate deals among themselves to address externality issues. Collective action need not be driven exclusively by public intervention but may be carried out by private sector collective bodies, such as chambers of commerce or industry associations. However, there is inevitably some role for public intervention to address externalities.

3.21 Orissa, like other states in India, has tried to address some of these externality issues through a proliferation of public sector agencies. One approach has been direct ownership of commercial enterprises. Thus, for example, the largest player in the mining sector is the state-owned Orissa Mining Corporation (OMC). Jointly established by the central and state governments in the first decade of the country's independence, OMC was the first public sector undertaking in Orissa. By 1962, OMC was wholly state-owned. A

number of other public and private companies are operating in the mining sector. These companies have taken up leases of various minerals for their captive production as well as export through the Minerals and Metals Trading Corporation (MMTC). The public sector also dominates in fisheries. There are 108 fish farms in the government sector, of which about 80 percent are currently operational. About a quarter of the operational farms have been leased out to the private sector; the rest are with the fisheries department of GoO.

3.22 Government is also active in the marketing and procurement of inputs. An example is the handicrafts sector, where the giant Orissa State Cooperative Handicrafts Corporation (OSCHC) was created to deal with procurement and marketing of handicrafts produced in the state, in the major cities of India as well as overseas. There are currently nine government-owned sales centers known as *Utkalika* in the state and eight in various large cities of the country. This public enterprise does not appear to have played any significant role in the sales of handicrafts, leaving the crafts in the hands of middlemen. For example, in 2001–02, OSCHC sold only Rs 306 lakh worth of handicrafts—barely 3 percent of the total reported output for that year (Rs 9,892 lakh). OSCHC sits at the apex of a cooperative system that has been used by the government to deliver direct support to artisans.<sup>15</sup> This has not proved to be an effective arrangement. It is widely known that cooperatives often are run by big intermediaries or artisan traders, with membership confined to their own cronies, family members, or artisans with little voice in the affairs of the cooperative. Most of these cooperatives have become the monopoly suppliers of raw materials and monopoly buyers of the handicrafts, and the government benefit packages intended for the welfare of the artisan workers are siphoned off by those who control the cooperatives. Artisan workers and small artisan entrepreneurs seem to have no faith in the cooperatives.

3.23 Government also has a strong presence in the services sector. The state owns

and operates 30 hotels, either directly through its tourism department (17 units) or indirectly through the Orissa Tourism Development Corporation. (13 units).<sup>16</sup> Established in 1979, OTDC operates with partial managerial and financial independence under India's Companies Act of 1956. Its mandate is to promote the development of tourism, to establish and run commercial ventures related to tourism activities, and to help the state implement its policies concerning the tourism sector. OTDC is expected to operate its facilities on a commercial basis and to generate profits. In fact, in the aggregate, its hotels have posted losses since 1998. Despite the activities of OTDC in travel and transportation, tourism-related services and facilities (restaurants, travel agencies, currency exchange and banking facilities, car rental and other transportation services, Internet cafes, and centers for recreational and cultural activities) are limited for national visitors and inadequate or nonexistent for international tourists, even in the capital city of Bhubaneswar.

## VII. CONCLUSIONS

3.24 The analysis in this chapter reinforces the investment climate assessment (ICA) finding that substantial work needs to be done to improve the investment climate in Orissa. While the investment climate survey results reported in chapter 2 have pinpointed firm-level perceptions of business constraints, this chapter has helped shed light on the broader issue of the role of the state in addressing the divergence between private and social returns. Four major conclusions emerge.

3.25 *First*, the significant role that GoO maintains in the ownership and management of commercial and industrial enterprises in all the strategic sectors of the economy compromises the level playing field. For example, as discussed, the application of different rules to SOEs and private sector enterprises in mining may lead to crowding-out of the private sector. Moreover, government involvement in running commercial enterprises (managing hotels, for example) may not be the optimal use of scarce public sector resources and capacity.



3.26 *Second*, attaining balance between its growth agenda and environmental and social considerations is a critical challenge for the state. Weak implementation and enforcement of environmental legislation, and unclear resettlement and rehabilitation policies may be seriously impeding growth in the very sectors in which Orissa has a comparative advantage: mining, tourism, and shrimp farming/processing.

3.27 *Third*, the model used in the past for providing direct support to firms has been a failure. With liberal financing and preferential procurement policies to encourage industrial development—especially the establishment of small and medium-sized enterprises—the state attracted hordes of individuals who set up manufacturing business without having the necessary entrepreneurial competence or commitment. Not surprisingly, these firms felt little or no compulsion to ensure product quality, upgrade technologies, or maintain price competitiveness.<sup>17</sup> While there is scope for the

state to intervene and support firms and entrepreneurship, its role needs to be redefined to make it more sustainable and dynamic (Rodrik, 2004).<sup>18</sup>

3.28 *Fourth*, because both direct government ownership/management and the old model of direct business support have proved ineffective, the state may need to spell out a vision and strategy for each of the strategic economic sectors. While market forces and private entrepreneurship would be in the driver's seat of this agenda, "governments would also perform a strategic and coordinating role in the productive sphere beyond simply ensuring property rights, contract enforcement and macroeconomic stability" (Rodrik, 2004).

3.29 On the basis of the analysis undertaken in chapters 2 and 3, and the feedback we received from discussions with government and private sector stakeholders in Orissa,<sup>19</sup> we now turn to policy recommendations in the concluding chapter.

## ENDNOTES:

- <sup>1</sup> Social resistance often is more than just a demand, justified or not, for compensation. There appears to be a strong resentment in Orissa against outsider initiatives to set up industries. This resentment is often observed in natural-resource-rich economies. There is a fairly widespread view that such large-scale investments will result in the exploitation of Orissa's natural resources and will drain away of her wealth, with very modest benefits to the local people either in terms of direct employment or growth of local, small-scale manufacturing units through ancillarization. Local sentiment strongly favors the concept of *Bhumiputra* (son of the soil) to take the lead in establishing industries. Such biases in favor of local entrepreneurs and resentment against outsiders send a negative signal to nonlocal industrialists, both national and international, and undermine Orissa's investment climate.
- <sup>2</sup> These concerns are further exacerbated by painful displacement experiences in hydroelectric projects, which rarely gave rise to township growth or expansion of employment opportunities.
- <sup>3</sup> It is alleged that resentment is often whipped up by local vested interests to create a volatile atmosphere and that demonstrations may be politically instigated for the purpose of securing the popular vote. In any case, the demonstrations have a negative effect on the investment climate of the state. It is also claimed that political and other vested interests often exploit the communication gaps that exist among the various parties—namely, the private sector, citizens, and the government—to further their own interests without any concern for the state's welfare.
- <sup>4</sup> Unclear property rights and the lack of a well-functioning land transaction market may exacerbate the problem of access to land. Aspects of government policy (such as high taxes on land transfers) and institutional deficiencies (such as underdeveloped land registries) may impede land transfers. However, these issues were not investigated for this report.
- <sup>5</sup> The ICS identified access to land as an important problem in the food processing sector, which includes shrimp processing.
- <sup>6</sup> Individual small-scale shrimp farming has thus not taken off in Orissa.
- <sup>7</sup> Indeed, this is how social friction and resistance have consistently undermined the prospects for this industry. The hostile attitude of the local people toward outsider industrialization efforts has been instrumental in the failure of large industrial projects in this sector. It also appears that local entrepreneurs might have a vested interest in keeping large investors out of this sector and may instigate citizen and NGO protests against the investors.
- <sup>8</sup> For example, the prawn industry requires the construction of artificial ponds by destroying mangroves, reed bed, and farmland, and causing serious damage to the ecosystem. Also, processed feed and chemical additives pollute the sea and groundwater and reduce the volume of fresh fish caught. There have been violent protests by the local population, particularly the fishermen, against prawn farms that operate around Chilika.
- <sup>9</sup> The Environment Protection Act (1986) enables the central government to prohibit the establishment and location of industries in any part of the country on the grounds of topographical and climatic features of an area, the net adverse impact on the environment likely to be caused by the location of the project or its operation, and various other considerations.
- <sup>10</sup> CRZs include coastal stretches of seas, bays, estuaries, rivers, creeks, and backwaters that fall between the low and high tide lines.
- <sup>11</sup> The extent to which firms view skill shortages as a problem depends on their horizons: If a firm expects to move into more sophisticated products or more competitive markets, it places a greater premium on skills.
- <sup>12</sup> Some enterprises, such as Indian Metals and Ferro Alloys (IMFA), were started with the help of a handful of tribal members who had been trained to run the factory with imported raw materials, equipment, and technology. The tribal population turned out to be highly trainable, and these ventures have been quite successful in the long run.
- <sup>13</sup> The majority would like this certification to be given by a government agency or by a competent private agency. There is little confidence in NGOs' ability to do this.
- <sup>14</sup> The Regional Research Laboratory (RRL) in Bhubaneswar has initiated an industry-institute interface to come up with new technologies appropriate for Orissa's profile. However, it is only the larger industries that come forward to tie up with the RRLs.
- <sup>15</sup> The proportion of artisans enrolled in some kind of cooperative structure varies by sector: art textiles (36%), stone carving (30%), brass and bell metal, (22%), silver filigree (7%), and cane and bamboo work (4%).
- <sup>16</sup> In general, the tourism department operates facilities of lower standard and those located in areas with limited tourism demand. These facilities are considered public services and are offered at rates that barely cover staff

salaries. Lack of funding and lengthy bureaucratic procedures prevent appropriate maintenance, so many of these hotels are in a state of serious disrepair.

- <sup>17</sup> An overwhelming proportion of these industrial units belonged to the ferrous metal sector. In fact, in 1981–82, according to Annual Survey of Industries (ASI) data, as much as 70 percent of the fixed capital in manufacturing in Orissa in the 241 registered factory units was accounted for by this sector. (See UNIDO, 2001.)
- <sup>18</sup> Technological externalities, either static or dynamic, in the form of learning-by-doing that is external to firms is one type of market failure that calls for intervention. Rodrik (2004) emphasizes two other kinds of market failure that are more rampant: "...informational externalities entailed in discovering the cost structure of an economy, and coordination externalities in the presence of scale economies." Unless these market failures are addressed, they can result in the under-provisioning of entrepreneurship in pursuit of structural change.
- <sup>19</sup> The initial findings of the ICS and the sectoral work were discussed with public and private sector stakeholders in two workshops held in Bhubaneswar in November 2004. The recommendations suggested are informed by this consultation with stakeholders. In May 2005 the final revised draft report was disseminated in Bhubaneswar.

## CHAPTER 4

### CONCLUSION AND POLICY RECOMMENDATIONS

*A reform program is a marathon, not a 100-metre sprint.*

Michael Porter, 2004

#### I. INTRODUCTION

4.1 Compared to many other better business climate states of India and the overall Indian investment climate scenario, there seems to emerge a strong case for improvement in Orissa's investment climate, especially if the GoO wishes to lure higher private investment and sustain it over the long run. To achieve the targeted economic growth rate of over 6 percent, a much higher level of investment is required than currently exists; for that to happen, significant improvement in the investment climate is a prerequisite. Reforms are in the works in some key areas, from governance and regulation to the power sector. While the initiatives are at an early stage of implementation, some advances in the investment climate can be gauged by the fact that very large investment proposals - albeit predominantly in steel and ferro-chrome sector - are already beginning to emerge.<sup>1</sup> The proposed US\$12 billion investment by the Korean steelmaker Posco is said to be the largest investment in India by any country so far. Not surprisingly, apart from seeking an assurance for long-term lease for the coal and iron ore supplies, the Korean company has underlined the need for a hassle-free approval.<sup>2</sup>

4.2 Improving the investment climate will involve comprehensive changes across sectors and institutions. In making investment and operational decisions, investors will look at the package of reforms, not just individual actions or reforms. The analysis suggests that IC reforms in Orissa will have to be guided by three fundamental objectives: (1) reducing the regulatory uncertainty and the cost of doing business; (2) making the playing field more level; and (3) strengthening the state's regulatory and strategic role.

4.3 In carrying out the program of IC reforms, three things will have to be kept in mind:

- While it is important to reduce the costs, risks, and barriers faced by private investors, it is also critical to *strike the right balance between private and social interests*, so that these interests are mutually reinforced and growth is equitable and inclusive. The goal of balancing private and social interests is a particular challenge for Orissa, with its legacy of mining and industrial development in the 1960s and 1970s that caused significant environmental degradation and social deprivation and that continues to cause doubts about the broad-based benefits of the investment and growth agenda. The ability of government to resolve this conflict for future investments will be key to creating a more balanced and stable economy.
- While there is need for a comprehensive action plan, both the implementation capacity of government and the political economy of reforms will require appropriate *prioritization of reforms* and clear identification of short-, medium-, and long-term actions. Building capacity in the public sector to analyze investment climate issues and to formulate and implement policies will be an integral part of the reform process.
- Since investment decisions have long-term implications, the *credibility of policies and reform programs is key*. The confidence firms have in government policies affects their investment decisions.<sup>3</sup> Thus, the policymakers must put full force behind a *speedy and robust implementation* of reforms by developing a credible action plan with time-bound outcomes and a monitoring

mechanism to track reforms. When governments effectively deliver what they promise, public trust in the government is fostered, which influences the location decisions of firms. By focusing on picking the low-hanging fruit, the state can help restore the credibility of its institutions, which has eroded over time, among the private sector and the public at large. Soliciting feedback from the private sector in both the reform formulation stage and the implementation stage—and acting on the feedback—are very important for credibility.

4.4 Building on the discussion in chapters 2 and 3, this chapter focuses on the way forward by providing policy recommendations for addressing both cross-cutting and sector-specific constraints. In each case, the recommendations are discussed in the context of (1) the ongoing reform policies and programs of the Government of Orissa, and (2) policy priorities for the short and medium term. In some cases, the recommendations highlight areas that government has yet to address effectively; in other cases, the recommendations echo government's ongoing reform efforts. However, even in the latter case, the report provides government with a concrete evidence base for its policy direction. By carefully weighing the potential costs of delaying the implementation and the potential benefits to be derived from forging ahead, these findings can be powerful arguments to convince those who might resist reform.

#### **A. POLICY RECOMMENDATIONS I: REDUCING THE REGULATORY BURDEN AND THE COST OF DOING BUSINESS**

##### **STREAMLINE AND MODERNIZE REGULATIONS AND IMPROVE GOVERNANCE**

4.5 Regulation and corruption have been identified as the most severe constraints by firms in Orissa and need to be addressed immediately. Priority areas for action include (1) making procedures for the entry and exit of firms simpler and more transparent; (2) increasing the accountability of government institutions and departments that enforce and regulate industry in

Orissa; and (3) modernizing and streamlining sector-specific regulations and laws.

4.6 Reform in this key area is under way. In November 2004, the state assembly approved the Industries Facilitation Bill, which seeks to establish "single-window" agency. The bill aims to establish a single point of contact for new businesses (see box 4.1). The Industrial Promotion and Investment Corporation of Orissa (IPICOL) is expected to be the nodal agency for large and medium-sized projects in the range of Rs 500 million to Rs 10 billion. For projects with investment below Rs 500 million (small units), the District Industrial Centers have been designated as the point of single contact. For mega projects over Rs 10 billion, the Orissa Government has constituted a High-Level Clearance Committee which is chaired by the Chief Minister and has the ministers of the Orissa Cabinet and principal secretaries of key departments as its members. Once the bill is implemented it should help reduce regulatory delays associated with setting up a new business in Orissa. Reducing the number of application forms from over 16 to 1 combined application form; introducing time-bound clearances; streamlining inspection procedures; and reducing the plethora of registers and returns that must be maintained are some of the essential features of this bill. Putting application forms on a website could save time and reduce transaction costs. Eliminating unnecessary inspections would also go a long way in tackling corruption and easing the regulatory burden in terms of management time.

4.7 Although the Industries Facilitation Bill has been approved, its provisions have yet to be operationalized. The key to improving the investment climate would be to ensure that the *provisions of this bill are implemented*, so that the time it takes to establish a new business in Orissa is considerably reduced. A key requirement for effective implementation of the Industrial Facilitation Bill 2004 would be to ensure that time-bound clearances are received and inter-departmental approvals are expeditiously granted. In cases in which approval is vested with the central government, such as mining rights and forest clearance, the state and the central government should work in tandem

#### Box 4. 1. International Experience with Single-Window Agencies/One-Stop Shops

Experience shows that, even in the best circumstances, the creation of a single-window agency/one-stop shop (SWA/OSS) will not automatically result in a streamlined and efficient process of implementing investment projects. Clearly, no agency can just take charge of all the various administrative procedures and simply shorten the time frame and procedural steps. Instead, an OSS must work closely with all the other authorities to carefully adjust and reengineer the individual processes so that they are less burdensome for investors without compromising other policy objectives. This is a time-consuming political process that cannot be accomplished overnight. However, a strong OSS can serve as the key catalyst in such a policy reform process. The most outstanding and well-known examples of a successful OSS system are (1) the Economic Development Board (EDB) of Singapore; (2) the Malaysian Industrial Development Authority (MIDA); and (3) the Industrial Development Authority (IDA) of Ireland.

In all three cases, investors can rely on the agencies to provide practically all the approvals and clearances needed. In fact, the EDB and IDA managed to obtain direct control over a number of approval procedures so that investors must deal directly with only a small number of separate authorities; and even then, the OSS agencies are highly effective in ensuring cooperation. MIDA, on the other hand, started as a pure coordination mechanism and experienced the typical start-up problems of an OSS. But it has the strong and direct support of the prime minister, and its involvement on behalf of an investor effectively guarantees that approvals and permits will be forthcoming without difficulties.

Strong political support is key. An OSS/SWA derives its power and effectiveness not through a strong and all-embracing legal mandate, but rather through political clout and seniority. Common to these three successful agencies is that they received full support from the most senior levels of government and that all three governments made the attraction of foreign direct investment a central pillar of their economic development strategies. Thus, when these agencies approach particular authorities on behalf of investors, it amounts to a direct request from the prime minister's office, making the handling of these applications an immediate priority. In addition, these agencies also benefited from an environment in which fewer licenses, approvals, permits, and clearances were necessary to begin with. To create this environment, the governments had already introduced a series of other reform measures, all geared toward eliminating obstacles to investment. Thus, establishing an effective OSS requires the full attention and support of senior government officials. Only then can the agency effectively design a streamlined process to implement investment projects without becoming immersed in and distracted by intragovernmental politics.

Source: Foreign Investment Advisory Services, World Bank Group, 2000.

to find appropriate solutions to expedite clearances for applicants who want to set up businesses.

➤ **Short term:** Operationalize the single-window agency by July 2005. Although the rules for the single-window agency were set in March 2005, the organizational structure, staffing, and budgeting within IPICOL to handle single-window clearances are not yet in place. It is important to establish a clear flow for the application process—for both the government officials and entrepreneurs—to enable quick and efficient adaptation of the new procedures.

➤ **Medium to long term:** (1) Facilitate entry by establishing online registration processes; (2) reduce the number of inspections from 12 to 6 per year; (3) undertake process reengineering in tax administration to simplify procedures and reduce public-private interface by 2005–06; and (4) establish an institutional process to review

regulatory systems and identify actions to streamline the system

➤ **Medium to long term, sector-specific:**

- Modernize the *mining* rights and fiscal regime in Orissa. Mining requires large investments and, therefore, entails large sunk costs that take several years to recover. If regulatory weaknesses are not dealt with, potential investors will remain cautious. Modernization ultimately will require reform of the Indian Mines and Minerals Act of 1957.<sup>4</sup> Orissa can proceed with its own reforms while it also promotes the reform of the Indian Mines and Minerals Act by the central government.

- GoO should adhere to the principle established in the law of granting mineral rights on the basis of “first come, first served.” Any discrimination in the selection criteria for granting mining rights—such as the applicant’s ability or commitment to

establish downstream industrial facilities—should be avoided. This policy adjustment will establish a level playing field for potential investors and will foster the growth of small and medium-sized private domestic mining companies as part of mining development.

- The consent of the GoO required by law for the transferability and mortgageability of mining rights and for raising a major portion of the investment funds from sources outside the mining rights holder should not interfere in the decisions of investors. This adjustment complements that of avoiding discrimination in granting mineral rights. Indeed, because of both adjustments, market forces will allocate mining rights and resources for mining development. This has been a key feature in the reform of the minerals sector in Argentina, Bolivia, Chile, Ecuador and Peru in Latin America.<sup>5</sup>

- Procedures related to accessing mineral rights—particularly during the development and implementation of mining projects—should be streamlined to encourage investment. The government should consider initiating further research and consultation with important stakeholders to further develop guidelines in the mineral sector, to provide a foundation for sustainable development of minerals based on transparency and consistency. The single-window clearance system included in Industrial Policy Resolution 2001 must be supported, as well as the efforts of the Orissa regional office of the Confederation of Indian Industry (CII) to expedite this change. This may still leave the forest clearance issue unresolved, which will significantly affect the timing for permitting mining projects.<sup>6</sup>

- Orissa should increase the efficiency of implementing environmental regulations and procedures, and facilitate more outreach and consensus-building efforts among all stakeholders to ensure

that investments in the *tourism* and *shrimp* sectors are not throttled when environmental concerns are adequately addressed. For instance, quite a few Indian states are currently promoting eco-friendly tourism. The objective of ecotourism is to ensure the sustainability of tourism—making efforts to ensure that the needs of today's visitors are not met at the expense of future generations. The state of Kerala is a typical example in this regard.<sup>7</sup> Orissa has tremendous potential that can be harnessed in the area of ecotourism. This will require a comprehensive industrial policy framework that explicitly addresses the regulatory norms in that area. The state government may consider obtaining expert input to draw up a blueprint for potential investments in Orissa that are compatible with environmental regulations.

#### IMPROVING INFRASTRUCTURE

4.8 Improving infrastructure—especially the reliability of power supply, roads, rural connectivity, railways, and port facilities—is critical for reducing the cost of doing business and enhancing market access.

4.9 In India, Orissa was the first state to initiate *power sector* reforms to deal with shortages. The state government was a pioneer in unbundling and privatization of electric power distribution. Reforms included the following:

- In 1996, GoO established the Orissa Electricity Regulatory Commission (OERC), India's first state-level regulatory commission in the power sector.
- The state restructured the former Orissa State Electricity Board (OSEB) through corporatization into its new form as the Grid Corporation of Orissa (GRIDCO), and put it in charge of transmission and distribution.
- The hydropower-generating stations owned by the government were transferred to the Orissa Hydro-Power Corporation (OHPC).

- In 1999, the government-owned GRIDCO spun off its distribution business into four separate distribution companies, of which three were sold to the Bombay Suburban Electric Supply Company and the fourth to AES.

4.10 Unfortunately, progress has not been satisfactory, and the power sector continues to face financial distress. Natural calamities such as the super-cyclone in 1999 and the severe drought in 2002–03 have adversely affected the transmission and distribution infrastructure. These natural events—coupled with high accumulated losses and debt on the GRIDCO balance sheets, delays in tariff revision that affect cost recovery, inefficiencies in billing and collection, unchecked power theft, nonpayment of government electricity dues, and other inefficiencies—exacerbated the financial distress of the power sector in Orissa, with the result that service delivery continues to be poor. The private sector operators have not brought in the expected level of commercial management and resources. In addition, the total withdrawal of government support to the sector—in terms of subsidy and support for theft control—has adversely affected the sector's performance. Indeed, this is a good demonstration of the fact that private participation in and of itself is not sufficient to improve the ills of a sector. There must be an effective enabling environment and sufficient incentives for the private sector to operate efficiently. To address these issues, GoO is developing a medium-term business plan for the sector. The companies have made submissions to OERC and a regulatory order has been issued, but no further progress has been made toward implementation.

➤ **Short term:** GoO, GRIDCO, and the distribution companies should take the necessary action for immediate and successful implementation of the business plan to effect a turnaround of the financial crisis in the sector and thus improve the quality of the power supply.

4.11 A key dimension of the transport bottleneck in Orissa is the *inadequacy of port facilities*. With a 480-km coastline at its disposal, Orissa should be a major maritime state. Yet, it

has only one major port at Paradeep and one minor active port.<sup>8</sup> The port at Paradeep is facing serious congestion, which could pose a significant barrier to the implementation of large investment projects in the mining and metal processing industries.<sup>9</sup> It is urgent that initiatives in the port sector be advanced. The framework of the port policy announced in 2003 sets the development of ports in the context of a broader strategy for industrial and infrastructure development, including inland waterways. The policy also proposes setting up an Orissa Maritime Board to act as the single-window agency to facilitate access to land, water, and power for potential investors in the development of ports and related infrastructure. The GoO has taken initiatives to develop ports through public-private partnership (PPP) arrangements. These include the Dhamra and Gopalpur ports.

4.12 Established in 1981, IDCO is the nodal agency for land and infrastructure development in Orissa.<sup>10</sup> The Ministry of Industries and Commerce also has identified Paradeep as the site of a Special Economic Zone (SEZ). India has not had much success with the development of SEZs and parks, with the exception of some information technology (IT) parks. Inefficient public sector management, uncertain land pricing and capital gain tax regimes, and a lack of incentive and accountability for operation and maintenance are among the contributing factors. International experience shows more failures than successes in this area. It may be prudent for GoO to start small and expand if the undertaking proves successful, and to take advantage of the experience of other states. In this context, it may be mentioned that the GoO has set up an IT park ("InfoCity" in Bhubaneswar) which has already attracted, as tenants, some well-known companies such as Infosys and Satyam.

4.13 The National Highway Authority of India (NHAI) has taken on the job of four-laning the highway from Chandikhole to Paradeep (77 km) to improve the road connectivity to the port. Paradeep Port is participating in this project through an equity amount of Rs 40 crores, for which GoI approval has been obtained. The work on the project has



begun and is likely to be completed within the next three years.

➤ **Short term:** While the port policy has been implemented and the Orissa Maritime Board has been set up, the board's role and functions have not yet been clearly defined. This is critical, as the board is meant to facilitate the development of ports through public-private partnerships.

➤ **Medium to long term:** The state government should work toward setting up all-weather, fully mechanized ports at Dhamra and Gopalpur. To develop these ports, GoO should focus, over the long term, on building rail connectivity from the proposed sites to the hinterland and on building an inland container depot in Orissa, in addition to other efforts to develop the infrastructure sector through the public-private partnership mode.

4.14 Developing a good *railway network*, especially from the mining regions to the port, would help improve access to Southeast Asian markets and improve the prospects for exporting to these regions. The bulk of Orissa's exports to other countries are metallurgical and mineral products, but Orissa has only one major port that handles large mineral-based shipments. Developing additional port facilities that are well connected with the interior would significantly improve profitability for firms.

4.15 Improving *air links* is important for business, particularly for tourism. Establishing air connections from Bhubaneswar to Varanasi and Gaya, both with international airports, would complete the "Buddhist triangle" and offer a great tourist attraction. However, this undertaking falls within the purview of the central government, and GoO has thus far been unable to influence the Civil Aviation Ministry to make the change.

➤ **Short term:** Finalize and implement the draft policy framework for public-private partnerships (PPPs).<sup>11</sup>

➤ **Medium to long term:** Encourage PPPs in infrastructure and, where possible, in ownership and management. There is a need for a clear

policy, institutional, and regulatory framework for the development of infrastructure projects on a PPP basis.

## ACCESS TO FINANCE

4.16 The small and medium industries sector in India faces a broad range of constraints. Primary amongst these constraints is access to finance for SMEs. This coupled with poor technology, project management skills and marketing arrangements (market access) pose significant constraints to SMEs leading to high sickness levels. The ICA for Orissa concludes that firms find access to finance among the more serious constraints in the investment climate. This constraint is an issue with 42 percent of the managers of the firms surveyed, compared with 19 percent in the all-India survey. Access to formal sector credit (measured through access to a bank credit line) is lower in Orissa (44 percent) compared with the national average (54 percent). The ICA also found that the average value of collateral required by banks and financial institutions is highest for SMEs at 111 percent (as a percent of the loan) as compared to large industries at 73 percent. It would be helpful to look at improvement of credit performance in other states and learn from their experience, since lending to the SME sector faces similar problems across India.

4.17 While several factors constrain the growth and competitiveness of SMEs, the key constraint is accessing adequate, timely financing on competitive terms. This situation has held back the establishment of small units, their growth to medium enterprises, and the overall growth and development of the SME sector. The problem is attributable to a combination of factors that are rooted in (1) a legal/regulatory framework that makes recovery of bad loans to SMEs, bankruptcy, and contract enforcement difficult for creditors; (2) institutional weaknesses, such as the absence of good credit appraisal and risk management/monitoring tools, that increase banks' transaction costs in dealing with SMEs; (3) the absence of reliable credit information on SMEs; and (4) lack of sufficient market credibility in the SME sector. It is difficult for lenders to assess risk premiums properly, creating differences in the perceived

versus real risk profiles of SMEs and resulting in untapped lending opportunities to SMEs.

➤ **Short term:** The particularly high level of nonperforming assets of financial institutions in Orissa in lending to both priority and nonpriority sectors warrants closer examination, as do the relative roles played by public sector undertaking (PSU) banks, private banks, regional rural banks, IPICOL, the Small Industries Development Bank of India (SIDBI), and GoO's special financial institutions (the Orissa State Financial Corporation and the Orissa State Cooperative Bank) in credit flows to the state. A further study needs to be undertaken to identify the current structure, relative roles, and performance of the various financial institutions in the state with regard to financing businesses (SMEs as well as large enterprises) in Orissa. Such a study will help determine whether there is an adequate flow of credit to firms and help identify the bottlenecks on the supply and demand sides to accessing finance at competitive terms. In any case, improving access to finance should be a priority policy agenda for the Government of Orissa.

➤ **Medium to long term:** While many of the policy recommendations relating to access to finance must be dealt with by the central government—particularly with regard to the policy/regulatory and institutional framework for SME financing—the state can establish policies to create a more conducive environment for market-based financing to SMEs by the formal financial sector. Medium- to long-term actions could involve the following:

- Improving the credit evaluation and risk management skills of banks and other financial institutions to improve lending practices. This will involve building institutional capacity to reduce transaction costs and reduce/manage risks related to SME lending. A risk-sharing facility to accelerate commercial bank lending to SMEs could be established that would provide partial

credit guarantees for commercial bank loans to SMEs.

- Improving credit information (both positive and negative) on SMEs by helping commercial banks and financial institutions verify and collate historic data on SMEs.

- Addressing the problem of collateral by improving and updating land and property records (the state of which currently impedes the use of land as collateral), and promoting the use of collateral substitutes. In this context, an electronic collateral registry could be encouraged. This enables a lender to check for existing rights to the collateral as well as its priority.

- Leasing finance could be an attractive source of finance for SMEs as it provides access to long-term finance required for capital investment with fewer constraints related to collateral etc. This could also help in being developed as a complementary tool to bank loans. Further with appropriately structured tax benefits, leasing finance could prove to be a very efficient source of financing for SMEs.

- Apart from improving the credit appraisal skills of banks to lend to SMEs, bankers in Orissa also believe that SMEs require capacity building assistance and hand-holding in preparation of pre-feasibility studies to approach banks for financing. This could include a wide range of issues from assessing financial needs, methods of payment and financing techniques to negotiating short-term credit, loans and legal documentation. In parallel, strengthening business development service (BDS) and market linkage programs for SMEs, thereby helping them to improve their profitability and competitiveness and to become more creditworthy. The existing DFID technical assistance to SIDBI at the national level could be leveraged to reach SMEs in Orissa. This would include selecting clusters and building capacity of BDS providers and financial institutions in each cluster; developing

links among large corporations and SMEs; working through the major SME business associations; developing high-quality, affordable technical and management training for local SMEs; developing entrepreneurship training programs; and so on.

▪ **Cluster financing approach:** Cluster development for SMEs has another benefit in terms of cluster financing. This enables member firms to seek finance together, provide collective guarantees or even set up their own financial body. The threat of expulsion from the cluster ensures that promises are kept, which allows the network to overcome shortcomings in the legal system. Frequent interaction with financial authorities and government, as well as the role that reputation plays in the cluster, can greatly increase confidence between firms and financial institutions and thus make it easier to get loans and lower rates of interest. Working together also means firms can get supplier credits and can borrow from each other when necessary, which reduces general costs. This approach could be pursued for a few select clusters in Orissa along with public and private sector commercial banks such as SBI and ICICI Bank.

## B. POLICY RECOMMENDATIONS II: ROLLING BACK THE STATE AND LEVELING THE PLAYING FIELD

### ROLLING BACK THE STATE FROM THE REMAINING SECTORS

4.18 GoO has made progress on public enterprise reform – a key element of its overall growth vision. Ten public enterprises have been identified for privatization. One has already been handed over to the private owners and another three are at an advanced stage of privatization. There are also plans to restructure some important public enterprises. Nonetheless, there are still commercial and industrial enterprises in which government plays a significant role, with consequent distortion of the playing field and a crowding-out effect for the private sector. To ensure that the private sector plays the central

role in investment and growth, state participation in economic activity needs to be further curtailed, through privatization, divestments, and withdrawing from the management role. In areas where public investments are deemed necessary—for instance, infrastructure-related enterprises—efficiency can be increased through private participation in infrastructure (PPI), an enhanced regulatory framework, and private management contracts.

➤ **Short term:** (1) Complete the privatization of 10 enterprises that was initiated in 2004—4 enterprises by September 2005 and the remaining 6 by December 2005; and (2) review the state role in various sectors—starting with mines and minerals, fisheries, tourism, and handicrafts—and develop an action plan to limit the state role to that of facilitator.

➤ **Medium to long term:** (1) Implement the action plan mentioned above; (2) restructure a number of the large public enterprises, including the Orissa State Road Transport Corporation, the Orissa State Financial Corporation, the Orissa Life Insurance Company, and the Orissa Seed Corporation; and (3) treat the state-owned Orissa Mining Corporation (OMC) like any other investor.<sup>12</sup>

4.19 While *skill shortage* is not identified among the top investment climate constraints in Orissa, it is not a trivial problem when analyzed through the sector-specific lens. An important element in tackling poor productivity in the mineral processing, food processing, and hotel and restaurant sectors is to improve the supply of skilled labor. GoO investment in building human capital by establishing training institutes and better educational institutions would improve the quality of the workforce in the state and thus improve labor productivity and the competitiveness and profitability of firms in Orissa.

➤ **Short term:** Carry out an assessment of the performance of the public sector training institutes; in particular, their ability to meet the skill requirements of the private industry and services sectors. This assessment should review private provision of training services, explore the

reasons behind inadequate provision of training, and suggest remedial mechanisms.

➤ **Medium to long term:** Create an enabling environment to encourage private sector provision of training. Increase private sector involvement in the public sector training infrastructure. This could include private sector participation in the design of curricula, private management of training institutes, and strengthening of apprentice programs. In addition, there should be greater emphasis on vocational education. There is scope for combining public funding and private training, including through output-based aid approaches in which public funding is disbursed according to the achievement of certain predefined outcome targets.

**4.20 Quality standards, testing, and certification:** Independent testing facilities, in the form of well-equipped scientific laboratories catering to mineral-based and aquacultural industries, should be set up, perhaps one in each industrial cluster. This could be done through public-private partnerships, including joint ventures and perhaps with foreign collaboration

(see box 4.2 for an example of such a facility). Mega-industrial projects that exploit backward and forward links with smaller firms would also ensure that the quality of the latter's products were monitored by the larger partners.

**4.21 Technology:** The technology policy framework in India is determined at the national level and often in a sector-specific manner. The state governments do not usually have specific technology policies.

**4.22** Orissa's lack of private initiative in technology development and adoption can be addressed by strengthening public-private partnerships. One successful model of PPP in technology development is the Drugs and Pharmaceuticals Research Program (DPRP) of the Department of Science and Technology, Government of India, from which useful lessons can be derived (see box 4.3).

**4.23** Like most other state governments, GoO has attempted to support private enterprise growth—including issues related to technology upgrading, quality, and standards—through the direct provision of business development

#### **Box 4.2. Food Research and Analysis Centre (FRAC)**

FRAC is an independent, autonomous, and nonprofit organization registered under the Indian Societies Act. It is sponsored by FICCI and CIFTI, and supported by the Ministry of the Food Processing Industry. Currently, FRAC's main purpose is to help more than 300 member companies, government institutions, exporters, importers, traders, and consumers get their food products tested against national and international specifications. It offers advice and assistance, as well as sophisticated chemical and microbiological analysis

FRAC offers the following services:

1. Analytical services
2. Training in quality control
3. Product development
4. Consultancy services
5. Mobile sample collection facility
6. Preexport inspection and certification
7. Training of technical staff in advanced instrumental analysis and microbiological testing
8. Trouble-shooting for the food processing industry in India.

For a decade, FRAC has provided a broad range of high-quality analytical services and interpretative support for its nationwide list of clients in the food industries. FRAC is continually expanding its analytical capabilities and the scope of its services in response to clients' needs and new regulatory requirements.

The organization has done a great job in offering analytical services in the areas of physiochemicals, mycotoxins, vitamins and other micronutrients, sensory evaluation, and shelf-life studies. It has helped the domestic industry by extending benefit-of-scale economies in the face of limited research and development scope and infrastructure.

#### Box 4.3. Public-Private Partnership: The Drugs and Pharmaceuticals Research Program

The process of drug development is risky, resource-intensive, and time-consuming. Recognizing the need for systematic government intervention to promote the growth of the Indian drug industry, the Government of India launched the Drugs and Pharmaceuticals Research Program (DPRP) in 1994-95. The program provides a great opportunity for effective industry-institution interface in the drugs and pharmaceuticals sector, largely to overcome problems involved in the process of drug discovery and development. The program aims to promote a public-private partnership (PPP) through collaborative research and development (R&D) with the following specific objectives:

- Synergizing the strength of public R&D institutions and the Indian pharmaceuticals industry.
- Creating an enabling infrastructure, mechanisms, and links to facilitate new drug development.
- Stimulating skill development of human resources in R&D for drugs and pharmaceuticals.
- Enhancing India's self-reliance in drugs and pharmaceuticals, especially in areas critical to national health requirements.

DPRP supports research in all aspects of medicine, including setting up facilities and joint industry-institution research projects. Generally, the partners share the costs 50-50. Research undertaken at the industry is fully funded by the industry; research at an institution is supported jointly by the government and the industry. Capital expenditure is fully supported by the government; for recurring expenditures, the government pays 70 percent and the industry pays the rest.

The success of the program can be judged by its contribution to clinical trials and filed patent applications in India and abroad. A peptide-based drug for the treatment of colorectal cancer has been synthesized at Centre for Biotechnology and is poised for human trials by the Dabur Research Foundation. Three product patent applications based on two projects and 12 process patent applications based on four projects have been filed in India and abroad.

services. An example of this, as described earlier, is the provision of marketing assistance to the handicrafts sector through the state-owned marketing agency. As has been the case elsewhere in India, the public provision of BDS has been ineffective. This is not surprising in the light of worldwide experience, which suggests that such services need to be market-driven. In recent years, a consensus has emerged in the SME practitioner community that traditional approaches to supporting these enterprises should be replaced by more effective interventions. The new approach discourages the use of interest rate subsidies and argues for subjecting BDS to market discipline. It calls for redirecting efforts away from helping SMEs directly to developing financial and consulting markets that will serve SMEs.<sup>13</sup>

4.24 Thus, in Orissa, the government's role should be restricted to establishing a suitable environment for market transactions and avoiding the crowding-out of private providers through direct provision of competing services. Certain activities may qualify for subsidies if there are strong externalities associated with

them. These could include research and training, and strengthening of institutions with public-good missions. But even here, it is important that the subsidies are transparent and are linked to results, perhaps through output-based financing disciplines. Cost-effective evaluation methods should be built into subsidy-dependent programs so that it is possible to determine the subsidy-equivalence or subsidy-dependence of such schemes.

➤ **Short term:** The government needs to reexamine its strategy in the area of business support services, moving away from the public provision of these services, including marketing assistance, to facilitating the development of markets for the services.

➤ **Medium to long term:** Implement the new BDS strategy by involving public and private collaboration and forging a partnership. Services that may lend themselves to such partnerships include research and development, skills development, information provision, and certification. Forms of public-private partnership that may be considered include public

subsidization combined with private provision of market related information and contracting out service delivery tasks to the private sector or non-government or membership organizations financed by a combination of public funding and private payment.

#### LEVELING THE PLAYING FIELD

4.25 There are several ways in which the public sector distorts market competition; for instance, through certain financial advantages (tax benefits, lower cost financing) over private competitors, through subsidies for meeting public service obligations that they can use to cross-subsidize their competitive activities, and through procurement regulations and product standards that favor public sector enterprises.

4.26 Because government's role in commercial activity affects market competition, it is important to have great transparency in the role of the government. It would help private sector businesses in Orissa if public sector competitors did not have any artificial cost advantages and there was more direct competition between the public and private sectors. International experience suggests that efficient and fair competition can be encouraged between public and private sector businesses through advocacy by government, civil society, and private sector participants, and through the use of competition law. A detailed analysis of the roles and interactions of the public enterprises with their private sector counterparts will help in designing specific solutions for improving competitiveness, fairness, and efficiency of businesses in Orissa.

#### C. POLICY RECOMMENDATIONS III: STRENGTHENING THE STATE'S REGULATORY AND STRATEGIC ROLE

4.27 As the sectoral analysis in chapter 3 showed, since the earlier model of direct support through provision of protection and subsidies has been discredited, the state may need to play a *coordinating role and devise new and sustainable mechanisms for addressing the issue of technological, informational, and coordination externalities*. Unless market failures in these areas are addressed, they can result in the under-

provisioning of entrepreneurship, with firms having little or no incentive to protect the environment, maintain product quality, upgrade technologies, and retain price competitiveness. It is particularly important for Orissa to counter these externalities to shed its laggard state image.

#### RESOLVING ENVIRONMENTAL AND SOCIAL ISSUES

4.28 The government has attempted to address the issue of acquisition of land (both private and government) for large and small-scale industry through the Industrial Infrastructure Development Corporation of Orissa (IDCO). Going through IDCO has the following advantages: (1) rates for government land are predetermined, so precious time is saved in appraisals that might otherwise take years to complete; (2) rates for private land are negotiated through the government; (3) legalities of registration and leasing are smoothed out; and (4) quite often, zone-wise land can be obtained at a concessional rate. To avoid unnecessary hassles, large industries prefer to deal with the government to sort out legalities and paperwork rather than getting involved with a large number of small land owners. Almost all huge projects in recent years have acquired land through IDCO. However, IDCO has often shied away from acquiring land for industrial purposes, fearful of social resistance and of violating environmental regulations. This is especially true in the case of mineral industries. It has been observed that even companies that offer very liberal compensation packages often fail to escape social resistance. The experience of Sterlite in Lanjigarh is a case in point. In addition to offering a good price for land, the company had to offer a lucrative package, including setting up rehabilitation colonies equipped with all necessary amenities and offering training for all able-bodied men between 18 and 35 years of age for future employment when the plant is operational. The transfer of land from small land owners to industry is an important issue, and this is where the *mediating role of government and other collective organizations such as industry associations is important*.

4.29 It is critical to establish a formal framework of compensation and benefit-sharing

and to have a trilateral dialogue among the government, the local/tribal community, and the mining company, so that joint efforts drive development in communities where mining operations are set up. Enhancing the role of the mining investor as a development promoter in local and tribal areas will help to dampen resistance. Many large private mining companies display good corporate citizenship. For example, mining companies are voluntarily establishing trusts for local development. The Orissa Mining Corporation conducts ongoing informal discussions with locals in which their concerns emerge and are addressed by the company. The company also makes contributions for hospitals, schools, and so on.

➤ **Short term:** Take action to increase the capacity of the environment regulatory bodies (Orissa Department of Environment and Forests, and Pollution Control Board), and the efficiency and accountability of their processes and procedures

➤ **Medium to long term:** Develop and adopt effective compensatory and benefit-sharing mechanisms based on best practices from Orissa, other parts of India, and relevant international experience.

4.30 IDCO has recently formulated, through consultations with stakeholders including local NGOs, a comprehensive rehabilitation and resettlement (R&R) policy to tackle the problem of compensation and redress. The new R&R policy is under consideration.

➤ **Short term:** Finalize the draft R&R policy by October 2005.

➤ **Medium to long term:** Approve and implement the R&R policy. This would be a key step in hastening the process of land allotment in Orissa and would go a long way toward improving the investment climate by streamlining regulatory procedures and ensuring smooth transfer of land after complete compliance and appropriate compensation to the poor forest dwellers.

## ESTABLISHING CREDIBILITY AND TRACKING REFORM EFFORTS

4.31 Reform efforts aimed at improving Orissa's investment climate will have to be credible in the eyes of private investors. Investors would like to see that good intentions are translated into actual policies, that announced policies are implemented, and that, once implemented, they are not unduly reversed. They would also like to see policies that reflect their concerns. Thus, the government needs to systematically obtain feedback on policies from the private sector during both the formulation and implementation stages. The government needs to balance the interests of various groups; private sector inputs will be a subset (although an important subset) of the many inputs that will go into the decision-making process.

4.32 It is important to develop institutions and processes that will (1) enhance the analytic capacity needed in the private sector to underpin its advocacy role; (2) enable systematic and credible government-business consultation; and (3) monitor the delivery of government policy commitments and the impact of policy reforms

4.33 Formulating and updating a clear vision for strategic sectors would reduce risk and uncertainty for the investors and lead to greater transparency in these sectors. However, it is not sufficient to draft policies; the real test of credibility lies in how well these policies are implemented. The key areas of growth in Orissa—such as mining and mineral processing, fisheries, tourism, forestry, and the handicrafts sector—would benefit from such policy documents wherever they do not exist or need to be updated

4.34 To catch up with the high-performing states and counter its laggard image, Orissa needs to step up its reform efforts, reduce uncertainty, and establish credibility. With a renewed mandate to reform and consensus among key players to capitalize on the state's rich potential, the timing is right to forge ahead and build on the ongoing reform process

## END NOTES:

- <sup>1</sup> According to the CMIE measure of investment projects under implementation, Orissa has accounted for 10% of foreign direct investments in India during recent months, ahead of other Indian states.
- <sup>2</sup> *The Hindu*, 31 March, 2005; and *Asia Pulse*, 31 March 2005.
- <sup>3</sup> Indian states with more credibility (such as Tamil Nadu, Karnataka, Gujarat, Maharashtra, and other better performing states) have succeeded in attracting greater investments, especially FDI.
- <sup>4</sup> Indian Bureau of Mines (2003a).
- <sup>5</sup> See Remy Felix (1996).
- <sup>6</sup> GoO should contact the Indian Forest Department or the forest central authority to coordinate actions that could simplify and reduce the time needed for mining and other industrial projects to obtain forest clearance.
- <sup>7</sup> The tropical ecosystem of the Western Ghats in Kerala has been identified as an ideal location for promotion of ecotourism. Kerala has identified 15 tourist spots, mostly sanctuaries and national parks, which are being promoted. Similar efforts are being made in the state of Uttaranchal.
- <sup>8</sup> The port at Paradeep was set up in 1966. The only active minor port in Orissa is the Gopalpur Port, which is a fair weather anchorage port operating from mid October to mid March. Preliminary work development work is also in progress at Dharma. There 10 other port sites, but these have all yet to be developed. They include Palur, Bali-harichandi, Asarang, Bahuda Muhan (Sonepur), Chudamani, Inchuri, Chandipur, Subarnakeha Mouth (Kirtania), Bahabalpur and Jatadhar Muhano Jagatsinghpur. (Port Policy, Government of Orissa, 2003.
- <sup>9</sup> These include those that are reported to be entertained by Posco, the Australian company BHP Billiton, and Mitsui of Japan. In addition, over a dozen Indian companies, including the Tata Iron and Steel Company have submitted proposals to set up a steel plant.
- <sup>10</sup> While IDCO constructs the basic infrastructure for power, water, and so on as part of a package deal, the connections for these utilities are often provided by individual agencies or obtained only after approval is granted. Thus, accepting a package deal from IDCO does not necessarily reduce the lengthy procedural mechanism involved in setting up a fully equipped industrial park.
- <sup>11</sup> It is being prepared by Ernst and Young under the DFID's Industrial Policy Resolution (IPR) project.
- <sup>12</sup> An advantage of OMC is that is not a burden for Orissa's budget. In the future, OMC's challenge is to maximize its contribution to the development of Orissa through the most efficient use of the mineral resources under its control.
- <sup>13</sup> Geeta Batra and Syed Mahmood, "Direct Support to Private Firms: Evidence on Effectiveness," World Bank Policy Research Working Paper 3170, November 2003.



## ANNEX 1

### ORISSA'S INVESTMENT CLIMATE SURVEY

**Table A1. Distribution of the Orissa Sample by City**

	Frequency	Percentage
Bhubaneswar	62	23.75
Cuttack	47	18.01
Ganjam	25	9.58
Keonjhar	16	6.13
Puri	22	8.43
Rourkela	57	21.84
Other	32	12.26
<b>Total</b>	<b>261</b>	<b>100.00</b>

**Table A2. Distribution of the Orissa Sample by Industry Sector**

Industry	Frequency	Percentage
Food processing	34	13.03
Mineral processing	30	11.49
Metal work	66	25.29
Other manufacturing	73	27.97
Hotels and restaurants	58	22.22
<b>Total</b>	<b>261</b>	<b>100.00</b>

**Table A3. Distribution of the Orissa Sample by Number of Employees**

	Frequency	Percentage
<10	5	1.92
10-29	119	45.59
30-99	88	33.72
100-149	15	5.75
150-499	26	9.96
500+	8	3.07
<b>Total</b>	<b>261</b>	<b>100.00</b>

Table A4. Sample and Standard Errors of Selected Investment Climate Indicators for SMEs Only					
Industry	Inspections per Year	% of Management Time Dealing with Regulation	Days to Get a Phone Connection	Days to Get Connected to the Public Grid	
<b>Food processing</b>					
Mean	12.0	12.0	19.0	30.0	
Standard error	2.2	2.0	1.7	5.3	
Observations	31	31	15	12	
<b>Mineral processing</b>					
Mean	14.0	15.4	18.5	45.0	
Standard error	4.1	5.5	4.9	5.7	
Observations	20	18	11	14	
<b>Metal work</b>					
Mean	13.9	11.1	37.1	53.1	
Standard error	2.6	2.0	8.8	9.6	
Observations	59	59	16	22	
<b>Other manufacturing</b>					
Mean	15.6	15.0	36.3	52.5	
Standard error	2.8	2.0	9.8	12.5	
Observations	59	53	14	16	
<b>Hotels and restaurants</b>					
Mean	5.3	11.5	46.0	35.0	
Standard error	0.9	1.4	14.7	9.0	
Observations	52	49	24	17	

Source: Orissa Investment Climate Survey, 2004.

## ANNEX 2

### INDUSTRY AND SERVICES IN ORISSA: A SECTORAL PROFILE

1. This annex provides a sectoral profile of the industrial and service sector in Orissa, focusing on some of the key sectors. A sectoral perspective is useful for at least three reasons: (1) richer insights about the working of the investment climate are often obtained at a sectoral rather than an aggregate level; (2) different sectors appear to play different roles in contributing toward growth of the economy and the poverty reduction agenda of the government; and (3) the Government of Orissa's (GoO's) Growth Vision 2020 envisages private growth in sectors in which Orissa has strategic comparative advantages, including tourism, mineral processing, horticulture, marine products, and handicrafts. The choice is reflective of Industrial Policy Resolution (IPR) 2001, which was formulated after intensive collaborative dialogue with the private sector.<sup>1</sup> By undertaking an analysis in these sectors, the report aims to uncover identify the most significant obstacles to dynamic growth and restructuring.

#### **The Enterprise Spectrum: Different Roles of Different Sectors and Types of Enterprises**

2. All enterprises may contribute to the overarching goal of broad-based growth, but they may take different approaches. Some enterprises may not have a substantial direct impact on employment or growth but may have a very substantial catalytic effect on other enterprises. The catalytic effect may come through backward and forward links, dissemination of good practices (in technology, product quality, production methods, and organizational practices), or through a signaling effect (e.g., a successful large venture may provide positive signals to other investors). Many large capital-intensive enterprises fall in this category, as do some dynamic medium-sized firms, especially export-oriented firms. A second group of enterprises are those that have a substantial direct effect on growth; however, they may not have a substantial effect on

employment nor a catalytic effect on other firms. A third group consists of enterprises that have no significant direct effect on growth or substantial catalytic effect on other enterprises but generate considerable employment. Many small firms fall into this category.

3. The Orissa investment climate survey covered four manufacturing sectors: food processing, metal work, mineral processing, and "other" manufacturing; and a service sector, hotels and restaurants. In addition, a separate survey was conducted on the handicrafts sector. The choice of sectors reflects the structure of the manufacturing sector in Orissa as well as the government's vision for growth. Mineral processing, food processing (in particular, fish processing), and tourism are sectors in which Orissa is believed to have a comparative advantage and that figure prominently in the development vision set out in IPR 2001 and Vision 2020. Handicrafts are an important activity for some segments of the poor population, especially the tribal population. While handicrafts are not expected to be a major driver of growth, they have an important place in the development vision because of the state's well-known cultural heritage and their potential to provide livelihoods for poor people.

4. Mineral processing firms may not have a significant impact on employment but have a growth-enhancing effect, especially through their catalytic effect on other firms. Tourism is also likely to have a catalytic effect on other firms, more by improving the image of Orissa and by some backward link effects than through any knowledge spillover. Tourism may not be a significant contributor to growth but may have a large employment effect. The other manufacturing sectors in Orissa, including fish processing, are likely to have a moderate growth and employment effect and may have some modest catalytic effect. In the light of this analytic classification, we now look at some of

the important sectors in Orissa in greater depth. A sectoral profile based on the surveyed firms only is provided in box 3.2 at the end of the annex.

## SECTORAL PROFILES

### *Mines and Minerals*

5. Orissa has significant geological potential and stands 6th in overall production of minerals in India.<sup>2</sup> The state accounts for almost all of India's chromite production and a little less than three-fourths of its bauxite output. Orissa has important reserves of manganese ore and nickel, and is likely to have major resources of base metals and diamonds. The mines and minerals sector has grown fairly rapidly in recent years; between 1991-92 and 2000-01, the annual growth rate of this sector was 10.4 percent, compared with 4 percent for the rest of India<sup>3</sup>. However, since this sector accounts for less than a tenth of gross state domestic product (GSDP) (8 percent in 2000-01), it has not had much of an impact on the growth of the overall economy. However, with such large mineral reserves, mining occupies an important position in the state's growth vision. Despite its mining tradition, Orissa is still a relatively unexplored state.

6. *The biggest player in the sector is the state-owned Orissa Mining Corporation.* Jointly established by the national and state governments in the first decade of the country's independence, OMC was the first public sector undertaking in Orissa. By 1962, it was wholly state owned. A number of other public and private sector companies are operating in the sector. These companies have taken up leases of various minerals for their captive production as well as export through the Minerals and Metals Trading Corporation (MMTC).

7. The mining sector's impact on Orissa's growth has been less than its potential, partly because of limited backward links of mining operations, despite a policy stance favoring the growth of ancillarization. These weak backward links in the past were in part a result of the central government's freight equalization policy, which subsidized buyers of mineral inputs for

transport costs, thus inadvertently encouraging them to set up mineral-processing units near market centers outside Orissa. With the removal of the freight equalization policy, private mining investors have more incentive to set up processing units near the mines, in the state.<sup>4</sup>

### *Fisheries*

8. Orissa also has vast potential in both marine and inland fishery resources. It has a 480-km coastline and the largest brackish water lagoon in India, Chilka Lake, which measures 79,000 hectares. These resources produced about 0.26 million tones of fish during 2000-01, of which 0.12 million tones were marine and 0.14 million tones were inland. The state contributes a little less than 5 percent of India's total fish production.

9. *Dominance of public sector:* There are 108 fish farms in the government sector, of which about 80 percent are currently operational. About a quarter of the operational farms have been leased out to the private sector; the rest are with the fisheries department of GoO. About two-thirds of the fishing craft in the state are traditional; there are about 2,500 motorized and 1,300 mechanized boats. There is one major fishing harbor at Paradeep; three minor fishing harbors at Gopalpur, Dhamra, and Astrang; and 66 fish landing centers on the coastline of Orissa.

10. The majority of the fishery population in the state is engaged in marine fishing and post-harvest activities. However, the inland sector, involving fish and shrimp farming in freshwater and brackish water, as well as fishing activities in reservoirs, holds immense potential of employment for the local people. During the 1990s, marine fish production in Orissa increased at an annual rate of 5.5 percent against the national rate of 2.2 percent; while the corresponding growth rates for inland fish production were 6.8 percent and 6.5 percent.

### *Handicrafts*

11. Although the contribution of handicrafts to Orissa's gross domestic product (GDP) is not significant, it is an important source of livelihood for many of Orissa's poor

people.<sup>5</sup> There is also an expectation that the handicraft sector has the potential to grow.<sup>6</sup> The government views the growth of this sector as an important part of its pro-poor growth strategy. However, to realize this vision, the handicrafts sector has a long way to go. Total handicrafts exports from Orissa have been hovering around Rs 1 crore for the past several years. Currently, only 10 exporters in Orissa deal with handicrafts.<sup>7</sup>

12. The artisans engaged in handicraft production are mostly poor and illiterate. They are diffused, operating from households, and are heavily dependent on middlemen for inputs, marketing, and advice. They have very little direct contact with final consumers, even within Orissa, and very little knowledge about market demands and tastes. The artisan entrepreneurs and trader entrepreneurs are small in size (in terms of capital investment) and not well informed about markets and marketing strategies; they depend on middlemen to dispose their stocks. The degree of dependence varies by craft but is generally high.<sup>8</sup> Excessive dependence on small intermediaries with very low capital bases has affected the artisans in terms of income and employment. In art textiles, no large middlemen or marketing intermediaries have emerged. There is a large number of small middlemen (trader entrepreneurs) who are not artisans themselves and do not own any showrooms. They operate with very low establishment costs and have kept the entire marketing process on a relatively small scale. Recently, the handicrafts sector in Orissa has seen the emergence of some dynamic entrepreneurs in some of the crafts, but their number is still very small.

13. **Government in marketing and accessing inputs:** In the handicrafts sector, direct support has been largely delivered through cooperatives.<sup>9</sup> This has not proved to be an effective arrangement. The cooperatives are run by big intermediaries or artisan traders with membership often confined to their cronies, family members, or artisans with little voice in the affairs of the cooperatives. Most of these cooperatives have become the monopoly suppliers of raw materials and buyers of the handicrafts, and the government benefit

packages intended for the artisan workers are often siphoned off by those who control the cooperatives. Artisan workers and small artisan entrepreneurs appear to have no faith in the cooperatives. At the apex level (state level), a giant body called the Orissa State Cooperative Handicrafts Corporation (OSCHC) was created to look into procurement and marketing for all the handicrafts in the state to the major cities of India as well as overseas. Currently, nine sales centers known as *Utkalika* are operating in the state and eight are operating in big cities elsewhere in the country. However, this public enterprise does not appear to have played any significant role in the procurement and sale of handicrafts, leaving the artisans at the mercy of middlemen. For example, in 2001–02, OSCHC procured only Rs 306 lakh worth of handicrafts, which was barely 3 percent of the total reported output for the year (Rs. 9,892 lakh).

### *Tourism*

14. With over 3.4 million arrivals in 2002, tourism in Orissa is a significant activity. However, it is dominated by domestic travel (99 percent), caters mainly to low-income visitors, and contributes only modestly to the local economy (2.7 percent of GSDP). International arrivals declined from a peak of 35,000 in 1997 to 23,000 in 2002. Although Orissa has many cultural and natural attractions, private investment in the sector has been discouraged by limited air connectivity, poor internal communications, inadequate tourist services, and the absence of a well-defined and proactive promotional strategy.

15. Tourism is a priority sector for the Government of Orissa. It wishes to help diversify business tourism through the promotion of conventions, fairs, and other business activities; better exploit pilgrimage tourism by enticing its upper-end clientele; foster domestic vacation tourism; and attract international tourism. The implementation of this strategy includes marketing Orissa as the "Soul of India"; developing tourism products better suited to its potential clientele; exploiting its natural and cultural resources; improving air connectivity, local road connections, and public transportation services; improving the beaches at

Gopalpur, Konark, and Puri; and developing a Special Tourism Area on an unspoiled beach next to the city of Puri. Notwithstanding its ambitious plans, *GoO has limited human resources to manage tourism development and limited financial means to make the related infrastructure investments.*

### *Tourism-related Services*

16. The tourism industry mainly consists of local entrepreneurs involved in hotels, restaurants, and related services. It is fragmented and lacks adequate national and international connections. There are about 800 hotels in the state, less than 10 percent of which cater to high income groups and another 20 percent to middle income groups.<sup>11</sup> According to available data, average occupancy rates are below 50 percent in most locations and in many barely reach 35 percent. Representatives of the Hotel and Restaurant Association of Orissa and a number of hotel managers confirmed that low occupancy rates are a serious problem and jeopardize the financial viability of the entire sector. Representatives of the State Bank of India indicated that 50 percent of the bank's hotel portfolio is nonperforming and that the bank had to restructure or reschedule a large portion of its lending to this industry.

17. *The State of Orissa owns and operates 30 hotels, either directly through its tourism department or indirectly through the Orissa Tourism Development Corporation (OTDC).* In general, the tourism department operates the facilities of lower standard or those located in areas with limited tourism demand. These facilities are considered public services and are offered at rates that barely cover staff salaries. Lack of funding and lengthy bureaucratic procedures prevent appropriate maintenance, so many hotels are in a state of serious disrepair. Established in 1979, OTDC operates with partial managerial and financial independence under the Companies Act of 1956. Its mandate is to promote the development of tourism, to establish and run commercial ventures related to tourism activities, and to help the state implement its policies concerning the tourism sector. *OTDC is expected to operate its facilities on a commercial basis and to generate profits. In*

*fact, in the aggregate, its hotels have posted losses from 1998 onward.*

18. Restaurants, travel agencies, currency exchange and banking facilities, car rental and other transportation services, Internet cafes, and centers for recreational and cultural activities are critical elements for the development of tourism. Despite the presence of OTDC in travel and transportation, the availability of these services and facilities appears limited for national visitors and inadequate or nonexistent for international tourists, even in the capital city of Bhubaneswar.

### **Box Annex 2A: Sectoral Profile from Survey Data**

In the absence of more comprehensive information, we can analyze data from the surveyed firms to obtain additional ideas about sectoral characteristics. This analysis, which is limited to sectors with a reasonable number of respondents (at least nine), tells us the following about various sectors:

**Metal works** (66 firms): 28% of the firms are medium-sized or large, compared with 36% for the aggregate sample. The sector is less export-oriented than the average Orissa firm (only 5% of the metal works firms are exporters, compared with a sample average of 11%) and is predominantly private (only 2% of the respondents are state-operated enterprises).

**Mineral processing** (30 firms): The mineral processing firms appear to be at the other end of the spectrum from the metal works firms in terms of size distribution—almost 75% of the surveyed firms are either large or medium-sized (one-third are large). 20% of the firms are export-oriented but, in two-thirds of the cases, the exports are to South Asia. In other words, barely 7% of the firms in this sector export outside South Asia. 7% of the firms are state-owned.

**Agro-processing** (14 firms): There are no large firms in the sample for this sector, but 43% are medium-sized; in other words, an average agro-processing firm is larger than an average firm in Orissa. None of the firms in the sample are exporters. 7% are state-owned.

**Marine-food processing** (9 firms): Firms in this sector are the most export-oriented (78%), with fairly diversified export destinations (22% each to North America and India; 11% to the Middle East, and 44% to "other" countries). The firms are, on average, larger than the average Orissa firm: 56% are medium-sized; another 22% are large. None of the firms in the sample for this sector are publicly owned.

## END NOTES:

- <sup>1</sup> See UNIDO 2001. The IPR 2001 was informed by the consultative process supported by UNIDO.
- <sup>2</sup> Study on Issues of Mining in Orissa, Verve Consulting Private Limited, submitted to the World Bank.
- <sup>3</sup> Ravi- Marina Orissa Vision, November 18, 2004; growth data- Pooja Churamani.
- <sup>4</sup> This may have been a factor behind a renewal of interest in the sponge iron sector in the state. The other factor may simply be the firming of international steel prices. Reportedly, the state government has received inquiries from 29 sponge iron concerns. According to a CMIE report, completed investment projects (public and private) averaged 10.6 percent of GSDP in Orissa during 1997–2001, compared with 6 percent for all of India.
- <sup>5</sup> For example, in 2001-02, the total production of handicrafts was about Rs 30 crore and sales were about Rs 34 crores. Orissa's handicrafts—once an organic part of its sociocultural and economic life—started declining during the British regime and after the Industrial Revolution because of an inflow of cheap, machine-made substitutes. Handicrafts can be broadly divided into three categories: those with utility, those with aesthetic and artistic value, and those that combine utility and artistry. Today, a handicraft item is more likely to be an artistic item than a utility item, and handicrafts are sought mostly by relatively wealthier people in the society.
- <sup>6</sup> Prospects of Orissan Silver Filigree Products.
- <sup>7</sup> Handicraft exports make up a mere 2.7 percent of the total production value of craft goods in the state, while the value of such exports at the national level is 20.2 percent of the total export value.
- <sup>8</sup> An exception is silver filigree and stone carving, in which the trader entrepreneurs are jewelry shops and stonework showrooms.
- <sup>9</sup> The proportion of artisans enrolled in some kind of cooperative varies by sector: art textiles (36%), stone carving (30%), brass and bell metal (22%), silver filigree (7%), and cane and bamboo work (4%).
- <sup>10</sup> *Statistical Bulletin*. Orissa Department of Tourism and Culture. 2002.

# ANNEX 3

## ORISSA IC SUMMARY TABLES

Table	INDICATOR	CORE QUESTION	DEFINITION
<b>Table A3.1 ICA Survey Sample Structure</b>			
	Low capacity	50	<b>Low capacity:</b> firm with less than 75% capacity utilization
	High capacity	50	<b>High capacity:</b> firm with 75% or more capacity utilization
	Size: Small	62	<b>Small:</b> firm with less than 50 employees
	Size: Medium	62	<b>Medium:</b> firm with 50–149 employees
	Size: Large	62	<b>Large:</b> firm with 150 or more employees
	Market orientation: Exporter	11	<b>Exporter:</b> firm with 10% or more of sales exported
	Market orientation: Non-exporter	11	<b>Non-exporter:</b> firm with less than 10% of sales exported
	Ownership: Domestic	3	<b>Domestic:</b> firm with a private domestic capital share that is (1) higher than the government capital share and higher than the foreign capital share; and (2) the government share, and the foreign share if applicable, is less than 10%
	Ownership: Foreign	3	<b>Foreign:</b> firm with foreign capital share that is (1) 10% or more and (2) higher than the government capital share
	Ownership: State	3	<b>State:</b> firm with government capital share that is (1) 10% or more and (2) higher than the foreign capital share (for the purpose of this classification, the private domestic capital share is irrelevant when the government capital share is 10% or more)
	Ownership: Other	3	<b>Other:</b> residual category
	Firm activity		Sector of activity
	Firm location		Geographical location of firms
<b>Table A3.2 Globalization of Markets and Inputs</b>			
	<b>Percentage of sales:</b>		
	Domestic sales	11	Percentage of total sales sold domestically (average value)
	Exported directly	11	Percentage of total sales exported directly (average value)
	Exported indirectly	11	Percentage of total sales exported indirectly (average value)
	<b>Percentage of inputs/supplies:</b>		
	Purchased from domestic sources	12	Percentage of raw materials purchased from domestic sources (average value)
	Imported directly	12	Percentage of raw materials imported directly (average value)
	Imported indirectly	12	Percentage of raw materials imported indirectly (average value)



Table	INDICATOR	CORE QUESTION	DEFINITION
<b>Table A3.3 Respondents' Evaluation of General Constraints to Operation</b>			
	Telecommunications	18	Percentage of firms that consider each constraint as "major" or "very severe" (answer either 3 or 4)
	Electricity	18	
	Transportation	18	
	Access to land	18	
	Tax rates	18	
	Tax administration	18	
	Customs and trade regulations	18	
	Labor regulations	18	
	Skills and education of available workers	18	
	Business licensing and operating permits	18	
	Access to financing	18	
	Cost of financing	18	
	Regulatory policy uncertainty	18	
	Macroeconomic instability	18	
	Corruption	18	
	Crime, theft, and disorder	18	
	Anti-competitive or informal practices	18	
	Legal system/conflict resolution	18	
<b>Tables A3.4A and 4B. Infrastructure Indicators</b>			
	Frequency of power outages (times last year)	19	(average value)
	Production lost due to power outages (%)	19	(average value)
	Have own generator	20	Percentage of firms that own a generator
	Have own well	21	Percentage of firms that own a well
	Production lost in shipment (%)	22	(average value)
	Number of days to obtain a telephone connection (average)	40	Additional cleaning: values greater than 730 disregarded (time frame: last two years)
	Number of days to obtain an electricity connection (average)	40	Additional cleaning: values greater than 730 disregarded (time frame: last two years)
	Number of days to obtain a water connection (average)	40	Additional cleaning: values greater than 730 disregarded (time frame: last two years)

Table	INDICATOR	CORE QUESTION	DEFINITION
<b>Table A3.5 Sources of Finance</b>			
	Retained earnings	27	(average % value)
	Banks, other financial institutions	27	(average % value)
	Trade credit	27	(average % value)
	Equity	27	(average % value)
	Informal sources	27	(average % value)
	Other	27	(average % value calculated on all remaining categories)
<b>Table A3.6. Credits, Loans, and Liabilities</b>			
	Share with overdraft or line of credit	28	Percentage of firms that have an overdraft or line of credit
	Percentage of credit that is currently unused	28	(average value)
	Share with a loan from a bank or financial institution	29	Percentage of firms that have a loan from a bank or other financial institution (Indirect estimation based on answers to question 29)
	Share that requires collateral	29	Percentage of firms that provide collateral for loans
	Average value of collateral required (as % of the loan)	29	
	Average interest rate on loan	29	
	Average duration of the loan (months)	29	
	Share of total borrowing denominated in foreign currency	30	(average value)
	Share of long-term (one year or more) liabilities in total liabilities	82	Ratio of long-term liabilities to total liabilities (average value). The value of total long-term liabilities is calculated as the sum of long-term "foreign currency denominated" and "domestic currency denominated" when not directly reported.
	Share of short-term liabilities in total liabilities	82	Ratio of short-term liabilities to total liabilities (average value). The value of total short-term liabilities is calculated as the sum of short-term "foreign currency denominated" and "domestic currency denominated" when not directly reported.
	Share of equity (or share capital) and retained earnings in total liabilities	82	Ratio of equity and retained earnings to total liabilities (average value).
<b>Table A3.7 Financial Sector— Auditing, Transaction Costs, and Property Rights</b>			
	Share of firms whose financial statements are audited by outside auditors	32	
	<b>Number of days to clear through a financial institution:</b>		

Table	INDICATOR	CORE QUESTION	DEFINITION
	Check	31	(average value)
	Domestic currency wire	31	(average value)
	Foreign currency wire	31	(average value)

**Table A3.8 Regulatory Burden and Administrative Delays by Country**

Interpretations of regulations are consistent, predictable	35	Percentage of firms that disagree with the statement that official interpretations of regulations are predictable (answer either 1 or 2)
Senior management's time spent dealing with regulations	38	(average % value)
Percentage of revenues typically paid to officials to "get things done"	39	(average value)
Percentage of firm revenues typically reported for tax purposes	41	(average value)
<b>Inspections:</b>		
Total days spent in inspections or required meetings with officials (average)	42	Additional cleaning: values greater than 365 disregarded (time frame: last year)
Percentage of meetings/inspections by local authorities	42	(average value)
Total cost of fines or seized goods (% sales)	42, 74	Ratio of "cost of fines or seized goods" to "total sales" (average value)
Percentage of interactions in which informal payment is requested	42	(average value)
Value of informal payments (% sales)	42, 74	Ratio of "value of informal payment" to "total sales" (average value)
<b>Imports:</b>		
Average number of days to clear customs	36	Additional cleaning: values greater than 365 disregarded (time frame: last year)
Longest number of days to clear customs (average)	36	Additional cleaning: values greater than 365 disregarded (time frame: last year)
<b>Exports:</b>		
Average number of days to clear customs	36	Additional cleaning: values greater than 365 disregarded (time frame: last year)
Longest number of days to clear customs (average)	36	Additional cleaning: values greater than 365 disregarded (time frame: last year)
Share of exports/sales	11	(average value)

**Table A3.9 Governance—Uncertainty and Corruption**

How consistent/predictable are government interpretations of regulations?	35	Percentage of firms that disagree with the statement that official interpretations of regulations are predictable (answer either 1 or 2)
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Table	INDICATOR	CORE QUESTION	DEFINITION
	Share of profits reinvested in the firm	52	(average value)
	Confidence in the judiciary	46	Percentage of firms that disagree with the statement "I am confident that the judicial system will enforce my contractual and property rights in business disputes" (answer either 1 or 2)
	Percentage of payment disputes resolved in the courts	47	(average value)
	Planning horizon for investments (months)	55	(average value)
	Percentage of revenues that are needed for informal payments	39	(average value)
	<b>Percentage of firms saying that a gift/payment is required for:</b>		
	A mainline telephone connection	40	(average value)
	An electrical connection	40	(average value)
	A construction permit	40	(average value)
	An import license	40	(average value)
	An operating license	40	(average value)
	Percentage of revenue reported by typical establishment for tax purposes	40	(average value)

**Table A3.10. Labor and Training in International Comparison and by Firm Characteristic**

Share of workers who are permanent	62, 63	Ratio of permanent employees to total employees (permanent+temporary) (average value)
Share of permanent workers who are female	62	(average value)
Share of temporary workers who are female	63, 63	Ratio of number of female temporary workers to number of temporary workers (average value)
Share of permanent skilled workers who are foreign nationals	64	(average value)
New employees as a share of total	65, 62	Ratio of new employees to total number of permanent employees (average value)
Employees who left as share of total	65, 62	Ratio of employees "dismissed or laid off" and "left due to sickness or died" to average number of permanent employees (average value)
Average time to fill skilled technician vacancy (weeks)	66	Additional cleaning: values greater than 104 disregarded (time frame: last two years)
Average time to fill production/service worker vacancy (weeks)	66	Additional cleaning: values greater than 104 disregarded (time frame: last two years)
Excess workforce due to regulatory	37	(average value)

Table	INDICATOR	CORE QUESTION	DEFINITION
	restrictions (%)		
	Share of workforce with less than six years of schooling	70	(average value)
	Share of workforce with more than 12 years of schooling	70	(average value)
	Share of firms offering formal training	67	
	Share of skilled workers receiving training	67	(average value)
	Total days lost to labor disputes or civil unrest	69	Sum of "days of production lost due to strikes or other labor disputes" and "civil unrest" (average value)

Table A3.1: ICA Survey Sample Structure

<i>Firm Size</i>			<i>Firm Activity</i>		
	<i>Sample</i>	<i>Population</i>		<i>Sample</i>	<i>Population</i>
Small	174		Food/Agro processing	25	
Medium	45		Marine food processing	9	
Large	24		Electrical goods	8	
			Metal work	66	
			Plastic/Rubber/Chemicals	38	
			Mineral processing	30	
<i>Market Orientation</i>					
	<i>Sample</i>	<i>Population</i>			
Exporter	19		Hotels and restaurants	58	
Non-Exporter	173		Other industry	27	
<i>Firm Ownership</i>			<i>Firm Location</i>		
	<i>Sample</i>	<i>Population</i>		<i>Sample</i>	<i>Population</i>
Domestic	248		Orissa	261	
Foreign	0				
State	11				
Other	0				

Table A3.2: Globalizations of Markets and Inputs

	<i>Orissa2003</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>	<i>Foreign</i>	<i>Domestic</i>	<i>Exporter</i>	<i>Non-Exporter</i>	<i>Low Capacity</i>	<i>High Capacity</i>
<i>Percent of Sales:</i>										
Sold Domestically	93.1	96.3	89.6	80.8		93.6	30.3	100.0	91.0	95.2
Exported Directly	6.2	2.9	10.3	17.3		5.8	62.4	0.0	7.3	4.5
Exported Indirectly	0.8	0.8	0.1	2.0		0.6	7.4	0.0	1.7	0.2
<i>Percent of Inputs/Supplies:</i>										
From Dom. Sources	97.0	97.1	97.2	94.6		97.4	88.9	97.8	96.4	97.5
Imported Directly										
Imported Indirectly										

Table A3.3: Respondent's Evaluation of General Constraints to Operation

Firms evaluating constraint as "major" or "very severe" (%)										
	Orissa2003	Small	Medium	Large	Exporter	Non-Exporter	Domestic	Foreign	Low Capacity	High Capacity
Telecommunications	3.8	3.5	8.3	0.0	11.1	3.3	4.0		2.0	5.1
Electricity	37.1	40.4	25.0	38.1	22.2	37.3	37.0		44.9	36.8
Transportation	19.2	17.7	25.0	23.8	27.8	19.3	19.0		16.3	18.4
Access to Land	10.8	9.2	19.4	4.8	16.7	12.7	10.5		8.2	13.2
Tax rates	31.0	32.6	25.0	33.3	27.8	34.0	31.0		32.7	28.7
Tax administration	44.6	44.0	47.2	38.1	38.9	48.7	46.5		42.9	42.6
Customs and trade regulations	23.5	27.7	19.4	9.5	33.3	24.0	24.5		18.4	25.0
Labor regulations	20.2	21.3	13.9	23.8	11.1	22.7	21.0		26.5	18.4
Skills and education of available workers	21.1	19.1	30.6	23.8	27.8	18.7	21.5		18.4	21.3
Business licensing and operating permits	27.7	29.8	19.4	28.6	33.3	30.0	29.0		24.5	26.5
Access to financing	38.0	36.9	38.9	47.6	50.0	39.3	39.5		28.6	36.8
Cost of Financing	33.8	39.0	25.0	23.8	27.8	37.3	34.5		28.6	33.8
Regulatory policy uncertainty	23.5	28.4	13.9	14.3	16.7	25.3	24.0		26.5	19.1
Macroeconomic instability	21.6	28.4	2.8	23.8	27.8	22.7	22.0		12.2	22.8
Corruption	57.3	58.2	61.1	57.1	61.1	62.0	58.5		57.1	54.4
Crime, theft and disorder	21.1	25.5	16.7	14.3	22.2	21.3	22.0		16.3	19.1
Anti-competitive or informal practices	23.9	29.1	11.1	23.8	38.9	23.3	24.5		22.4	20.6
Legal system/conflict resolution										

Table A3.4A: Infrastructure Indicators

	Orissa 2003
Frequency of power outages (avg. days last year)	
Output losses among those firms that experienced power losses (% of sales)	5.5
Have own generator (%)	60.2
Have own well (%)	78.2
Production lost in shipment (%)	
No. of days to obtain a telephone connection	45.7
No. of days to obtain an electricity connection	60.0
No. of days to obtain a water connection	
Share of Exports/Sales	6.9

Table A3.4B : Infrastructure Indicators

	Small	Medium	Large	Domestic	Foreign	Exporter	Non-Exporter	Low Capacity	High Capacity
Frequency of power outages (avg. days last year)									
Output losses among those firms that experienced power losses (% of sales)	5.2	4.4	10.8	5.7		5.7	5.7	6.8	5.5
Have own generator (%)	55.8	68.9	83.3	60.2		78.9	48.0	63.3	56.4
Have own well (%)	72.5	68.2	87.5	73.8		88.5	73.4	59.0	78.0
Production lost in shipment (%)									
No. of days to obtain a telephone connection	48.2	42.3	40.8	45.9		32.6	46.2	46.0	46.2
No. of days to obtain an electricity connection	57.0	72.0	62.8	59.3		39.2	65.9	54.6	61.1
No. of days to obtain a water connection									
Share of Exports/Sales	3.7	10.4	19.3	6.4		69.7	0.0	9.0	4.8



Table A3.5: Sources of Finance

	Orissa 2003	Small	Medium	Large	Exporter	Non- Exporter	Domestic	Foreign	Low Capacity	High Capacity
<b>Share of working capital from:</b>										
Retained earnings	53.8	54.9	57.4	39.6	68.2	49.1	54.3		44.7	60.8
Banks, other financial institutions	27.1	25.2	28.0	39.8	31.8	30.3	26.5		30.7	26.3
Trade credit	4.3	3.5	5.0	8.8	0.0	5.7	4.5		4.1	4.6
Equity	0.8	0.6	0.0	5.2	0.0	1.1	0.8		0.0	1.3
Informal sources	1.1	1.4	0.6	0.8	0.0	1.3	1.2		1.4	0.9
All other	12.9	14.4	9.0	5.8	0.0	12.5	12.7		19.1	6.1
<b>Financing of new investments from:</b>										
Retained earnings	32.9	32.2	43.4	19.4	37.9	38.1	35.6		34.0	36.5
Banks, other financial institutions	32.2	30.3	24.1	65.6	56.4	32.7	31.5		35.0	31.8
Trade credit	1.1	0.0	1.9	6.3	0.0	1.7	1.2		0.0	1.7
Equity	1.1	0.1	1.3	0.0	0.0	0.5	1.2		0.0	1.7
Informal sources	5.1	1.2	16.9	1.3	0.0	8.0	5.5		2.8	4.8
All other	27.6	36.2	12.5	7.5	5.7	18.9	25.0		28.3	23.4

Table A3.6: Credits, Loans and Liabilities

	Orissa 2003	Small	Medium	Large	Foreign	Domestic	Exporter	Non- Exporter	Low Capacity	High Capacity
Share with overdraft or line of credit	82.0	39.3	55.6	40.0		43.2	38.9	44.8	45.0	42.9
Percent of credit that is currently unused										
Share with a loan from a bank or financial institution	47.9	44.3	51.1	66.7		48.4	63.2	55.5	49.2	47.2
<i>For the most recent loan or overdraft:</i>										
(a) Share that require collateral	82.1	85.5	72.7	75.0		81.4	91.7	80.9	75.9	80.5
(b) Average value of collateral required (as % of the loan)	102.8	111.1	95.5	73.1		99.9	94.0	104.6	70.7	115.1
(c) Average interest rate on loan	13.3	13.3	12.8	13.5		13.3	12.1	13.5	12.8	13.3
(d) Average duration of the loan	108.4	101.2	106.4	126.0		108.5	118.8	107.3	115.2	108.3
Share of your total borrowing denominated in foreign currency	0.1	0.1	0.0	0.0		0.1	0.0	0.1	0.0	0.0
Share of long-term (1 year or more) liabilities in total liabilities	31.5	31.4	29.0	34.8		31.9	26.4	30.6	34.6	30.3
Share of short-term liabilities in total liabilities	16.5	14.9	20.3	19.0		16.4	20.9	18.1	16.7	17.1
Share of equity and retained earnings in total liabilities	49.8	51.7	49.2	42.7		50.4	44.9	51.2	48.9	50.6

Table A3.7: Financial Sector--Auditing, Transactions and Property Rights

	Orissa 2003	Small	Medium	Large	Exporter	Non- Exporter	Domestic	Foreign	Low Capacity	High Capacity
Share of firms with audited financial statements										
<i>Days to clear through your financial institution</i>										
(a) a check	13.2	13.5	12.6	15.8	16.3	13.1	11.6	9.7	14.5	
(b) a domestic currency wire	4.3	4.1	4.8		0.0	4.0	4.3	8.2	1.9	
(c) a foreign currency wire	4.7	4.4	8.0	2.0	2.0	5.5	4.7	5.8	2.3	

Table A3.8: Regulatory Burden and Administrative Delays by Countries

	Orissa 2003	Small	Medium	Large	Domestic	Foreign	Exporter	Non- Exporter	Low Capacity	High Capacity
Interpretations of regulations consistent and predictable (% disagree)	45.5	44.4	39.5	47.6	46.5		47.1	50.3	42.9	44.4
Senior management's time spent dealing with regulations (%)	13.3	11.8	17.5	16.5	13.3		14.1	12.7	14.0	12.8
Revenues typically paid to officials to "get things done" (% of sales)										
Total firm revenues typically reported for tax purposes (% of sales)										
<i>Inspections:</i>										
(a) Total days spent in inspections or required meetings with officials	11.7	9.4	14.2	21.6	11.2		12.9	12.9	12.0	12.0
(b) Percentage of meetings/inspections by local authorities										
(c) Total cost of fines or seized goods (% of sales)										
(d) Percentage of interactions in which informal payment requested	23.4	19.5	38.5	33.3	24.2		25.0	29.9	8.8	26.4
(e) Value of informal payment (% of sales)	3.4	2.8	2.9	8.4	3.6		7.7	4.8	3.2	2.4
<i>Imports:</i>										
Avg. days to clear customs	14.9	13.7	14.5	18.8	13.2		15.6	14.4	15.3	15.3
Longest day to clear customs	26.5	37.1	27.2	13.9	16.7		19.1	21.8	12.1	34.5
<i>Exports:</i>										
Avg. days to clear customs	9.4	9.4	9.2	10.2	9.8		9.1	10.0	10.2	10.3
Longest day to clear customs	15.4	14.7	14.2	19.5	16.3		14.8	16.5	19.5	15.7

Table A3.9: Governance–Uncertainty and Corruption

	Orissa 2003	Small	Medium	Large	Exporter	Non- Exporter	Domestic	Foreign	Low Capacity	High Capacity
<i>Uncertainty:</i>										
Interpretations of regulations consistent and predictable (% disagree)	45.5	44.4	39.5	47.6	47.1	50.3	46.5		42.9	44.4
Share of profits reinvested in the firm										
Confidence in the judiciary (% disagree)	10.0	8.8	9.3	9.5	11.8	10.1	10.5		12.5	9.2
Percent of payment disputes resolved in the courts										
Planning horizon for investments (months)										

Table A3.10: Labor and Training in International Comparison and by Firm Characteristic

	Orissa2003	Small	Medium	Large	Exporter	Non-Exporter	Domestic	Foreign	Low Capacity	High Capacity
<b>Labor Composition</b>										
Share of workers that are permanent	73.0	66.8	89.2	87.9	71.1	65.2	73.0		86.4	68.4
Share of permanent workers that are female	6.3	5.8	5.3	9.7	18.5	6.8	5.8		9.7	3.7
Share of temporary workers that are female										
Share of perm. skilled wkrs. that are foreign nationals	1.2	0.6	0.8	2.5	0.4	1.5	1.2		0.8	1.5
<b>Labor Turnover</b>										
New employees as a share of total	19.9	23.5	15.3	6.7	12.7	24.9	20.6		15.8	21.5
Employees that left as share of total	2.7	3.2	0.3	3.5	0.1	3.8	2.8		1.2	3.0
Avg. time to fill a skilled techn. vacancy (weeks)	25.5	22.1	35.5	22.8	35.2	23.4	25.4		23.9	27.4
Avg. time to fill a prod/service wkr. vacancy (weeks)	22.8	19.6	33.3	20.9	27.7	19.5	22.4		20.1	26.3
Desired level of workforce as % of current level	102.2	96.0	115.2	89.8	91.3	100.3	102.9		103.8	102.2
<b>Training and Education</b>										
Share of workforce with less than 6 years schooling	31.5	30.4	29.2	33.5	30.7	32.6	32.1		32.4	29.8
Share of workforce with more than 12 years schooling	16.7	16.4	17.4	19.2	19.8	15.2	16.3		19.5	15.6
Share of skilled workers receiving training										
Share of firms offering formal training										
<b>Labor Unrest</b>										
Total days lost to labor disputes or civil unrest										

## BIBLIOGRAPHY

- Besley, Timothy, and Robin Burgess. 2002. "Can Labor Regulation Hinder Economic Performance? Evidence from India," *Quarterly Journal of Economics*.
- Careaga, F. L. 2004. *The Mining and Mineral Processing Component*. Discussion draft submitted to the World Bank. February.
- Dasgupta, P., and L. Liu, ed. 2005. *Subnational Reform in Business Regulatory Framework – Experiences and Challenges in Select Indian States*. February 15
- Dollar, David, and Aart Kraay. 2002. "Growth is Good for the Poor." World Bank.
- Government of India. 2002. *Report on Reforming Investment Approval and Implementation Procedures*. November.
- Government of India. 2002. *Orissa Development Report*. Planning Commission, New Delhi.
- Government of India. 2004. *Report of the Task Force on Implementation of the Fiscal Responsibility and Budget Management Act 2003*. Ministry of Finance.
- Indian Council for Research on International Economic Relations (ICRIER). 2004. *Investment Climate and Total Factor Productivity in Manufacturing: Analysis of Indian States*.
- Ratha, D. 2003. *Concept Note: A Growth Strategy for Orissa*.
- Ravishankar, V. J., Marina Wes, and Pooja Churamani. 2004. *Orissa Vision*. November 18.
- Ray S. Amit. 2004. *A Note on Orissa's Investment Climate*. submitted to the World Bank. August.
- Rodrik, D., ed. 2003. *In Search of Prosperity: Analytic Narratives on Economic Growth*.
- Rodrik, D. 2004. *Industrial Policy for the Twenty-First Century*. September.
- Rodrik, D., with A. Subramaniam. 2004. *Hindu Growth to Productivity Surge: The Mystery of the Indian Growth Transition*. February.
- United Nations Industrial Development Organization (UNIDO). 2001. *Industrial Policy Resolution 2001 of the State of Orissa, Volume 1: Proceedings of the Policy Review Workshop, Economic Analysis and Policy Recommendations*. Vienna. June.
- . 2001. *Industrial Policy Resolution 2001 of the State of Orissa, Volume 2: Industrial Growth and Socioeconomic Progress in Orissa*. Vienna. June.
- Verve Consulting Private Limited. 2003. *Study on Issues in Mining in Orissa*. Draft report submitted to the World Bank. January.
- World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*.
- World Bank. 2004. *Doing Business in 2004: Removing Obstacles to Growth*
- World Bank. 2004. "India Investment Climate Assessment: Improving Manufacturing Competitiveness."
- World Bank. 2004. Project Document on a Proposed Loan and Credit to India for the Orissa Socio-Economic Development Program. SASPR, September 28.
- World Bank and Confederation of India Industry. 2002. "Improving the Investment Climate in India."
- World Bank. 2000. "Do One-Stop Shops Work?" Foreign Investment Advisory Services. September.

