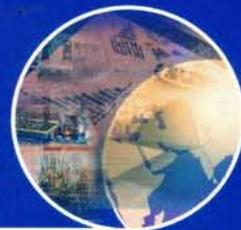


# PROJECT APPRAISAL AND FINANCING

Amrish Gupta



The process of delicensing, liberalization and globalization, which started in the early nineties in our country, has thrown lots of opportunities as well as challenges before the enterprises and the entrepreneurs. The era of starting nineties has created a new breed of entrepreneurs whose quest for finance is unending. The lending institutions, on the other hand, have become choosy due to, among other reasons, mounting Non-Performing Assets (NPAs). All this has led to increased pressure on the availability of finance to the entrepreneurs. In this setting, careful consideration of *Project Appraisal and Financing* holds the key to survival.

Designed in this context, the book begins with explaining the project fundamentals—features, identification, and project life cycle. It goes on to explain and analyze project formulation, appraisal of promoters and management, market appraisal, technical appraisal, financial appraisal, project report, institutional risk assessment and financing decision. The book also focuses on the concepts of project management, overruns, post-completion performance evaluation and contemporary issues like infrastructural financing, and environmental impact assessment. *All through the book, the emphasis is on critical analysis and decision-making.*

Primarily intended for the students of MBA/PGDM/PGDBM and other allied courses such as MFC and MBE, the book will also be of immense value to the students of CA, CWA, CS, CFA, CPA and CAIIB. Besides, it will be equally beneficial for the executive development and in-company training programmes on project appraisal and financing. Project finance executives in consulting firms and lending institutions and banks will also be benefited from the book due to its practical orientation.

## KEY FEATURES

- Comprehensive coverage and treatment of the subject matter.
- Practical approach in dealing with the subject, thus making the text easy-to-comprehend.
- Written in a lecture mode and conversational style; classroom simulative.
- Large number of varying illustrations and exercises.
- Large number of case studies, including 2 (written by the author) registered with The Case Centre UK/USA.
- Systematic and organized coverage of a full-fledged manufacturing project, including 10 years' financial projections integrated with the text throughout the book.
- Inclusion of contemporary issues like infrastructure financing and environmental impact assessment.
- Unique pedagogical features, as explained in the 'Visual Tour of the Book' section.
- **Chapter-wise PPTs ([phindia.com/amrish-gupta/](http://phindia.com/amrish-gupta/)) as well as Solutions Manual available for instructors adopting the book.**

## THE AUTHOR

**Amrish Gupta**, PhD, FCA, is Senior Professor, Finance and Accounts, FORE School of Management, New Delhi.

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# CONTENTS

Visual Tour of the Book .....	xvii
Preface .....	xxix
About the Author .....	xxxiii

(For detailed Contents refer to Roadmap given in the beginning of Every Chapter)

## PART 1: FOUNDATION

### Chapter 1: Project Fundamentals: Features, Identification and Life Cycle ..... 3–28

Roadmap .....	3
Chapter Opener: TANISHQ: A SPARKLING JOURNEY .....	4
Learning Outcomes .....	6
Introduction .....	6
Project .....	7
Features of a Project .....	7
Identification of a Project .....	13
The Project Cycle .....	20
Project Appraisal and Financing .....	22
40 Tips for Budding Entrepreneurs .....	23
Over to the Next Chapter .....	24
Key Words .....	24
Reference Materials .....	24
Test Your Knowledge .....	26

 TANISHQ: A Sparkling Journey



The Tanishq saga began in the early 1990's primarily fuelled by the fabled Tata entrepreneurial spirit and partly forced by circumstance.

## PART 2: PROMOTERS AND MANAGEMENT

### Chapter 2: Assessment and Appraisal of Promoters and Management ..... 31–68



Late Dhirubhai Hirachand Ambani was the first generation, legendary, promoter of Hindustan's largest

Roadmap .....	31
Chapter Opener: RELIANCE: SIPHER SE SHIKHAR TAK KAA SAFAR .....	32
Learning Outcomes .....	33
Introduction .....	33
Purpose of Assessment and Appraisal of the Promoters and Management .....	33
Appraisal of Promoters and Management by Lending Institutions .....	34
Role of Nominee Directors .....	41
Significance of Appraisal of Promoters and Management and its Impact on Project's Means of Financing and Profitability .....	43
IRR Spread .....	47
Determination of IRR Using Excel Software .....	48

private enterprise **Reliance Industries Ltd.** which became the first corporate from Asia to issue **50 and 100 years bonds in the US debt market** in 1996-97 during his life-time itself.

Decision Making Case Study.....	54
Over to the Next Chapter.....	54
Key Words.....	54
Reference Materials.....	54
Test Your Knowledge.....	55

## PART 3: MARKET ANALYSIS AND APPRAISAL

### Chapter 3: Market Analysis and Appraisal ..... 71–102

Roadmap.....	71
Chapter Opener: LEARNING FROM TATA'S NANO MISTAKES.....	72
Learning Outcomes.....	73
Introduction.....	73
Purpose of Market Analysis.....	73
Steps in Systematic Market Analysis.....	74
Sample of a Market Survey.....	76
Some Contemporary Challenges In Market Assessment....	77
Research Agencies Offering Services for Preparing Market Assessment Reports.....	79
Regulatory Authorities, Trade Associations and Export Promotion Councils for Secondary Sources of Market Information.....	80
Illustrative List of Secondary Sources of Publications on Market Related Information.....	81
Market Appraisal by Lending Institutions.....	82
Significance of Appraisal of Market Viability and its Impact on Project's Cost and Profitability.....	87
Decision Making Case.....	91
Over to the Next Chapter.....	91
Key Words.....	91
Reference Materials.....	91
Test Your Knowledge.....	92

#### Learning from Tata's NANO Mistakes

By Matt Eyring | 8:12 AM, January 11, 2011

It's been a rough season for Tata Motors' much-publicized "people's car," the Nano. In November, while overall auto sales in India's booming economy rose more than 22%, Tata sold only 509 Nanos, down precipitously from the 9,000 it sold the previous July, news that's been trumpeted in disparaging headlines from New York to Sydney.



A cheap car that's not really cheap. A safe car whose safety has been questioned. A poor people's car that poor people aren't buying. That sounds like a failure, certainly.

### Chapter 4: Demand Forecasting..... 103–126

#### Honda to Set Up World's Largest Scooter Plant in Gujarat

By Chanchal Pal Chauhan, ET Bureau | Aug 04, 2014.



Scooter sales have jumped by 29% in the ongoing fiscal, and now form 27% of the total two-wheeler market from just 8% a decade back.

Roadmap.....	103
Chapter Opener: HONDA TO SET UP WORLD'S LARGEST SCOOTER PLANT IN GUJARAT.....	104
Learning Outcomes.....	105
Introduction.....	105
Demand Forecasting.....	105
Time Series Analysis of Past Demand.....	106
Advanced Statistical Techniques of Time Series Analysis.....	118
Judgmental/Qualitative Techniques.....	119
Significance of Demand Forecasting.....	120
Demand and Product Pricing.....	121
Over to the Next Chapter.....	121
Key Words.....	122
Reference Materials.....	122
Test Your Knowledge.....	123

**Chapter 5: Product Pricing Decisions ..... 127-143**

Roadmap .....127  
 Chapter Opener: MARKET LED PRICING AT HONDA.....128  
*Learning Outcomes* .....129  
 Introduction.....129  
 Product Pricing.....129  
 Target Pricing or Cost-Plus Pricing Based on Absorption Costing.....130  
 Market Led Pricing Based on Target Costing.....135  
 Additional Influences on Product Pricing.....137  
 Institutional Approach to Pricing .....138  
 Over to the Next Chapter.....138  
*Key Words* .....139  
*Reference Materials* .....139  
*Test Your Knowledge*.....139

**Market Led Pricing at Honda**

हॉन्डा ने भारत में अपनी सबसे सस्ती बाइक CD 110 ड्रीम लॉन्च की  
 5 Jul 2014, 1418 hrs IST, एजेंसियां



The above HONDA story shows the importance of market led pricing to sustain over a long-run and score an edge over the competitors.

**PART 4: TECHNICAL ANALYSIS AND APPRAISAL**

**Chapter 6: Technology and Know How Selection..... 147-169**

**Smart Meters for More Efficient Power Transmission**

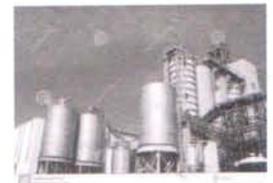


Such is the power of technological innovation. It makes business efficient and economic. A new project therefore has to be very selective of the latest but proven technology.

Roadmap..... 147  
 Chapter Opener: SMART METERS FOR MORE EFFICIENT POWER TRANSMISSION..... 148  
*Learning Outcomes* ..... 149  
 Introduction ..... 149  
 Purpose of Assessment and Appraisal of Technology and Know-how Selection..... 149  
 Issues Related to Technology and Know-how ..... 150  
 Project Report on Aluminium Composite Panel Project Continued..... 151  
 Appraisal of Technology and Know-how Arrangements by Lending Institutions..... 159  
 Significance of Appraisal of Technology and Know-how Selection and its Impact on Project's Cost and Profitability ..... 161  
 Decision Making Case Study..... 162  
 Government Policy on Foreign Technical Collaborations.....162  
 Government Policy on Payments towards Foreign Consultancy Services ..... 163  
 Over to the Next Chapter..... 164  
*Key Words*..... 164  
*Reference Materials*..... 165  
*Test Your Knowledge*..... 165

**Chapter 7: Infrastructural Facilities and Inputs of Production..... 170-195**

Roadmap .....170  
 Chapter Opener: INFRASTRUCTURAL FACILITIES.....171  
*Learning Outcomes* .....172  
 Introduction.....172  
 Purpose of Technical Analysis and Appraisal.....172



Systematic Technical Analysis: Identification and Assessment of Requirements of Infrastructural Facilities .....172

Project Report on Aluminium Composite Panel Project *Continued* .....173

Estimation of the Life of the Project.....184

Technical Appraisal by Lending Institutions.....184

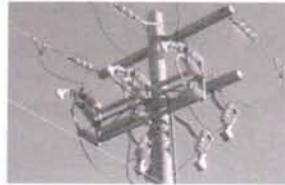
Significance of Technical Appraisal .....192

Over to the Next Chapter .....192

*Key Words* .....193

*Reference Materials* .....193

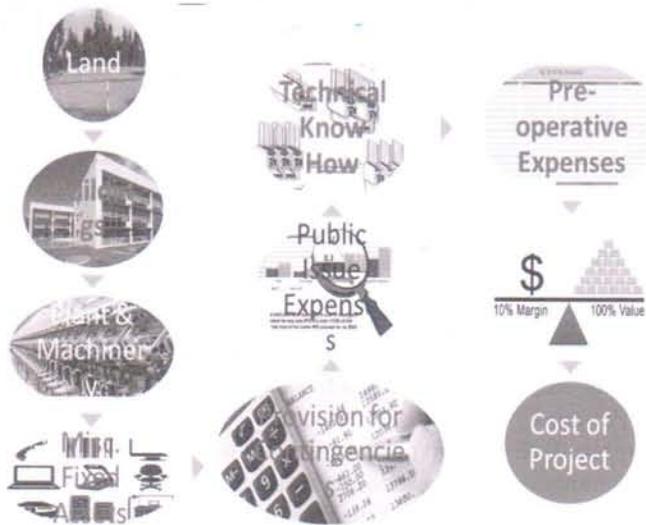
*Test Your Knowledge* .....193



**PART 5: FINANCIAL ANALYSIS AND APPRAISAL**

**Chapter 8: Assessment of Cost of Project ..... 199–222**

**Components of Cost of Project**



Roadmap..... 199

Chapter Opener: COMPONENTS OF COST OF PROJECT..... 200

*Learning Outcomes*..... 201

Introduction ..... 201

Basic Input for Financial Analysis and Appraisal..... 201

Purpose of Financial Analysis and Appraisal ..... 202

Coverage of Financial Analysis and Appraisal..... 203

Assessment of Components of Cost of Project ..... 203

Project Report on Aluminium Composite Panel *Project Continued*..... 204

Total Cost of the Project..... 212

Appraisal of Cost of Project by Lending Institutions .... 213

Significance of Determination of Cost of Project ..... 215

Over to the Next Chapter..... 216

*Key Words*..... 216

*Reference Materials*..... 216

*Test Your Knowledge*..... 217

**Chapter 9: Sources of Project Finance ..... 223–234**

Roadmap .....223

Chapter Opener: FUNDING SOURCES.....224

*Learning Outcomes* .....225

Introduction.....225

Sources of Finance.....225

Project Report on Aluminium Composite Panel *Project Continued* .....229

Appraisal of Proposed Means of Finance by Lending Institutions .....230

Significance of Assessment of Means of Finance .....232

Over to the Next Chapter .....233

*Key Words* .....233

*Reference Materials* .....233

*Test Your Knowledge* .....234



**Chapter 10: Capital Subsidies and Incentives Available to New Projects and Taxation..... 235–266**

**Financial Subsidies**

**Outlay Amounts for Infrastructure Development (First Year Plans)**

Plan	Outlay (Rs. Crores)
10th Plan	~1000
11th Plan	~1500
12th Plan	~2000

**Initiatives for Infrastructure Development**

- Mega Food Parks Scheme
- Integrated Corridor Scheme
- State Level Initiatives
- National Horticulture Board
- National Hort. and FFI Mission

**SUBSIDY UNDER TUFS**

Standalone spinning	2% IR
Composite spinning	5% IR or 15% MMS
Garments	5% IR + 10% CS or 15% MMS
New shuttle-less loom	6% IR + 15% CS or 30% MMS
Handloom, silk	5% IR or 30% CS

IR: interest reimbursement; CS: capital subsidy; MMS: margin money scheme  
Source: Textile Commissioner's Office

Roadmap..... 235

Chapter Opener: FINANCIAL SUBSIDIES AND SUBSIDY UNDER TUFS..... 236

*Learning Outcomes*..... 237

Introduction..... 237

Fiscal Incentives Available under the Income Tax Act...237

Subsidies and Incentives as per North East Industrial and Investment Promotion Policy (NEIIPP) 2007 of the Central Government..... 250

Select Subsidies and Incentives for New Projects at State Government Level: The Case of Gujarat..... 255

Influence of Incentives on Project Selection, Its Various Parameters and Sustainability..... 258

Over to the Next Chapter..... 259

*Key Words*..... 259

*Reference Materials*..... 259

*Test Your Knowledge*..... 260

**Chapter 11: Capital Structuring and Arranging Means of Finance..... 267–296**

Roadmap..... 267

Chapter Opener: BUSINESS RISK VS. FINANCIAL RISK..... 268

*Learning Outcomes*..... 269

Introduction..... 269

Approach to Capital Structure and Financing the Project..... 269

Lending Institutions' Norms..... 269

Public Issue Eligibility Conditions of SEBI..... 276

Listing Norms of Stock Exchanges..... 278

Other Considerations..... 281

Need for and Significance of a Sound Capital Structure ...288

Over to the Next Chapter..... 288

*Key Words*..... 289

*Reference Materials*..... 289

*Test Your Knowledge*..... 289

**Business Risk Vs. Financial Risk**

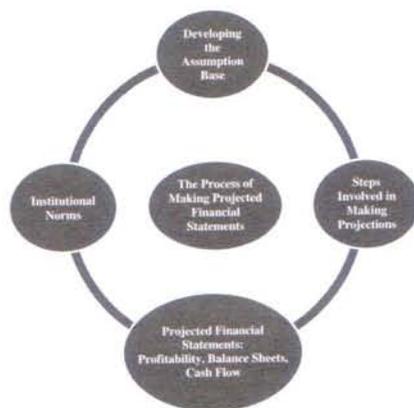
**WEIGHTED AVERAGE COST OF CAPITAL**  
= proportion of equity x cost of equity + proportion of debt x cost of debt

**GEARING = DEBT / EQUITY**

**Risk & Standard Deviation**

Low Risk/Return  
High Risk/Return

**Chapter 12: The Process of Projected Financial Statements..... 297–326**



Roadmap..... 297

Chapter Opener: THE PROCESS OF MAKING PROJECTED FINANCIAL STATEMENTS..... 298

*Learning Outcomes*..... 299

Introduction..... 299

Projected Financial Statements: General Institutional Norms..... 299

Developing the Assumption Base..... 300

Steps Involved in Making Financial Projections..... 302

Case Study on Financial Projections..... 313

Over to the Next Chapter 12A..... 320

*Key Words*..... 320

*Test Your Knowledge*..... 320

**Chapter 12A: A Project on Financial Projections and Appraisal: Merry-Con Aluminium Composite Panels Ltd. ....327–365**

Roadmap .....327  
 Chapter Opener: TREMENDOUS POTENTIAL OF ALUMINIUM COMPOSITE PANELS .....328  
*Learning Outcomes* .....329  
 Introduction.....329  
 A Project of Financial Projections and Appraisal—  
 Merry-Con Aluminium Composite Panels Ltd. ....329  
 Promoters and Management .....329  
 Marketing and Technical Aspects and Other  
 Project Details.....329  
 Cost of the Project .....330  
 Proposed Means of Finance .....330  
 Assumptions for Projected Financial Statements .....330  
 Assignment: 10 Years' Projected Financial Statements  
 Together with Accompanying Schedules .....334  
 Over to the Next Chapter 13A.....365

**Tremendous Potential of Aluminium Composite Panels**



**Chapter 13: Overall Financial Evaluation .....366–383**

**Techniques of Financial Analysis**



**Break-even point**



Notes  
 Quiz  
 End



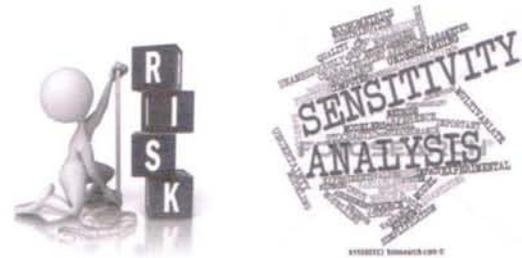
Roadmap..... 366  
 Chapter Opener: TECHNIQUES OF FINANCIAL ANALYSIS..... 367  
*Learning Outcomes*..... 368  
 Introduction ..... 368  
 Overall Financial Evaluation: General Institutional  
 Norms..... 368  
 Primary Evaluation Criterion ..... 368  
 Further Comprehensive Ratio Analysis..... 377  
 Case Study on Evaluation of Proposed Capital  
 Structure..... 379  
 Another Case Study on Evaluation of Proposed  
 Capital Structure..... 380  
 Summary of Evaluation..... 380  
 Project of Merry-Con Aluminium Composite  
 Panels Ltd. *Continued*..... 381  
 Over to the Next Chapter 13A ..... 381  
*Key Words*..... 381  
*Test Your Knowledge*..... 382

**Chapter 13A: Project of Merry-Con Aluminium Composite Panels Ltd. Continued for Overall Financial Evaluation .....384–392**

Roadmap ..... 384  
*Learning Outcomes* ..... 385  
 Introduction..... 385  
 Primary Evaluation Criteria ..... 387  
 Further Comprehensive Ratio Analysis ..... 392  
 Recommendation ..... 392  
 Over to the Next Chapter 14A..... 392

<b>Chapter 14: Risk Management in Project Finance</b> .....	393–404
Roadmap.....	393
Chapter Opener: RISK ASSESSMENT AND MITIGATION.....	394
<i>Learning Outcomes</i> .....	393
Introduction.....	395
Nature of Risk in Project Appraisal and Financing.....	395
Events Influencing the Returns and Leading to Risks.....	396
Risk Management in Practice.....	397
Project of Merry-Con Aluminium Composite Panels Ltd. <i>Continued</i> .....	402
Over to the Next Chapter 14A.....	403
<i>Key Words</i> .....	403
<i>Test Your Knowledge</i> .....	403

**Risk Assessment and Mitigation**



Risks are inherent in project appraisal and financing since there are a lot of subjective assumptions, judgments, estimates, anticipations and forecasts relied upon during the process of appraisal.

<b>Chapter 14A: Project of Merry-Con Aluminium Composite Panels Ltd. Continued for Risk Management through Sensitivity Analysis</b> .....	405–425
Roadmap.....	405
<i>Learning Outcomes</i> .....	406
Introduction.....	406
Project on Risk Management through Sensitivity Analysis: Merry-Con Aluminium Composite Panels Ltd., <i>contd.</i> .....	406
Decreased in Capacity Utilisation by 5%.....	407
Decreased in Selling Prices by 2%.....	413
Increase in Raw Material Prices by 2%.....	419
Summary of Results of Sensitivity Analysis.....	425
Interpretation and Follow-up Action.....	425
Over to the Next Chapter 16A.....	425

**PART 6: PROJECT REPORT, INSTITUTIONAL RISK ASSESSMENT AND FINANCING DECISION**

<b>Chapter 15: Project Report</b> .....	429–438
Team Acting on The Project Report	
Roadmap.....	429
Chapter Opener: TEAM ACTING ON THE PROJECT REPORT.....	430
<i>Learning Outcomes</i> .....	431
Introduction.....	431
Contents of a Project Report.....	431
Over to the Next Chapter.....	438
<i>Key Words</i> .....	438
<i>Test Your Knowledge</i> .....	438



**PROJECT REPORT**

**Chapter 16: Institution's Overall Risk Assessment and Financing Decision ..... 439–449**

Roadmap .....439  
 Chapter Opener: OVERALL RISK ASSESSMENT.....440  
*Learning Outcomes* .....441  
 Introduction.....441  
 Purpose of TLRAM .....441  
 Methodology of TLRAM.....441  
 Role of Further Credit Risk Rating by Credit Rating Agencies in Loan Pricing.....447  
 Project of Merry-Con Aluminium Composite Panels Ltd. *Continued* .....448  
 Over to the Next Chapter 16A.....448  
*Key Words* .....448  
*Test Your Knowledge* .....448

Overall Risk Assessment	
A. Project's Financial Risk Factors:	Maximum Possible Score
1. Security cover	5
2. Debt equity ratio	5
3. TOL to TNW ratio	5
4. Promoters' contribution	5
5. Repayment period	5
6. Average DSCR	5
<b>Sub-total ... A</b>	<b>30</b>
<b>B. Management Risk Factors:</b>	
1. Integrity and character	15

**Chapter 16A: Project of Merry-Con Aluminium Composite Panels Ltd. *continued* for TLRAM and Term Loan Pricing ..... 450–454**

Roadmap ..... 450  
*Learning Outcomes* ..... 451  
 Introduction..... 451  
 Project on TLRAM and Term Loan Pricing: Merry-Con Aluminium Composite Panels Ltd., *Contd.* ..... 451  
 Rate of Interest Assumed for Financial Projections Vs. Rate of Interest as Per TLRAM ..... 453  
 Over to the Next Chapter ..... 454

**PART 7: PROJECT MANAGEMENT, OVERRUNS AND POST-COMPLETION PERFORMANCE EVALUATION**

**Chapter 17: Project Management ..... 457–472**



Roadmap..... 457  
 Chapter Opener: METRO KE TEESRE CHARAN KAA PAHLAA KADAM ..... 458  
*Learning Outcomes*..... 459  
 Introduction ..... 459  
 Project Management ..... 459  
 Earned Value Management ..... 461  
 Over to the Next Chapter..... 469  
*Key Words*..... 469  
*Reference Materials*..... 470  
*Test Your Knowledge*..... 470

**Chapter 18: Time and Cost Overruns and Over Run Financing ..... 473–483**

Roadmap .....473  
 Chapter Opener: ESSAR OIL GETS CDR NOD FOR VADINAR PROJECT .....474  
*Learning Outcomes* .....475  
 Introduction.....475  
 Meaning of Time and Cost Overruns .....475  
 Causes of Overruns .....475  
 Over Run Financing .....476  
 Determination of Financial Restructuring Package by the Lending Institutions .....477

**Essar Oil Gets CDR Nod for Vadinar Project**



The revival package involved fresh equity infusion of

Case Studies on CDR .....478  
 Case Study on SDR .....479  
 Over to the Next Chapter .....481  
 Key Words .....481  
 Reference Materials .....481  
 Test Your Knowledge .....482

₹1,180 crore (including ₹311 crore to be brought in by the Ruias and ₹905 crore to be brought in by ABB). The debt equity ratio is now at 2.26. The lenders will reinstate the earlier sanctions of ₹1,500 crore to disburse most of it in foreign currency.

**Chapter 19: Post-Completion Performance Evaluation ..... 484-507**

**Banks May Get to Bailout Airlines**



A letter from RBI Deputy Governor Usha Thorat to Secretary Financial Services R. Gopalan, which has been seen by ET, says the Central Bank is willing to extend 'Appropriate Regulatory Concessions' for the Aviation Sector provided Banks come together as a Consortium.

Roadmap..... 484  
 Chapter Opener: BANKS MAY GET TO BAILOUT AIRLINES ..... 485  
 Learning Outcomes..... 487  
 Introduction ..... 487  
 Comparison of Actual and Projected Financial Results: Post Audit..... 487  
 Embarking Upon Corrective Action Plan ..... 491  
 Embarking Upon Rehabilitation Plan: Strategic Debt Restructuring ..... 492  
 Case Studies on Rehabilitation Plans ..... 493  
 Discontinuance Analysis..... 495  
 Over to the Next Part..... 502  
 Key Words..... 502  
 Reference Materials ..... 502  
 Test Your Knowledge..... 503

**PART 8: SOME SPECIFIC AND CONTEMPORARY ISSUES**

**Chapter 20: Some Specific Issues..... 511-528**

Roadmap ..... 511  
 Chapter Opener: INDIA INC'S SINGAPORE SLING... 512  
 Learning Outcomes ..... 513  
 Introduction..... 513  
 Evaluation of Overseas Projects..... 513  
 Selection Out of Mutually Independent Equipments of Unequal Economic Lives ..... 516  
 Determination of Optimal Life of an Equipment..... 518  
 Resource Allocation Strategy for Selection Out of Multiple Projects..... 523  
 Over to the Next Chapter ..... 525  
 Key Words ..... 525  
 Test Your Knowledge ..... 525

**INDIA INC'S SINGAPORE SLING**

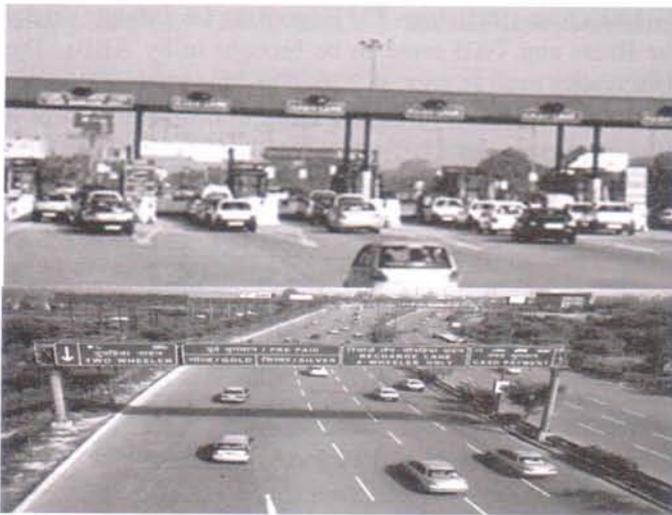
<p><b>MAHINDRA</b>                  Hub for Tech Mahindra, financial services &amp; aerospace business</p> <p><b>HEMANT LUTHRA</b>                  CHAIRMAN                  MAHINDRA CIE</p> <p>"It may not be a big manufacturing hub for our auto or tractors business, but it is an important window into Asia for aerospace, IT or financial services verticals"</p>	<p><b>TATA</b>                  Current footprint: 15 group cos. employing over 3300 employees &amp; managing over \$7.5 billion of investments                  International HQs for Tata Communications, Tata Power &amp; Tata Chemicals                  Regional (APAC) HQs for TCS to oversee operations of 12 countries                  Tata Steel's 1st cross-border acquisition NatSteel, Corus acquisition routed via Singapore entity                  Tata-SIA JV Vistara to take off in Jan 2015                  TML Holdings houses all international businesses of Tata Motors, including JLR</p> <p><b>KV RAO</b>                  RESIDENT DIRECTOR -ASEAN, TATA SONS                  "We feel at home here. There is also a certain positive image of doing business out of Singapore"</p>	<p><b>ADANI</b>                  Group's international shipping, coal trading, oil and gas &amp; the ambitious Australian mining operations are all housed in Singapore arm Adani Global Singapore                  Adani Global, 100% subsidiary of Adani Enterprises, the holding company.                  Adani Global Singapore revenues: \$4.5 bn</p> <p><b>ARUP ROY</b>                  CEO, ADANI GLOBAL                  "We came to Singapore when hardly anybody was diving for it"</p>
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**Chapter 21: Issues in Infrastructure Financing..... 529-551**

**DND Flyway**



Roadmap..... 529  
 Chapter Opener: DND FLYWAY ..... 531  
 Learning Outcomes ..... 532  
 Introduction ..... 532  
 Nuances of Infrastructure ..... 532  
 Nuances of Public-Private-Partnership Model ..... 536  
 RBI's Guidelines to Banks for Appraisal of Infrastructure Projects ..... 542



What Makes Infrastructure Special and its Financing Difficult..... 542

Institutional Financing Stipulations in Infrastructure Projects..... 543

Deepak Parekh Committee Recommendations on Financing of Infrastructure Projects..... 544

Role of India Infrastructure Finance Company Ltd. (IIFCL)..... 546

Role of National Infrastructure Investment Fund (NIIF)..... 547

Case Studies on Infrastructure Projects..... 547

Over to the Next Chapter..... 548

Key Words..... 548

Reference Materials..... 549

Test Your Knowledge..... 549

**Chapter 22: Environmental Impact Assessment..... 552–576**

Roadmap..... 552

Chapter Opener: ENVIRONMENTAL IMPACT OF THERMAL POWER PLANT..... 554

Learning Outcomes..... 555

Introduction..... 555

**Section A: United Nations Environment Programme (UNEP): Environmental Impact Assessment (EIA)**

Meaning of Environment and, EIA & Its Purpose..... 556

Importance of EIA..... 556

Aims and Objectives of EIA..... 557

Nature and Scope of Environmental Issues and Impacts... 557

Key Elements of the EIA Process..... 557

Public Involvement..... 558

Costs and Benefits of EIA..... 558

Key Decisions in the EIA Process..... 559

Limitations of EIA..... 565

**Section B: EIA in India**

Projects/Activities Requiring Prior Environmental Clearance (PEC)..... 566

Application for PEC..... 567

The Checklist Approach..... 568

Stages in the PEC Process for New Projects..... 568

Decision Making Case..... 569

Grant or Rejection of PEC..... 571

Post Environmental Clearance Monitoring Reports..... 571

Generic Structure of the EIA Report..... 572

Case Studies on EIA..... 573

Conclusion..... 573

Key Words..... 574

Reference Materials..... 574

Test Your Knowledge..... 574

**Environmental Impact of Thermal Power Plant**



A Thermal Power Plant has huge adverse impacts on the surrounding environment. These impacts are:

AIR	WATER	SOIL	PEOPLE
Causes respiratory ailments	Affects water quality & thus reduces quantity available for human consumption	Limits crop cultivation due to increase in alkalinity of soil	Affects livelihood for farmers and fishermen
Affects historic structures	Affects fishing as hot water let into sea kills or causes migration of marine species	Limits crop cultivation as quantity available for agriculture reduced	Increases risk of accidents due to hazardous working conditions
Causes climate change		Affects plant growth	

Like thermal power plants there are lot many other industrial activities as detailed in this chapter, which though essential for economic development, cause environmental hazards of one or the other nature. EIA has therefore become crucial before such projects are given a go ahead.

**Appendix..... 577–580**

**Index..... 581–586**