

Profile of Contractors in Infrastructure Industry: An Exploratory study

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Of

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April, 2008

CERTIFICATE

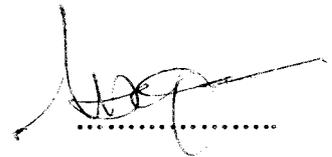
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BONAFIDE CERTIFICATE

Certified that this project report titled “**Profile of Contractors in Infrastructure Industry: An Exploratory study**” is the bonafide work of **Ms. Pramodhini.R, 71206631040** who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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.....
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PROJECT COMPLETION CERTIFICATE

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During the tenure his / her performance was **Good**.

Yours faithfully
For Sakthi Finance Ltd

R.PRAVEENA
HR Executive

DECLARATION

DECLARATION

I, hereby declare that this project report entitled as “**Profile of Contractors in Infrastructure Industry: An Exploratory study** ” has been undertaken for academic purpose submitted to Anna University in partial fulfillment of the requirements for the award of the degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of **Dr. K. Chitra** during the academic year 2007 – 2008.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

Date: 12 . 05 . 2008

Place: Coimbatore


.....
(Pramodhini.R)

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The economic growth of India is second in the world after China. India's IT and BPO industry continue to grow dramatically. Considering its rapid growth rate, India has the potential to be the next world leader. As India grows, it faces problems in developing its infrastructure to meet the skyscraping demands of the businesses. Without significant investment in infrastructure, India will be unable to continue its astounding growth. Several fiscal incentives were announced by the government for boosting investment in infrastructure projects.

There are several players involved in the development of infrastructure like main contractors, sub-contractors, hirers, first time users/buyers. The success of any financial institution is based on how the customers make their payment. Such payment will be made by the customers in time, only when they are fully satisfied with the financial institution. So before lending to any customers, the financiers must know about the contracts executed, loan details, perception about the contractors success factors, and perception regarding re-investment. Hence this is identified as the problem for the study.

Against this background the study was conducted to understand the profile and business of the contractors. Further the study attempts to identify the contractor's level of satisfaction with the financial institution. The study assumes the characteristic of exploratory research. A sample of seventy two contractors in Erode, Coimbatore, Pollachi and Dharapuram is selected on convenience basis and data are collected through interview schedule.

The findings and recommendations of the study reveal that in future at par with the boom in the infrastructure industry, trend is expected to continue. So the loan seekers will be more. This would enable the financiers to have some insight regarding the strategies to be adopted to expand their market.

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ACKNOWLEDGEMENT

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I express my sincere gratitude and thanks to our Director for permitting me to carry out the project.

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INTRODUCTION

CHAPTER I

INTRODUCTION

1.1. Background of the study:

The background of the study gives an overall picture about the Indian Infrastructure and also the different players involved for the development of infrastructure..

Indian Infrastructure:

The economic growth of India is second in the world only after China. India's IT and BPO industry continue to grow dramatically. Considering its rapid growth rate, India has the potential to be the next world leader. However, India's growth faces a major challenge. As India grows, it faces problems in developing its infrastructure to meet the skyscraping demands of the businesses. Without significant investment in infrastructure, India will be unable to continue its astounding growth.

There are six core areas and infrastructure industries, viz., electricity, crude oil, petroleum refinery products, coal, steel and cement, having a weight of 26.7 % in overall Index of Industrial Production (IIP) achieved 6.8 % during 2000-01. Several fiscal incentives were announced by the government for boosting investment in infrastructure projects. Ten-year tax holiday offered to projects in core sectors like roads, highways, waterways, water supply, sanitation and solid waste management systems can now be availed of during the initial 20 years. Projects in airports, ports, inland ports, industrial parks and generation and distribution of power can now avail of 10-year tax holidays during the initial 15 years. Tax incentives were made available to investors providing long-term finance to enterprises engaged in infrastructure.

The core areas of infrastructure are discussed below.

Railways: The Indian Railways is the second largest network in the world with a total

route length of 63,000 km and a fleet of 7,000 passenger and 4,000 goods trains. It carries more than 4,000 million passengers per year and transports over 382 million tonnes of freight every year. It is well equipped to meet its demands for locomotives, coaches and other components. Lately, the Railways have launched a massive gauge-conversion drive. With improvement in tracks, plans are afoot to introduce faster trains. Very soon, certain prestigious long-distance trains will be running at 160 km per hour. The Railways have also started a scheme to privatize several services that will include maintenance of railway stations, meals, drinking water and cleaning of trains.

Road Transport: The roadways have grown rapidly in independent India. Ranging from the cross-country link of the national highways to the roads in the deepest interiors, the country has a road network of 2.1 million km. India also manufactures most of its motorised vehicles like cars, jeeps, trucks, vans, buses and a wide range of two-wheelers of various capacities. While Indian scooters have established a good foreign market, the car industry is also looking up with several foreign companies setting up plants in India.

Shipping: The natural advantage of a vast coastline requires India to use sea transport for the bulk of cargo transport. Following the policy of liberalization, the Indian shipping industry, major ports, as also national highways and water transport have been thrown open to the private sector.

Shipping activity is buoyant and the number of ships registered under the Indian flag has reached 471. The average age of the shipping fleet in India is 13 years, compared to 17 years of the international shipping fleet. India is also among the few countries that offer fair and free competition to all shipping companies for obtaining cargo. There is also no cargo reservation policy in India.

Aviation: India has an aviation infrastructure which caters to every aspect of this industry. Hindustan Aeronautics Limited (HAL) is India's gigantic aeronautical organization and one of the major aerospace complexes in the world. India's international carrier, Air-India, is well known for its quality service spanning the world. Within the country, five international airports and more than 88 other airports are linked by Indian Airlines.

For example: (1) **Vayudoot**, an intermediate feeder airline, already links more than 80 stations with its fleet and it plans to build and expand its network to over 140 airports in the far-flung and remote areas of the country. (2) **Pawan Hans**, a helicopter service, provides services in difficult terrains. The Government has adopted a liberal civil aviation policy with a view to improve domestic services. Many private airlines are already operating in the country.

Pipelines: Oil and natural gas pipelines form an important transportation network in the country. The country completed recently, on schedule, one of its most ambitious projects, the 1,700 km Hazira-Bijaipur-Jagdishpur pipeline. Costing nearly Rs. 17 billion, the pipeline transports liquid gas from the South Bassein offshore field of Mumbai to Jagdishpur and Aonla, deep in the mainland in Uttar Pradesh. Besides, India has nearly 7,000 km of pipeline mainly for the transportation of crude oil and its products.

Telecommunications: With rapid advances in technology, India now uses digital technology in telecommunications, which derives advantage from its ability to interface with computers. The present strategy focuses on a balanced growth of the network, rapid modernization, a quantum jump in key technologies, increased productivity, and innovations in organization and management. Moving towards self-reliance, besides establishing indigenous R&D in digital technology, India has established manufacturing capabilities in both the Government and private sectors. The private sector is expected to play a major role in the future growth of telephone services in India after the opening of the economy. Soon every village panchayat will have a telephone.

Power: The generation of power has increased impressively in recent years. In 1990-91, India generated 6.6 billion kilowatt hour of electricity; in 1995-96 the figure was 380.1 billion kilowatt hour. The installed capacity, which was 1400 MW at Independence in 1947, has crossed 83,288 MW.

Coal: Coal is the primary source for power generation in India. The country has huge reserves of coal, approximately 197 billion tonnes. A sufficient amount of lignite

(brown coal used in thermal power stations) is also available. India produced about 270 million tonnes of coal in 1995-96. The government now welcomes private investment in the coal sector, allowing companies to operate captive mines.

Petroleum and Natural Gas: The recent exploration and production activities in the country have led to a dramatic increase in the output of oil. The country currently produces 35 million tonnes of crude oil, two-thirds of which is from offshore areas, and imports another 27 million tonnes. Natural gas production has also increased substantially in recent years, with the country producing over 22,000 million cubic metres. Natural gas is rapidly becoming an important source of energy and feedstock for major industries. By the end of the Eighth Five-Year Plan, production was likely to reach 30 billion cubic metres.

The 1998-99 Budget announced by the BJP government has given a major thrust to infrastructure development, particularly in energy and power, transport and communications, by stepping up public expenditure in these sectors. This increased government spending on infrastructure which is expected to boost India's sluggish economy. The lack of a clear policy frame work for private sector participation has hampered the badly-needed infrastructure development, particularly in telecommunications, power, roads and ports. The public sector, has reduced its investments considerably, due primarily to its poor fiscal position.

Players involved in the development of Infrastructure:

Contractors play a major role in the development of Infrastructure. There are different types of contractors involved behind the growth of infrastructure.

Types of Contractors:

- ❖ Main Contractors
- ❖ Sub-Contractor

- ❖ Hirers
- ❖ First time users/buyers

Contractors and Sub-contractors

It is common for businesses to use contractors and subcontractors instead of hiring permanent staff when the work is short-term and expert skills are needed for a finite period or the extent of the workload is unknown. Contractors are not employees of the business but have a contract to provide certain services. Subcontractors undertake a contract from a contractor. They are established in their own business, they supply materials, plant and equipment to complete work for an agreed price. A **general contractor** is a group or individual that contracts with another organization or individual (the owner) for the construction or renovation of a building, road or other structure. A general contractor is defined as such if it is the signatory as the builder of the prime construction contract for the project.

He is responsible for the means and methods to be used in the construction execution of the project in accordance with the contract documents. Contract documents usually include the contract agreement including budget, the general and special conditions and the plans and specification of the project that are prepared by a design professional.

He is also responsible for supplying of all material, labor, equipment, (engineering vehicles and tools) and services necessary for the construction of the project. To do this it is common for the general contractor to subcontract part of the work to other persons and companies that specialize in these types of work. These are called **subcontractors**.

General contractors conducting work for government agencies are typically referred to as **prime/main contractors**.

Hirers

Hirers are those who hire equipments on lease basis for a certain period of time from the owners of the equipment. They engage for service under a term of contract.

First time users/buyers

First time users are those who enter into the business for the first time and first time buyers are those who buy the equipment for the first time but have the experience of using it before.

Role played by Contractors:

- As a service
- As an owner
- General contractor "sub-types".

As a service

Most contractors are required to be licensed in each state and may be required to take an exam. Contractors are defined in the law by each state and are usually considered those who contract, bid, negotiate a price or offers to construct, supervise, oversee, schedule, direct, alter, repair, install, improve, move, demolish, furnish labor, etc.

In addition, there are various types like: building (residential and commercial); electrical; plumbing; mechanical; highway; and environmental (mold/lead remediation).

As an owner

General contractor as an owner work directly with the subcontractors and take care of the administration and organization of the various subcontractors. In such cases, he takes on all liability for proper sequencing of the work, and dealing with the realities of construction.

General contractors make a living working with known subcontractors. An established General Contractor will have established relationships that will outlast one construction project, and the subcontractors will acknowledge this with their cooperation. Owners often do not have this advantage, and most subcontractors will recognize the risk of working with a one time client with higher bids.

General contractor "sub-types"

In some states, general contractors for real estate construction are broken into a small number of sub-types. In Florida, for example, a residential contractor, is a general contractor, however, he is permitted only to oversee, coordinate, and be liable for the acts.

1.2. Review of literature:

According to the study conducted by Mr. Serji N. Amirkhanian¹ et al, on Expert system for equipment selection for earth-moving operations says that, proper earth-moving equipment selection is a major factor when trying to satisfy a project's budget and schedule requirements. The selection of the equipment is best performed by personnel with experience in earth-moving operations. In this research project, a rule-based expert system (i.e., VP-Expert) was used to develop a system for selecting earth-moving equipment. The contractors' selections compared favorably with the developed expert system with regard to the size and type of equipment needed to perform the various tasks.

According to Mr. Marzouk.M² et al, about the Multiobjective optimization of earthmoving operations is that, the optimization aims at minimizing time and cost of earthmoving operations. The proposed framework considers factors that influence earthmoving operations including equipment availability and project indirect cost. The simulation process, in the proposed methodology, utilizes discrete event simulation and object oriented modeling. The optimization process uses a recently developed genetic algorithm to search for a near-optimum fleet configuration employing Pareto optimality to account for multiobjective optimization.

¹ J. Constr. Engrg. Mgmt., Serji N. Amirkhanian Member, ASCE and Nancy J. Baker, Volume 118, Issue 2, pp. 318-331 (May/June 1992)

² J. Constr. Engrg. and Mgmt., Marzouk.M, and Moselhi.O, Volume 130, Issue 1, pp. 105-113 (Jan-Feb 2004)

Mr. Eldin, Neil. N³ et al., has undertaken a study on Determination of most economical scrapers fleet saying that, Scrapers are valuable construction equipment for large earthmoving operations. Their production rates vary widely as they depend on the equipment performance, operation's travel time, and haul-road conditions. Determining the most economical selection of the size, model, and number of scrapers is a rather tedious process that involves repetitive calculations. A spreadsheet application was created in order to facilitate such calculations and select the most economical scraper from the list of available equipment for the job under consideration.

The study conducted by Mr. Prasertrunguang, Thanapun⁴ et al, on Heavy equipment management practices and problems in Thai highway contractors is intended to investigate the current practices and problems in heavy equipment management as well as to identify practices capable of alleviating equipment management problems for highway contractors in Thailand . The equipment management practices vary, to some extent, among different contractor sizes. The study also highlights practices that are capable of reducing problems relating to heavy equipment management for highway contractors

As per GAO Reports⁵ on defense critical infrastructure, The Department of Defense (DOD) relies on a global network of critical physical and cyber infrastructure to project, support, and sustain its forces and operations worldwide. The incapacitation, exploitation, or destruction of one or more of its assets would seriously damage DOD's ability to carry out its core missions. To identify and help assure the availability of this mission-critical infrastructure, in August 2005, DOD established the Defense Critical Infrastructure

³ J. Constr. Engrg. and Mgmt., Marzouk.M, and Moselhi.O, Volume 130, Issue 1, pp. 105-113 (Jan-Feb 2004)

⁴ Construction Engineering and Infrastructure Management, School of Engineering and Technology, Asian Institute of Technology, Pathumthani, Thailand., Prasertrunguang, Thanapun and Hadikusumo, Vol. 14 Issue 3, p228-241, 14p, 2007

⁵ GAO Reports; p1, 20p, 4/3/2008

Program (DCIP), assigning overall responsibility for the program to the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (ASD [HD&ASA]).

Mr. Alan Atalah⁶ says about the Effect of rock trenching vibrations on nearby structures that, Trenching to install deep gravity sewers and drains in medium-to high-strength rock requires large and heavy rock trenchers that produce high levels of vibrations that may affect the structural integrity of nearby utilities and buildings. Although not every vibration causes damage, owners often believe that their structures have been harmed by rock excavation. The resulting disputes can waste a great deal of time and money. In an effort to reduce structural damage and associated disputes, this paper provides guidelines for the safe distance between rock trenchers and nearby buildings and underground structures.

Based on the study conducted by Mr. Tarek Hegazy⁷ et al, on Efficient repetitive scheduling for high-rise construction says that, a new scheduling and cost optimization model for high-rise construction is presented in this paper. The model has been formulated with a unique representation of the activities that form the building's structural core, which need to be dealt with carefully to avoid scheduling errors. A computer prototype was then developed to demonstrate the model's usefulness on a case study high-rise project. The model is useful to both researchers and practitioners as it better suits the environment of high-rise construction, avoids scheduling errors, optimizes cost, and provides a legible presentation of resource assignments and progress data.

⁶ J. Constr. Engrg. and Mgmt., Alan Atalah,¹ P.E., M.ASCE, Volume 134, Issue 4, pp. 234-241 (April 2008)

⁷ J. Constr. Engrg. and Mgmt., Tarek Hegazy, M.ASCE and Ehab Kamarah, Volume 134, Issue 4, pp. 253-264 (April 2008)

According to Mr. Busan⁸ et al, about the Performance measurement of construction firms in developing countries states that many large contractors in Vietnam are lacking an effective method to measure their performance and identify weaknesses and threats. The integration of the balanced scorecard (BSC) and strengths-weaknesses-opportunities-threats (SWOT) matrix is described to evaluate the strategic performance of large contractors in Vietnam. The AnGiang Construction Company (ACC) was used as an example to validate the approach. The BSC-oriented SWOT matrix is developed to formulate the short- and long-term strategies of ACC. The benchmarking approach was adapted to evaluate the ACC's performance and expose its competitors' best practices for improvement. The results indicated that only the financial perspective is at a poor level on the performance scale whereas the customer, learning and growth, and internal process perspectives are at a moderate level on the performance scale.

Mr. Tang, Siman⁹ et al says about the impact of public transport policy on the viability and sustainability of mass railway transit as, Mass transit railway projects are often a top contender to meet the rapidly increasing travel demand, especially in many Asian cities. The experience of Hong Kong, with a system of highly reputable public transport services, reveals that the viability and sustainability of mass transit railways depend very much on accompanying transport policies and land development strategies. The priority given to public transport and control on the growth of private cars, among others, has laid the foundation for success in Hong Kong over the past quarter of century. It is, therefore, imperative that mass transit railway projects are planned with accompanying long-term transport policies to ensure their viability and sustainability.

The review of literature reveals that such exploratory study on the profile of the contractors is scarce, particularly in the Indian context. Hence this study is undertaken.

⁸ Pukyong National University, Busan and Long Xuyen, Vol. 26 Issue 4, p373-386, 14p, Apr:2008

⁹ Transportation Research Part A: Policy & Practice; Tang, Siman and Lo, Hong K, Vol. 42 Issue 4, p563-576, 14p, May2008.

1.3 Statement of the problem

The success of any financial institution is based on how the customers make their payment. Such payment will be made by the customers in time, only when they are fully satisfied with the financial institution. So before lending to any customers, the financiers must know about the contracts executed, loan details, perception about the contractors' success factors, and perception regarding re-investment. Hence this is identified as the problem for the study.

1.4. Objectives of the study

The objectives of the study are,

- To present the profile of contracts executed which includes volume of the contract, period of contract and net profit.
- To present the details of loan availed by the contractors in terms of financial institutions, equipments, EMI and %age of re-payment.
- To identify the perception of contractors regarding the factors influencing the survival and profitability of business.
- To analyze the perception regarding re-investment.
- To ascertain the level of satisfaction with respect to the terms of lending of various financial institutions.

1.5 Scope of the study

The scope of the study is limited to Contractors involved in the Infrastructure Industry. They perform specialized activities related to road, earth and construction work. It offers more opportunities than most other industries for individuals who want to own and run their own business. Contractors in general include main contractors, sub- contractors, hirers, and first time users/buyers. Such contractors have great variety of career opportunities who undertake contracts with the government and private parties. The study area is limited to Erode, Coimbatore, Pollachi and Dharapuram.

1.6. Methodology

1.6.1 Type of study

As this study explores the profile of contractors in the Infrastructure Industry, the study assumes the characteristics of exploratory research design. **Exploratory study** is a study which is done for the first time by the process of collecting information to formulate, research and to investigate studies, which discovers future research tasks including the developing concepts, where the researcher expands the understanding of management dilemma.

1.6.2 Sampling Design:

- Since the population is infinite, Convenient Sampling method is adopted. **Convenient Sampling** is a non-probability sampling where the sample selection is based on the ease of accessibility i.e., readily available individuals as participants.
- Sample size constitutes of 72 contractors in the area of Erode, Coimbatore, Pollachi and Dharapuram.

1.6.3 Method of Data Collection

The study mainly depends on **Primary data** collected through interview schedule. A copy of Interview schedule is enclosed in the annexure.

- **Secondary data-** collected for preparing the background information from website like www.globalwitness.org, www.theeconomictimes.com, www.google scholar.com, www.ssrn.com etc...

1.6.4 Tools for analysis:

The tools used for analysis is

- **Descriptive analysis** (%age analysis, Crosstabs) used to summarise the data.
- **Mean score** is used for all type of ranking questions to find out the highest priority of contractors.

1.7. Limitations

Some of the limitations faced while making this study are,

- As the contractors are located widely, the researcher has experienced difficulty in contacting and collecting the details from the respondents.
- As the study area is limited to Erode, Coimbatore, and Pollachi, the findings cannot be generalized.

1.8. Chapter scheme

Chapter 1: Introduction

The first chapter deals with the background, objectives, scope of the study, methodology used in data collection, limitation, of the study, and brief introduction of all the chapters.

Chapter 2: Organization Profile

Organization profile includes details on the history of the organization, management and organization structure, product profile and market potential, competitive strength of the company and brief description on various functional areas of the organization.

Chapter 3: Macro-micro Economic analysis

Macro-Micro analysis deals with the prevailing scenario of the organization with respect to its respective industry and performs the SWOT analysis of the company.

Chapter 4: Data Analysis and Interpretation

The chapter mainly deals with analysis of the data.

Chapter 5: Conclusion

Conclusion includes the result and the discussion put forth regarding the performance of the company.

ORGANIZATION PROFILE

CHAPTER II

ORGANISATION PROFILE

This study is undertaken especially for Sakthi Finance Limited, as it is foreseeing itself to extend its operation by providing finance for earth moving equipments, which indirectly promotes the development of Infrastructure.

2.1 History of the Organization:-

Sakthi Finance Limited was incorporated on 30th March 1955 under the Company's Act in the name of "Pollachi Credit Society" Private Limited, as group's in house financing arm for TELCO dealership. The company made its first public issue in 1984. With successive rights issue on premium the company paid up the capital raised from Rs 25 lakhs to 17.5 crores as on March 2002.

- ❖ It is one of the India's oldest NBFCs founded in the year 1965.
- ❖ One of the first companies to introduce used vehicle financing, which has 20 branches spread all over India.
- ❖ A wide variety of loans for cars, commercial vehicles, plant machinery and equipment are available and has a leading presence in Finance Agro foods, Dairy, and Transport.
- ❖ A deep understanding of the transport industry has made Sakthi one of the most trusted names in financing for commercial vehicles which has 100000 and more happy customers.
- ❖ Sakthi Financial Services Limited, an associate Company carries out the Locker Operations.

The company's authorized capital comprises, 4,00,00,000 equity shares of Rs.10 each and 5,00,000 redeemable cumulative preference share of Rs.100 each. The issued subscribed and paid up capital are 2,00,71,321 equity shares ors Rs.10 each fully paid up.

Sakthi Finance Limited is a unit of Sakthi Group Promoted by Dr.N. Mahalingam. Authorised share capital of the capitals of the company in 2006 is Rs. 45 cores which is

divided into 4 crores Equity shares of Rs.10 each and 5 lakhs Redeemable Preference share of Rs.100 each. The Paid- up Shares capital is 2,00,71,231 Equity shares of Rs.10 each. Presently the company operates through a networks of 21 branches located in Tamilnadu, Kerala, Andrapradhesh and Maharashtra, with specific focus on Tamil Nadu and Savings centers have been established at various deposit potential arrears at taluks of different districts in Tamilnadu and Kerala for mobilizing public deposits. The Company is also having safety locker facility to the deposit holders.

2.2. Management:

Sakthi, a growing group that's business interests are etching out new industrial horizons. With the strength of vision, the Sakthi group is now among the top corporate houses in the country. Led by the farsighted Dr.N. Mahalingam, the group chairman – the driving force behind Sakthi the group today is a Rs.800 crore conglomerate, has diverse interests spanning across Sugars, Textiles, Transport, Finance, Fruit beverages, Soya products, Synthetic gem manufacturing.

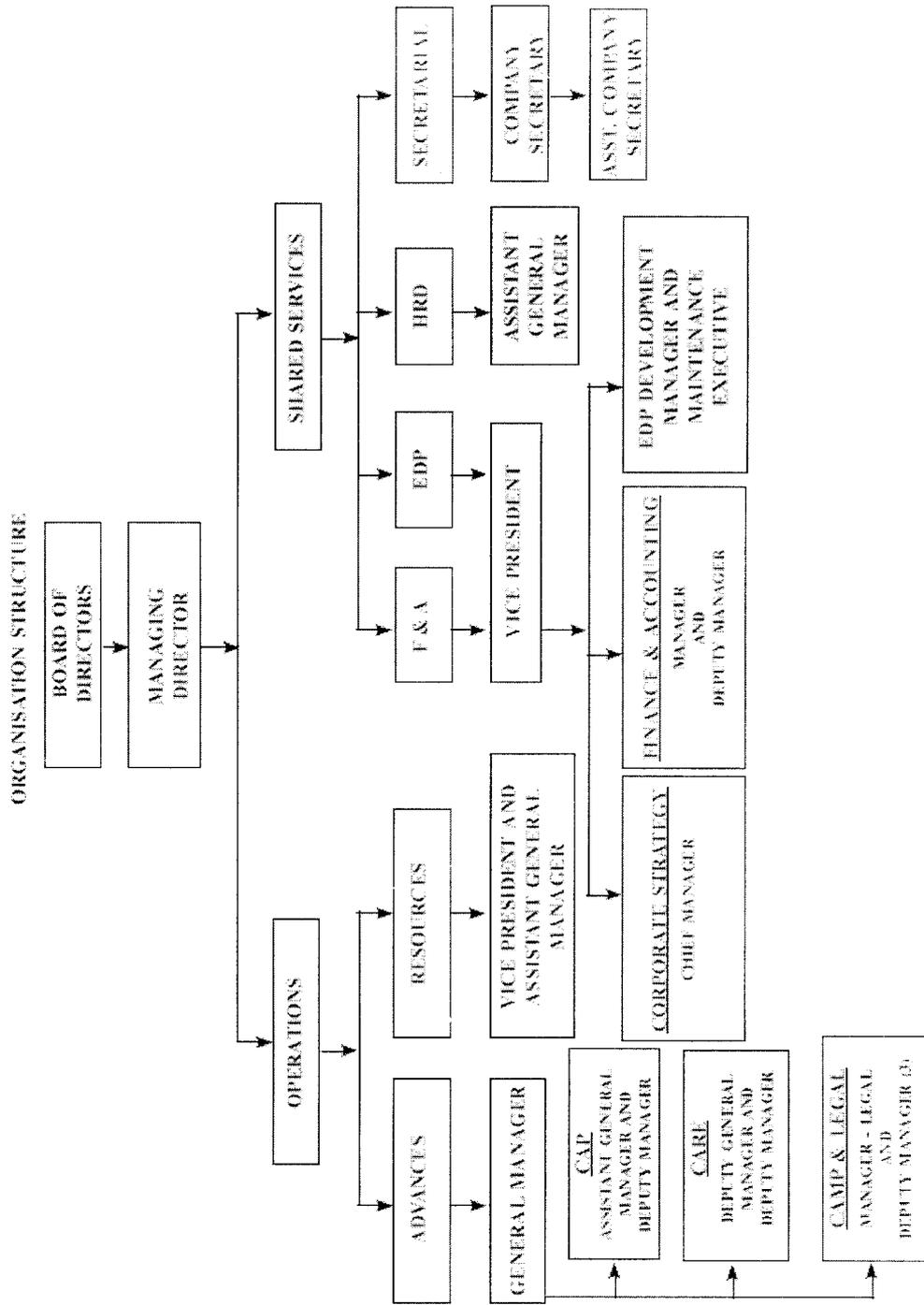
The **Vision** of the company is to “be amongst the top three re-financiers of commercial vehicles in the country and to be the most preferred supplier of the customer choice with total solution provided through channel seven – value chain management”.

The **Mission is** “to partner the progress of the small and medium transport and to provide ‘End to End service’ leading to ‘Total Customer Solution’ with Speed, Flexibility and Integrity”.

A keen participant in social commitments, the Sakthi group has set up many Educational and charitable institutions, hospitals and religious centers. The branch offices of the company are located in several parts of the following five states.

- ❖ **Tamilnadu**
- ❖ **Kerala**
- ❖ **Karnataka**
- ❖ **Andhra Pradesh**
- ❖ **New Delhi**

2.3 ORGANISATIONAL STRUCTURE



2.4 Products Profile and Market Potential

SFL is engaged in providing finance for commercial vehicles and equipments like,

- ❖ Commercial Vehicle Finance
- ❖ Infrastructure Equipment Finance

Commercial vehicle finance forms the core business of Sakthi finance. It provides finance for new as well as used commercial vehicles. Its strategy is to engage in niche segment of commercial vehicle refinance business. Very few organized players have entered into commercial vehicle refinance business. The average loan size for commercial vehicles varies from Rs. 2 Lakhs to Rs. 4 Lakhs and the tenure is from 24 Months to 36 Months.

Infrastructure equipment finance is provided in order to diversify its portfolio. Government has proposed incentives for industries engaged in the infrastructure development which may give the company an opportunity to improve its business on account of wide scope for growth in this business.

The **Market potential** of the company is

- It has outsourced the process of retail resource mobilizations to its associate company called Sakthi Financial Services Limited.
- Sakthi Financial Services Limited has employed around 30 field staff in Tamil Nadu to market the Fixed Deposit and Non-Convertible Debentures scheme of Sakthi Finance Limited.
- Potential customers are contacted and explained about the schemes and deposit is mobilized.

The marketing activity for lending is directly handled by Sakthi Finance Limited. The company has 25 branches in Tamil Nadu, Kerala, Andhra Pradesh, Karnataka, Pondicherry and Delhi. Each branch is in-charge of a Branch Manager. Depending upon the potential in the territory, 4 to 6 marketing officers are attached to each branch, at present there are 75 marketing officers in the rolls of the company. These officers are located in rural centers, wherein truck population (35) is higher. Each of these officers typically covers 50 km area from his location. They are responsible for lending money in

that area and also for collecting the installments. These officers are given required marketing support, by holding Special Customer Meets, Campaigns etc.

The **Competitive Strengths** of the company is that the company is rated by ICRA as MA which means adequate safety. It has experience in hire purchase financing for more than 45 years. It also has experienced personnel and focused executives at all level with a strong Customer base of more than 5 million.

The **Future Plan** of the company is to set up exclusive software for maintaining their electronic database. It has planned to electronically appraise the upcoming credit proposals with newly built software, which will enable the company to stretch its market to open new branches in South India. It is also in the process of framing new deposit schemes to accumulate deposits from its customers.

Functional areas:

The main area of function of the company is **Lending and Collection**. There are some processes involved in Lending and Collection which includes,

- Customer Acquisition and Retention (CARE)
- Customer Appraisal Process (CAP)
- Customer and Asset Management Process (CAMP)

Customer Acquisition and Retention (CARE): In this process the Marketing Officers identify good customers who intend to borrow and collect their profiles. If the profile of the intended borrower matches with the policy of the company, the officer makes a recommendation to grant loan to the applicant or not.

Customer Appraisal Process (CAP): This process is centralized and handled at Head Office which takes care of appraising the profiles of all intended borrowers and selects the right borrowers who have the capacity and intention to repay the loan. All the branches are linked through internet and hence the appraisal process is carried out faster. The funds are advanced after the process of evaluation is completed and the necessary documentations have been completed.

Customer and Asset Management Process (CAMP): The critical success factor of an NBFC is its ability to manage the advance portfolio and recover the money lent on due dates. There is a team at Head Office which is continuously monitoring the recovery and offers support to branches on exceptional accounts which pose collection problems.

CHAPTER III

MACRO-MICRO ANALYSIS

This chapter discusses in-depth about two major sections viz., the Infrastructure Industry and the Financial Institutions involved in providing loans for Construction Equipments.

Section I- Overview of Infrastructure Industry in which the customers are functioning.

Section II- Snapshot of Financial Institutions funding for Construction Equipments.

These two sections play a major role in determining the profitability of the customers viz., the contractors, sub-contractors, Hirers etc... in their contracts.

Infrastructure Industry

India's economy is booming. All the sectors such as power, ports and shipping are poised for major developments and witnessing implementation of a variety of projects. Overall infrastructure development in the economy will result in increase of import of machines and equipments pertaining to various sectors.

At the same time, the automobile sector is poised for major growth. The Indian automobile manufacturers are expanding their manufacturing capacity and multinational firms are also setting up automobile manufacturing units in India. This phenomenon will result in increase of import and export of automobile and ancillary components and in turn will offer growth to multimodal transport operators.

The importance of infrastructure for sustained economic development and influencing the living standards is well recognized. In the Indian context, while there has been some progress in attracting investment into infrastructure, the total annual capital investment on infrastructure still hovers around 4 % of GDP, as compared to over 10 % share in some other Asian countries. The dynamics of the Indian economy warrant a strong push to infrastructure. Honorable Finance Minister of India, while presenting the Union Budget for FY 2006, acknowledged the need and significance of building adequate infrastructure in the country.

Government of India accordingly approved a Scheme for Financing of Infrastructure through a Special Purpose Vehicle called India Infrastructure Finance Company Ltd (IIFCL), broadly referred to as SIFTI. The major areas of infrastructure are discussed below.

Infrastructure – Airports

India currently has 5 international and 88 domestic airports. The annual growth rate in airline passenger traffic for the period 1997-2000 is expected to be about 7% for international travelers and 10% for domestic, reaching a total of around 60 million passengers per year by the turn of the century. Along with this, air cargo is expected to grow at least 12% annually to close to 5.6 million tons by 2000.

The Air Corporation Act, 1953, repealed on March 1, 1994, ended the monopoly of Indian Airlines and Air India over scheduled air transport services. Private operators who were operating as air taxis, have been granted the scheduled airlines status. In addition, 21 air taxi operators have been given the permit for charter/non-schedule air transport services. India's airports are in urgent need of modernization in equipment and services, terminal technologies and transport facilities. Specific investment opportunities include:

- expansion of import and export wings at international airports
- building of new, integrated cargo and airfreight terminals
- building of common user domestic terminals at all international airports
- introduction of electronic data interchange at all airports to enable handling of international cargo

Infrastructure – Ports

India has 11 major ports in the country apart from 139 minor working ports along the coastline of 5,550 km. India's 11 major ports, which account for over 90 % of the country's port traffic, handled a record 251.44 million tons of cargo during IFY 1997-98, an increase of 10 % over IFY 1996-97. Port traffic has been growing by 9-10 %

annually, and is expected to reach 424 million tons by 2002. To decongest the ports a plan, with an outlay of Rs. 17,000 crores, has been drawn in the Ninth Plan. It also aims to increase the major ports capacity to 424 million tonnes per annum from the existing 215.3 million tonnes.

To meet the huge gap between demand and availability of port capacity, private and foreign investment in ports is being encouraged by the government, which issued guidelines liberalizing the sector in October 1996. As part of its port revival plan, the government has decided to lease out port assets to private companies at attractive terms to generate more revenue. Ministry of Surface Transport is also planning to incorporate the eleven major ports, and has announced a port investment plan of dollar 7.6 billion for 21 projects in those major ports. Port capacity is to be increased from the current level of 215 million tons to 850 million tons by 2012.

The guidelines for foreign investment have been liberalized to allow:

- Automatic approval for foreign equity participation up to 74% in construction of ports and harbors.
- Automatic approval for foreign equity participation up to 51% for support services such as operation and maintenance of piers, loading and discharging of vessels.

Infrastructure – Power

The power sector is high on India's priority as it offers tremendous potential for investing companies based on the sheer size of the market and the returns available on investment capital. Since independence in 1947, the power generating capacity in India has increased over 59-fold, from 1,362 megawatts (MW) to 81,000 MW in 1995. Presently thermal plants account for 74% of total power generation, hydroelectric plants for 24% and nuclear plants generate the remaining 2%. Currently approximately 85% of India's 560,000 villages have electricity and there is a nationwide network for the transfer and distribution of power to all parts of the country.

The Central Government has identified a number of new initiatives to give a new thrust to the power sector. The government has agreed to set up a power trading corporation, which would be a centralized agency to trade in power. The proposed corporation could purchase power from large projects and trade in it at the inter-state level. In view of the paucity of resources and the need to bridge the gap between the rapidly growing demand and supply, the Government has undertaken a policy to encourage greater investments by private enterprises in this sector. Incentives include:

- Generation and distribution power projects of any type and size are allowed.
- Foreign equity participation can be as high as 100%.
- Return on equity of up to 16% is assured at 68.5% PLF for thermal power plants (with the possibility of earning higher returns for higher PLF). Similar incentives are provided for hydroelectric power projects.
- A renewable license period of 30 years has been set.
- Import duty at the concessional rate of 20% has been set for import of equipment.
- The Government allows a 5-year tax holiday for power generating projects with an additional 5 years in which a deduction of 30% of taxable profits is allowed.

Infrastructure – Railways

Indian Railways is the second largest system in the world under a single management, with an extensive network of 62,725 kilometers, 21.5 % of which is electrified. Indian Railways operates an extensive network. It ranks second in the world (after China) in terms of freight intensity, track to land ratio, wagons to track ratios, passengers and cargo. Freight traffic carried in IFY 1997-98 was 430 million tons, up 5.5 % over the previous year. The target for IFY 1998-99 is 450 million tons and an annual growth rate of 7.4 % has been projected for the next five years. Indian Railways has launched

a program to reduce terminal delays and turn around time of its rolling stock. The program aims at increasing freight carrying capacity by 50 % through continual usage of wagons. Indian Railways is also soliciting private sector participation in freight movement through a Build-Own-Operate-Transfer (BOOT) scheme and a Own-Your-Wagon-Scheme (OYWS).

Thrust areas identified for improvements and expansion include:

- replacement and renewal of over-aged assets,
- augmentation of terminal and rolling stock capacities,
- gauge conversion and electrification,
- Introduction of new routes and long distance special parcel services.

Infrastructure – Roads

India's road networking covers 2.9 million kilometers, the third largest in the world, with only 34,298 km of National Highways suitable for speedy transportation. Though it constitutes less than 2% of the total road network, it carries more than 40% of the traffic. According to Government estimates, by the year 2000 road traffic will account for 87% and 65 % of passenger and goods traffic, respectively, compared with 80% and 60 % at present.

About 20% of the NH need widening from single to double lanes, and about 70% of two lane roads have to be strengthened. Selected corridors on NH need conversion into Expressway.

Indian Road Network Length(in Kms)

National Highways	58,112
State Highways	137,119
Major District Roads	470,000
Village and other roads	2,650,000
Total Length	3,315,231

The Government is looking for both private investment and foreign to build national highways and their maintenance. The National Highway Authority of India (NHAI) received a budgetary allocation of \$ 56 million in the Indian financial year 1997-98. Private parties investing funds in identified projects will be permitted to recover their investment by way of collection of tolls for specified periods. At the end of the agreed period, the facilities will revert to the Government. Provisions relating to foreign investment in the road sector have also been considerably liberalized and include:

- Automatic approval for foreign equity participation up to 74% in the construction of roads and bridges.
- Automatic approval for foreign equity participation up to 51% in land transport support services such as operation of highway bridges, toll roads and vehicles.
- Land required for construction and operation of facilities will be made available by the Government free from encumbrances.
- Five-year tax holiday with subsequent deductions of 30% for the next five years.

Duty-free imports of road-building machinery are now permitted in order to attract more private investment. Banks and FIs have cleared a draft model concession agreement for road projects, which incorporates project-specific traffic guarantees. It also envisages safeguards for both investors and the National Highway Authority of India (NHAI). The government has decided to offer sovereign guarantees on all new multilateral loans in the road sector which are routed through NHAI, which will aid NHAI in securing additional funding.

Several incentives for investors introduced are easing of controls on the acquisition and sale of vessels, foreign investment is permitted, and facilities at part with 100% Export Oriented Units (EOUs) are available for the ship repair industry. Foreign investment is permitted and facilities at part with 100% Export Oriented Units (EOUs) are available for the ship repair industry.

Infrastructure – Telecommunication

India operates one of the largest telecom networks in Asia, comprising over 21.328 telephone exchanges with a capacity of over 15 million lines and 12 million working connections. The network has been growing at an annual rate of 21.6% and is expected to expand to over 24 million lines by the turn of the century. However, there is scope for much improvement as even today three of every four villages have no telephone service, and only 5% of India's villages have long-distance service.

The entire telecom equipment manufacturing industry has been de-licensed and de-reserved, with the deregulation of the economy in July 1991. The National Telecom Policy of 1994 opened up the area of basic telephone services to private sector participation. The tremendous response of global telecom giants, in joint ventures with Indian companies, resulted in perhaps the most competitive bidding for telecom services witnessed anywhere in the world. In August 1995, the Lok Sabha passed a bill amending the Indian Telegraph Act 1885, paving the way for setting up a Telecom Regulatory Authority of India. The TRAI has well defined functions, responsibilities and powers to function as the watchdog of the telecom sector. The terms of reference inter alia include standard setting, price regulation, ensuring technical compatibility among different service providers, facilitating revenue sharing arrangement between the DOT and private operators and fixation of access charges.

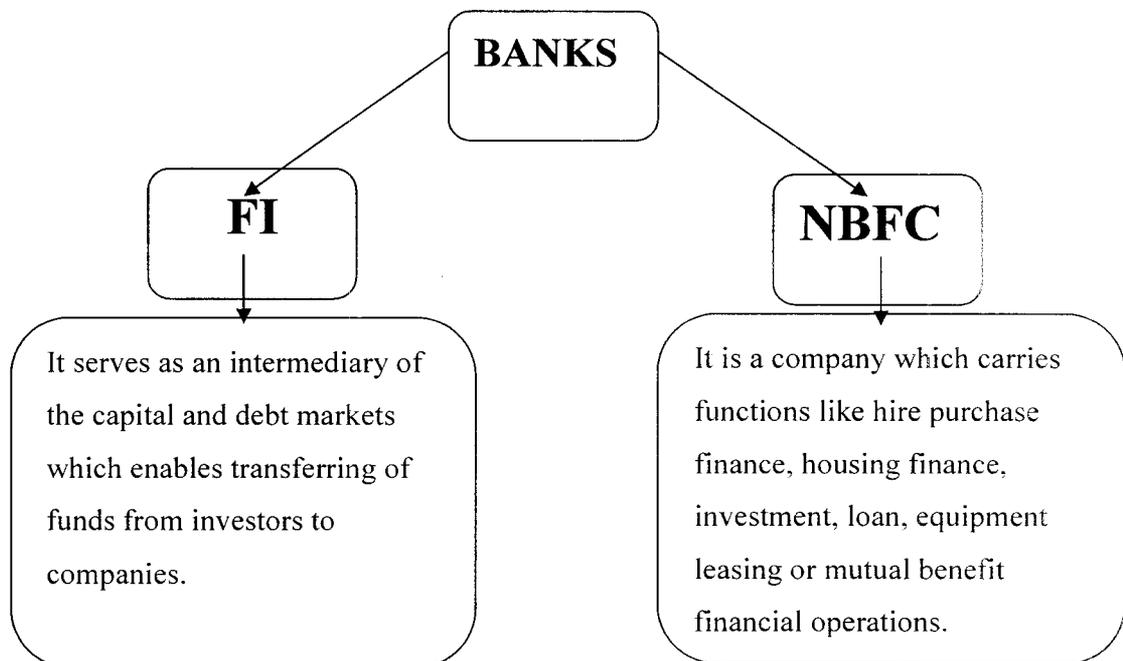
SNAPSHOT OF FINANCIAL INSTITUTIONS

The financial system comprises of financial institutions, financial instruments and financial markets that provide an effective payment and credit system and thereby facilitate channelizing of funds from savers to the investors of the economy.

A **financial institution** acts as an agent that provides financial services for its clients or members. Financial institutions generally fall under financial regulation from a government authority. Common types of financial institutions include banks, building societies, credit unions, stock brokerages, asset management firms, and similar businesses. Financial institutions serve as intermediaries of the capital and debt markets. They are responsible for transferring funds from investors to companies, in need of those

funds. The presence of financial institutions facilitates the flow of funds through the economy. For such purpose, savings accounts are pooled to mitigate the risk brought by individual account holders in order to provide funds for loans. This is the primary means for depository institutions to develop revenue.

Financial Institutions (FI) even include the Non-Banking Financial Corporations (NBFC) which also provides equipment financing for the purpose of Infrastructure Development.



Some of the financial institutions that lend for the Infrastructure projects include the following;

- Industrial Credit and Investment Corporation of India (ICICI)
- Industrial Credit and Investment Corporation of India Ventures (ICICI Ventures)
- Industrial Development Bank of India (IDBI)
- Industrial Finance Corporation of India (IFCI)
- Industrial Investment Bank of India (IIBI)
- Infrastructure Development Finance Company (IDFC)
- Investment by Insurance Companies etc...

Likewise some of the Non-Banking Financial Corporations lending for Infrastructure projects is;

- Unit Trust of India(UTI)
- Life Insurance Corporation (LIC)
- General Insurance Corporation (GIC) etc...

Strategy of banks & financial institutions

Since there are inherent difficulties in levying and collection of user charges and thus in revenue generation in infrastructure project, a special strategy that is different than the one used for financing regular business projects becomes necessary. The key principles of these stated or unstated strategies may be summed up as described:

1. Establishing innovative financing methods
2. Risk minimizing
3. Establishing a long term debt market.

Financial Institutions and commercial banks have traditionally funded working capital requirements of large and medium industrial projects in India but infrastructure projects and their inherent complexities differentiate them from traditional industrial projects. Most infrastructure projects would be non-recourse or limited recourse financing. Such projects bear higher risk as compared to traditional industrial lending where risk is covered by the balance sheet of the sponsor, with tangible assets as security.

Over the years, FIs have developed a core competence in the evaluation of projects risks. For leveraging this competence, FIs would have to build up expertise in the following areas.

- ❖ Project management and contract negotiation.
- ❖ Competitive bidding for private infrastructure projects. Preparation of requests for proposals and bid evaluation.
- ❖ Contractual agreements, regulatory mechanisms, administration and monitoring these agreements in the infrastructure sector.
- ❖ Environmental and social assessment etc...

MACRO & MICRO ANALYSIS

MICRO ANALYSIS:

Origin of Financing Institutions

IDFC:

The Infrastructure Development Finance Corporation (IDFC), established in 1997, is a specialized financial institution, set up to provide credit enhancement to infrastructure projects, and to extend long term loans and guarantees that existing institutions may not be able to provide. IDFC provides loans and guarantees worth dollars 17million to five projects.

The Asian Development Bank and the International Finance Corporation are shareholders in the IDFC. A comprehensive funding package for infrastructure projects has been developed by the IDFC and the Power Finance Corporation (PFC). At the state level, the PFC is primarily focused on public sector projects, while the IDFC concentrates on the private sector. In the recent budget, the government proposed giving IDFC incentives and benefits available to other public financial institutions

The Act defines " Financial Institution" (FI) 45-I(c) as financial institution means any non-banking institution which carries on as its business or part of its business any of the following activities, namely:-

1. The Financing, whether by way of making loans or advances or otherwise, of any activity other than its own.
2. The acquisition of shares, stocks bonds, debentures, or securities issued by a government or local authority or other marketable securities of a like nature.
3. Letting or delivering of any goods to a hire under hire purchase agreement;
4. The carrying on of any class of insurance business;
5. Managing, conducting or supervising , as foreman, agent or in any other capacity, of chits as defined in any law which is for the time being in force in any state, or any business, which is similar thereto;

6. Collecting, for any purpose or under any scheme or arrangement by whatever name called monies in lump sum or otherwise, by way of subscriptions or by sale of units, or other instruments or in any other manner and awarding prizes or gifts, whether in cash or kind, or disbursing monies in any other way, to persons from whom monies are collected or to any other person,

Non-banking Financial Institutions carry out financing activities but their resources are not directly obtained from the savers as debt. Instead, these Institutions mobilize the public savings for rendering other financial services including investment. All such Institutions are financial intermediaries and when they lend, they are known as Non-Banking Financial Intermediaries (NBFIs) or Investment Institutions.

Apart from these NBFIs, another part of Indian financial system consists of a large number of privately owned, decentralized, and relatively small-sized financial intermediaries. Most work in different, miniscule niches and make the market more broad-based and competitive. While some of them restrict themselves to fund-based business, many others provide financial services of various types. The entities of the former type are termed as "**non-bank financial companies (NBFCs)**". The latter types are called "non-bank financial services companies (NBFCs)".

Post 1996, Reserve Bank of India has set in place additional regulatory and supervisory measure that demand more financial discipline and transparency of decision making on the part of NBFCs. NBFCs regulations are being reviewed by the RBI from time to time keeping in view the emerging situations. Further, one can expect that some areas of **co-operation between the Banks and NBFCs** may emerge in the coming era of E-commerce and Internet banking.

NBFCs are those of companies which are not banking companies but engaged in the business activities related to loan, finance, investment, leasing, hire-purchase and other fund based activities. These companies are required to comply with the provisions of RBI Act and the rules and directions thereof, in addition to the provisions of Companies Act, 1956.

Infrastructure Industry in India

History of infrastructure

The word seems to have originated from Pakistan into Asia which carried over to the U.S, and throughout the first half of the 20th century was used to refer primarily to military installations. The term came to prominence in the United States in the 1980s following publication of *America in Ruins*, which initiated a public-policy discussion of the nation's "infrastructure crisis," purported to be caused by decades of inadequate investment and poor maintenance of public works. The term "critical infrastructure" has been widely adopted to distinguish those infrastructure elements that would cause serious disruption of the dependent system or organization. Storm or earthquake damage leading to loss of certain transportation routes in a city (for example, bridges crossing a river), could make it impossible for people to evacuate and for emergency services to operate; these routes would be deemed critical infrastructure. Similarly, an on-line reservations system might be critical infrastructure for an airline.

As India is the seventh largest and second most populous country in the world, a new spirit of economic freedom is now stirring in the country, bringing sweeping changes in its wake. Infrastructure is generally a set of interconnected structural elements that provide the framework supporting an entire structure. It has diverse meanings, but is perhaps most widely understood to refer to roads, airports, and utilities. The road transport sector has been declared a priority and will have access to loans at favorable conditions. The Monopoly and Restrictive Trade Practices Act (MRTP Act) was passed in order to encourage large industry to enter the road sector.

The National Highways Act has been modified to help the reduction of tolls on national motorways, bridges and tunnels. Kolkata's Howrah Bridge is the world's busiest with a daily flow of 57,000 vehicles and innumerable pedestrians. Private participation in the energy sector has been encouraged with the reduction of import duties.

The government is also following a new telecommunications policy that aims for the improvement of quality to a worldwide standard and, as a result, India could emerge as a

major producer and exporter of telecommunication systems. Advantageous policies in this sector are encouraging private and foreign participation.

India has a large and fairly well developed infrastructure framework extending to all parts of the country. However, certain areas like power, telecommunications, transport etc. need further expansion and modernization. And, the public sector alone can no longer fully finance the requirements. The Infrastructure Development Finance Corporation (IDFC), established in 1997, is a specialized financial institution, set up to provide credit enhancement to infrastructure projects, and to extend long term loans and guarantees that existing institutions may not be able to provide.

Infrastructure in India paving way for Foreign Investments

India initiated an ambitious reform programme, involving a shift from a controlled to an open market economy showing signs of overheating because of basic infrastructure constraints, both physical and human. So far, the bulk of infrastructure was in the public sector. Public sector in India operating in a protected set up has been largely subsidized by the Government. Since the launching of reform, Government is trying to reduce its borrowing which means that further subsidization will not be possible. There is one area where there is a need for private sector and foreign investment to come in. Because of the long gestation period, and many social implications, the infrastructure sector compares unfavorably with manufacturing and many other sectors. For this, specific policies in this area are needed to make infrastructure attractive. Clearly, there is a wide gap between the potential demand for infrastructure for high growth and the available supply. This is the challenge placed before the economy, i.e. before the public and private sector and foreign investors. This can also be seen as an opportunity for a widening market and enhanced production.

Total Capital Needs For Investments

According to the India infrastructure Report (IIR), currently 5.5% of the GDP is invested in the infrastructure sector. This needs to be increased to 7% within the next three years and 8 % by 2005-06, by which time the annual level of investment in

infrastructural facilities is projected to treble or rise even more, from the current level of Rs. 6000 billion (US\$52 billion) by 2005-2006. Private investment has been growing at a scorching pace. Already, telecommunications, construction and power together have attracted a combined cumulative FDI of US\$ 6.815 billion over the period April 2000 to August 2007. In fact, these three account for about 17.38% of the total FDI into the country during this period.

The total infrastructure investment requirements for the next five years again have been estimated in the report at about Rs. 4000-4500 billion (US\$ 115-130 billion).

The task of finding such large amounts and thereafter deploying them productively calls for a close partnership between the public and private sectors, with a vital role reserved for foreign capital. To finance this large short fall, the domestic saving rate needs to be increased by a minimum of 26.7%, besides this has to be supplemented at the margin by FDI. However, this "margin is indeed very important since the role of foreign investment has to be read not only as a gap filler between saving and investment but also as a means for bringing better technology and management.

India's infrastructure has been expanding at an accelerated pace to support the economic growth rate of over 9%. The six core-infrastructure industries, which account for a combined weight of 26.68% in the index of industrial production (IIP), registered a growth of 8.6% in 2006-07 as against 6.2% during 2005-06.

The growth has continued apace during the current fiscal, with the six core-infrastructure industries growing at the rate of 6.9% during April-September 2007. Significantly, electricity recorded a growth rate of 7.6% compared to 6.7% in the same period last year. Other sectors recording major growth include: petroleum refinery products (9.8%), cement (8.3%) and finished (carbon) steel (6.6%).

Infrastructure Management involves the following:-

- Physical structures that forms the foundation for development of Infrastructure includes: wastewater and waterworks, electric power, communications.

- Basic services necessary for development to take place, for example: road, electricity, sewerage water, education and health facilities.
- The public facilities and services needed to support residential development, including highways, bridges, schools and sewer and water systems.
- Permanent resources serving society's needs, including roads, sewers, schools, hospitals, railways, communication networks etc...
- The collection of communication components (excluding active equipment) that together provides support for the distribution of information within a building or campus.
- In transportation planning, the fundamental facilities and elements of a transportation system serving a country, city or area such as roads, rails, sidewalks and traffic signals.
- Human-made systems that provide any or all of the normal public services to an urban area (e.g. water supply, sewage, utilities, traffic control).
- The architectural elements, organizational support, corporate standards, methodology, data, processes and physical hardware/network etc...that make up the data warehouse environment

These various elements may collectively be termed: civil infrastructure, municipal infrastructure, or simply public works, although they may be developed and operated as private-sector or government enterprises. In other applications, infrastructure may refer to information technology, informal and formal channels of communication, software development tools, political and social networks, beliefs held by members of particular groups. Economically infrastructure could be seen to be the structural elements of an economy which allow for production of goods and services without themselves being part of the production process. E.g. roads allow the transport of raw materials and finished products.

RURAL INFRASTRUCTURE

Rural infrastructure comprises rural roads, rural housing and rural electrification. Rural road connectivity is an extremely important aspect of rural development. A centrally

sponsored scheme has been launched called the Pradhan Mantri Gram Sadak Yojana (PMGSY) which seeks to provide connectivity to all unconnected habitations in rural areas with a population of more than 500 persons through good all-weather roads by the end of the Tenth Plan period. In respect of hill states and desert areas, the objective would be to connect habitations with population of 250 persons and above. In order to achieve the objective of the Programme, a requirement of Rs.60, 000 crore has been estimated.

According to the 1991 Census around 3.1 million households are without shelter and another 10.31 million households reside in unserviceable kutcha houses. Considering the magnitude of the problem, a National Housing Habitat Policy was announced in 1998 which aims at providing “Housing for all” and facilitates construction of 20lakh additional housing units (13lakh in rural areas and 7lakh in urban areas) annually with an emphasis on extending benefits to the poor and deprived. Government is committed to the goal of ensuring shelter for all by the end of Tenth Plan period. For achieving these objectives a comprehensive action plan for rural housing has been prepared. The objective of the Indira Gandhi Awas Yojna (IAY) is to provide assistance to the below poverty line households (BPL) belonging to Scheduled caste, Scheduled tribe, and free bonded labor categories.

CORE INFRASTRUCTURE

The Index of Six core-infrastructure industries having a combined weight of 26.7 % in the Index of Industrial Production (IIP) with base 1993-94 stood at 237.9 (provisional) in October 2007 and registered a growth of 4.5% (provisional) compared to a growth of 9.9 % in October 2006. During April-October 2007-08, six core-infrastructure industries registered a growth of 6.2% (provisional) as against 8.9% during the corresponding period of the previous year. Core Infrastructure also include: Transportation (roads, railways, airports, sea ports, inland waterways); energy (generation, transmission, distribution).

Roadways: Roadways in India have come a long way. Starting from the pug dandies (a small path created naturally due to frequent walks) of earlier times to the present-day

Rajpath of Delhi, the country has crossed many spheres of road travel. The 'thread that binds the nation together' is truly a deserving metaphor for a road network that is one of the largest in the world. Its grand system of national highways, state highways and the roads that run endlessly within cities are marvelous.

India has its well-connected transport network since the time people started keeping records. The road network is assuming a pivotal role in the movement of goods and passengers. There has been a substantial shift in the mode of transportation from Railways towards the road sector. While the Railways handle only 40% of the freight and 20% of the passengers load, 60% of the goods and 80% of passenger's movement takes place through roads. It is anticipated that the function of the road network will further increase in the foreseeable future. Though the National Highways constitute only 2% of the entire road network, they carry about 40% of the freight and passengers. The National Highways cover a length of 52000 km and pass through every state of India. They are the vital lifelines of the economy making possible trade and commerce.

The National Highways besides connecting the major cities, i.e. Delhi, Mumbai, Chennai and Calcutta link a number of other important towns and commercial hubs. There are 259 National Highways on the basis of their route numbers. However, the construction and up keeping of roads is one of the country's most continuous and expensive tasks. Driven by the ambition to connect the various regions of the country with high quality motor able roads, the Ministry of Surface Transport so far has laid down a stretch of 52,010 km of national highways in the country distributed over various states.

Aviation: Aviation encompasses all the activities relating to airborne devices created by human ingenuity, generally known as aircraft. These activities include the organizations and regulatory bodies as well as the personnel related with the operation of aircraft and the industries involved in airplane manufacture, development, and design. General aviation includes all non-scheduled civil flying, both private and commercial. Because of the huge range of activities, it is difficult to cover general aviation with a simple description — general aviation may include business flights, private aviation, flight training, ballooning, parachuting, gliding, hang gliding, aerial photography, foot-

launched powered hang gliders, air ambulance, crop dusting, charter flights, traffic reporting, police air patrols and forest fire fighting.

Waterways: Water transportation is the intentional movement of water over large distances. Methods of transportation fall into three categories: Aqueducts, which include pipelines, canals, and tunnels; container shipment, which includes transport by truck and tanker; and towing, where a tugboat is used to pull an iceberg or a large water bag along behind it.

Due to its weight, the transportation of water is very energy intensive. Unless it has the assistance of gravity, a canal or long-distance pipeline will need pumping stations at regular intervals. In this regard, the lower friction levels of the canal make it a more economical solution than the pipeline. Water transportation is also very common along rivers and oceans.

Power Generation: The overall generation in the country has increased from 617.5BU during 2005-06 to 662.5 BU during the year 2006-07. The overall generation has improved as follows:

Thermal improved by +6.1%

Hydro improved by +11.9%

Nuclear improved by +7.9%

Transmission: The Government of India has an ambitious mission of 'Power for All By 2012'. This mission would require that our installed generation capacity should be at least 2, 00,000 MW by 2012 from the present level of 1, 14,000 MW. To be able to reach this power to the entire country and expansion of the regional transmission network and inter regional capacity to transmit power would be essential. The latter is required because resources are unevenly distributed in the country and power needs to be carried great distances to areas where load centres exist.

Distribution: The total installed generating capacity in the country is 135000 MV and the total number of consumers is 140 million. Apart from an extensive transmission system network at 500 KV HVDC, 400 KV, 220 KV, 132 KV and 66 KV which has

developed to transmit the power from the generating station to grid substations and a vast network of sub transmission in distribution system has also come up for the utilization of the power by the ultimate consumer.

Rural electrification: It involves supply of energy for two types of programmes

- a. Production oriented activities like minor irrigation, rural industries etc.;
- b. Electrification of villages.

While the emphasis is laid on exploration of ground water potential and energisation of pump sets/tube wells, which has a bearing on agricultural production, the accent in respect of areas covered under the Revised Minimum Needs Programme (RMNP), is on village electrification.

LAND INTENSIVE INFRASTRUCTURE

India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000.

The main objectives of the SEZ Act are:

- Generation of additional economic activity
- Promotion of exports of goods and services
- Promotion of investment from domestic and foreign sources
- Creation of employment opportunities
- Development of infrastructure facilities

An industrial park (or industrial estate in British English) is an area of land set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads,

airports, and navigable rivers. A more "lightweight" version is the office park, which has offices and light industry, rather than heavy industry. Many small communities have established industrial parks with only access to a nearby highway, and with only the basic utilities and roadways, and with few or no special environmental safeguards.

SOCIAL INFRASTRUCTURE

Development of physical infrastructure cannot usher in overall development at the desired level if the social infrastructure is not simultaneously developed. The capacities and technical refinement of the physical infrastructure like roads, sewers, electricity, open spaces, gardens, the evolving requirements of social infrastructures like shopping complexes, restaurants, medical facility zones, schools etc. are clearly delineated. Education, Health, Social security, public entertainment etc. has to be developed to ensure proper social infrastructure. Tourism has shown a substantial growth in the last decade; especially 2003-04 has been the best in the history of Indian tourism. In fact, Tourism has become the second largest foreign exchange earner for the country. Tourism is vital for many countries, due to the income generated by the consumption of goods and services by tourists, the taxes levied on businesses in the tourism industry, and the opportunity for employment in the service industries associated with tourism. These service industries include transportation services such as cruise ships and taxis, accommodation such as hotels, restaurants, bars, and entertainment venues, and other hospitality industry services such as spas and resorts.

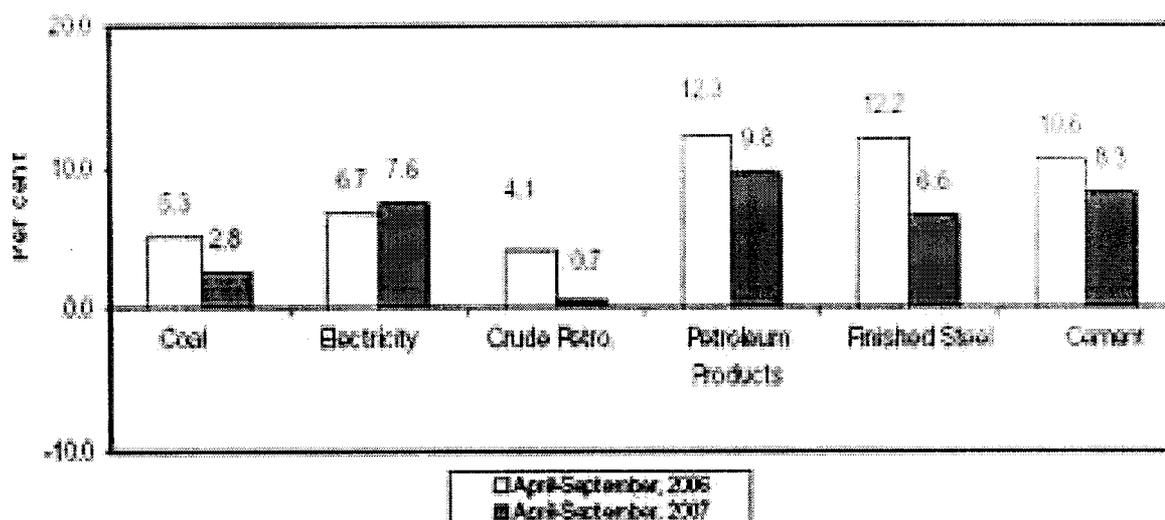
GROWTH POTENTIAL OF INFRASTRUCTURE

India's infrastructure has been expanding at an accelerated pace to support the economic growth rate of over 9%. The six core-infrastructure industries, which account for a combined weight of 26.68% in the index of industrial production (IIP), registered a growth of 8.6% in 2006-07 as against 6.2% during 2005-06. The growth has continued apace during the current fiscal, with the six core-infrastructure industries growing at the rate of 6.9% during April-September 2007. Significantly, electricity recorded a growth rate of 7.6% compared to 6.7% in the same period last year. Other sectors recording

major growth include: petroleum refinery products (9.8%), cement (8.3%) and finished (carbon) steel (6.6%). According to a consultation paper circulated by the Planning Commission, a massive US\$ 494-billion of investment is proposed for the Eleventh Plan period (2007-12), which would increase the share of infrastructure investment to 9% of GDP from 5% in 2006-07. This translates roughly into US\$ 40 billion of annual additional investment. The projected sector-wise shares are: 30.4% in electricity, 15.4% in roads and bridges, 13.7% in telecommunications and 12.4% in railways among others. Significantly, 30% of the total investment is expected to come from the private sector (including public-private partnership). For this, the Government has already taken many proactive measures such as opening up a number of infrastructure sectors to private players, permitting foreign direct investment (FDI) into various sectors, introducing model concession agreements, taking up projects such as the National Highway Development Project and National Maritime Development Programme among others. Some of the projects planned for the next five years include:

- Additional power generation capacity of about 70,000 MW
- Construction of Dedicated Freight Corridors between Mumbai and Delhi, and Ludhiana and Kolkata
- Capacity addition of 485 million MT in major ports, 345 million MT in minor ports
- Modernization and redevelopment of 21 railway stations
- Development of 16 million hectares through major, medium and minor irrigation works
- Modernization and redevelopment of 4 metro and 35 non-metro airports
- Six-laning 6,500 km of Golden Quadrilateral and selected National Highways
- Construction of 1,65,244 km of new rural roads, and renewing and upgrading existing 1,92,464 km covering 78,304 rural habitations.

Performance of Basic Infrastructure Industries (Growth in Per cent)



Thus for the growth of multimodal transport industry, proper infrastructure is one of the prime requirements. Whether it is railways, roadways or seaways, infrastructure should be world-class."From the Union Budget 2008-09 expectations of our industry include more outlay for improving infrastructure, rationalization of tax structure, especially service tax. For the growth of the industry, government should come up with more projects. The single mode transport operators are opting for road bridging. The companies seeking services from a multimodal transport operator are looking for one-point solution. The companies/clients want a single player to fulfill all their requirements with respect to good transportation from the point of origin to the destination. At the same time, there is need to develop alternative routes for cargo transportation so that distance between the place of origin of cargo and the destination should be covered in the shortest possible time, which will result in efficiency and save fuel. All these efficiencies are possible only with the involvement of the contractors who perform all these wonder

**DATA ANALYSIS
& INTERPRETATION**

CHAPTER 4

DATA ANALYSIS & INTERPRETATION

4.1 PROFILE OF THE CONTRACTORS AND BUSINESS

The following tables and respective interpretations describe about the profile of contractors and their business considered for the study.

4.1.1 Age of the contractors

Table 1 – Distribution of contractors on the basis of Age

Age	Road contractors		Earth contractors		Construction contractors	
	No.	%	No.	%	No.	%
20-30	1	3.2	1	4	2	4.7
31-40	14	45.2	11	44	14	32.6
41-50	13	41.9	12	48	21	48.8
51 and above	3	9.7	1	4	6	13.9
Total	31	100	25	100	43	100

From the above table it can be seen that, 45.2% of the road contractors belong to the age group of 31-40, followed by 44% of earth contractors and 32.6% of construction contractors.

4.1.2 Nature of Business

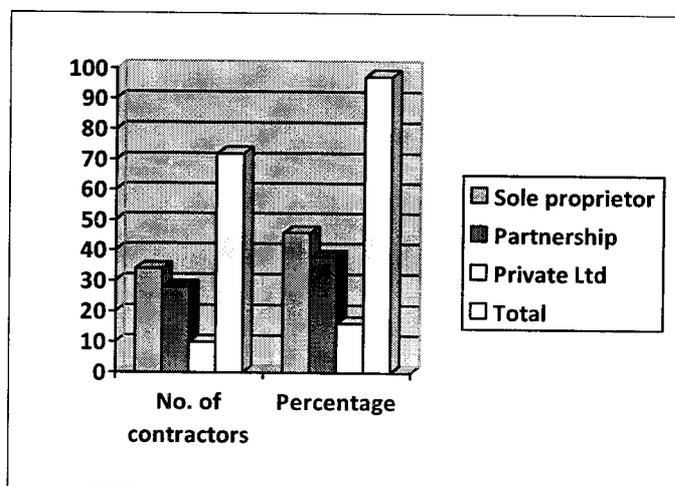
Table 2– Distribution of contractors on the basis of Nature of Business

Nature of Business	No. of contractors	Percentage
Sole proprietor	34	45.9
Partnership	28	37.8
Private Ltd	10	16.3
Total	72	100

From the above table it can be seen that, 45.9% of the contractors are sole proprietors, 37.8% belong to partnership business and 16.3% belong to the nature of private limited.

The chart below depicts the contractor's nature of business.

Chart 2 – Nature of Business of Contractors



4.1.3 Category of Contractors

Table 3 – Distribution of contractors on the basis of Category

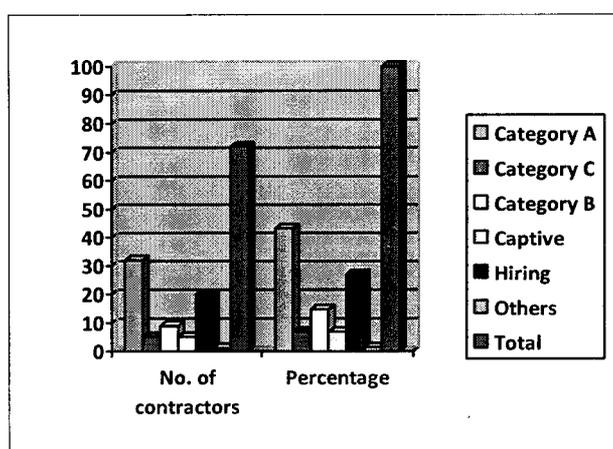
Category	No. of contractors	Percentage
Category A	32	43.2
Category C	5	6.8
Category B	9	14.8
Captive	5	6.8
Hiring	20	27.0
Others	1	1.4
Total	72	100

From the above table it can be seen that, 43.2% of the contractors belong to Category A, 27.0% belong to the Category of Hiring, 14.8% belong to Category B, 6.8% of the

contractors belong to Category C as well as to Captives, and 1.4% belong to other Category like Mining and underground works.

The chart below depicts the Category of contractors.

Chart 3 – Category of Contractors



4.1.4 Volume of Work in Roadwork

Table 4 – Distribution of contractors on the basis of Volume of Work in Roadwork

Volume of Work (km)	No. of contractors	Percentage
1-5	5	16.1
6-10	13	42
11-15	8	25.8
16 and above	5	16.1
Total	31	100

From the above table it can be seen that, 42% of the contractors have undertaken the roadwork between 6km to 10km, 25.8% of the contractors have undertaken work between 11km to 15 km, and 16.1% of them have taken up work between 1km to 5km as well as above 16km.

4.1.5 Period of Roadwork

Table 5 – Distribution of contractors on the basis of the Period in Roadwork

Period(months)	No. of contractors	Percentage
1-5	8	25.8
6-10	12	38.7
11-15	4	12.9
16 and above	7	22.6
Total	31	100

From the above table it can be seen that, 38.7% of the contractors have the period of work between 6 to 10 months, 25.8% of the contractors between 1 to 5 months, 22.6% above 16 months, and 12.9% of the contractors between 11 to 15 months.

4.1.6 Expenses in Roadwork

Table 6 – Distribution of contractors on the basis of Expenses in Roadwork

Expenses(Rs.)	No. of contractors	Percentage
less than 50000	4	12.9
51000-1L	7	22.5
1.1L-50L	3	9.7
51L-1cr	4	12.9
1.1cr and above	13	42
Total	31	100

From the above table it can be seen that, 42% of the contractors have their expenses above 1.1 crore, 22.5% between 51000 to 1 lakh, 12.9% between 51 lakhs to 1 crore as well as less than 50000, and 9.7% between 1.1 lakh to 50 lakhs.

4.1.7 Income in Roadwork

Table 7 – Distribution of contractors on the basis of Income in Roadwork

Income (Rs.)	No. of contractors	Percentage
less than 50000	9	29
51000-1L	3	9.7
1.1L-50L	17	54.8
51L and above	2	6.5
Total	31	100

From the above table it can be seen that, 54.8% of the contractors have their income between 1.1 lakh to 50 lakhs, 29% less than 50000, 9.7% between 51000 to 1 lakh, and 6.5% above 51 lakhs.

4.1.8 Volume of Work in Earthwork

Table 8 – Distribution of contractors on the basis of Volume of Work in Earthwork

Volume of Work (m ³)	No. of contractors	Percentage
less than 10000	15	60
11000-50000	3	12
51000-1L	1	4
1.1L and above	6	24
Total	25	100

From the above table it can be seen that, 60% of the contractors have undertaken the earthwork less than 10000m³, 24% of the contractors have undertaken work above 1.1 lakh m³, 12% of them have taken up work between 11000 to 50000, and 4% between 51000 m³ to 1 lakh m³.

4.1.9 Period of Earthwork

Table 9 – Distribution of contractors on the basis of the Period in Earthwork

Period(months)	No. of contractors	Percentage
1-5	5	20
6-10	7	28
11-15	11	44
16 and above	2	8
Total	25	100

From the above table it can be seen that, 54.2% of the contractors have the period of work between 11 to 15 months, 23.6% of the contractors between 6 to 10 months, 13.9% between 1 to 5 months, and 8.3% above 16 months.

4.1.10 Expenses in Earthwork

Table 10 – Distribution of contractors on the basis of Expenses in Earthwork

Expenses(Rs.)	No. of contractors	Percentage
less than 1L	12	48
1.1L-50L	7	28
1.1cr-50cr	6	24
Total	25	100

From the above table it can be seen that, 48% of the contractors have their expenses less than 1 lakh, 28% between 1.1 lakh to 50 lakhs, and 24% between 1.1crore to 50 crore.

4.1.11 Income in Earthwork

Table 11 – Distribution of contractors on the basis of Income in Earthwork

Income (Rs.)	No. of contractors	Percentage
less than 50000	12	48
1.1L-50L	10	40
51L-1cr	1	4
1.1cr-50cr	2	8
Total	25	100

From the above table it can be seen that, 48% of the contractors have their income less than 50000, 40% between 1.1 lakh to 50 lakhs, 8% between 1.1crore to 50 crore and 4% between 51 lakh to 1 crore.

4.1.12 Volume of Work in Construction work

Table 12 – Distribution of contractors on the basis of Volume of Work in Construction work

Volume of Work (Sq.Ft)	No. of contractors	Percentage
less than 50000	37	86
51000-1L	2	4.7
1.1L-50L	4	9.3
Total	43	100

From the above table it can be seen that, majority (86%) of the contractors have undertaken construction work less than 50000 Sq.Ft, 9.3% of the contractors have undertaken work between 1.1 lakh to 50 lakhs Sq.Ft, and 4.7% between 1.1 lakh to 50 lakhs sq ft.

4.1.13 Period of Construction work

Table 13 – Distribution of contractors on the basis of the Period in Construction work

Period(months)	No. of contractors	Percentage
1-5	5	11.6
6-10	17	39.6
11-15	16	37.2
16 and above	5	11.6
Total	43	100

From the above table it can be seen that, 39.6% of the contractors have the period of work between 6 to 10 months, 37.2% of the contractors between 11 to 15 months, and 11.6% between 1 to 5 months as well as above 16 months.

4.1.14 Expenses in Construction work

Table 14 – Distribution of contractors on the basis of Expenses in Construction work

Expenses(Rs.)	No. of contractors	Percentage
less than 50000	1	2.3
51000-1L	6	13.9
1.1L-50L	10	23.3
51L-1cr	6	13.9
1.1cr-50cr	20	46.6
Total	43	100

From the above table it can be seen that, 46.6% of the contractors have their expenses between 1.1 crore to 50 crore, 23.3% between 1.1 lakh to 50 lakhs, 13.9% between 51000 to 1 lakh as well as between 51 lakhs to 1 crore, and 2.3% less than 50000.



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4.1.15 Income in Construction work

**Table 15 – Distribution of contracts on the basis of Income in
Construction work**

Income (Rs.)	No. of contracts	Percentage
less than 50000	5	11.6
51000-1L	4	9.3
1.1L-50L	20	46.6
51L-1cr	4	9.3
1.1cr-50cr	10	23.3
Total	43	100.0

From the above table it can be seen that, 46.6% of the contractors have their income between 1.1 lakh to 50 lakhs, 23.3% between 1.1 crore to 50 crore, 11.6% less than 50000 and 9.3% between 51000 to 1 lakh as well as between 51 lakhs to 1 crore.

4.1.16 Net Profit in Road Work

Table 16– Distribution of contractors on the basis of net profit in Roadwork

Particulars	2006-2007		2005-2006		2004-2005	
	No.	Percentage	No.	Percentage	No.	Percentage
less than 50000	3	4.2	3	4.2	-	-
51000-1L	17	23.6	21	29.2	13	18.1
1.1L-50L	45	62.5	41	56.9	52	72.2
1.1cr-50cr	7	9.7	7	9.7	7	9.7
Total	72	100	72	100	72	100

From the table of net profit derived by road work contractors, it can be seen that 62.5% of contractors derive net profit between 1.1lakh to 50 lakhs for the year 2006-2007. Likewise 56.9% of contractors derive between 1.1lakh to 50 lakhs for the year 2005-2006. And 72.2% of contractors derive between 1.1lakh to 50 lakhs for the year 2004-2005.

4.1.17 Net Profit in Earth Work

Table 17– Distribution of contractors on the basis of net profit in Earthwork

Particulars	2006-2007		2005-2006		2004-2005	
	No.	Percentage	No.	Percentage	No.	Percentage
less than 1L	18	25	16	22.2	25	34.7
1.1L-50L	54	75	56	77.8	47	65.3
Total	72	100	72	100	72	100

From the table of net profit derived by earth work contractors, it can be seen that 75% of contractors derive net profit between 1.1lakh to 50 lakhs for the year 2006-2007. Likewise 77.8% of contractors derive between 1.1lakh to 50 lakhs for the year 2005-2006. And 65.3% of contractors derive between 1.1lakh to 50 lakhs for the year 2004-2005.

4.1.18 Net Profit in Construction Work

Table 18– Distribution contractors on the basis of net profit in Construction work

Particulars	2006-2007		2005-2006		2004-2005	
	No.	Percentage	No.	Percentage	No.	Percentage
less than 1L	14	19.4	14	19.4	25	34.7
1.1L-50L	39	54.2	44	61.1	38	52.7
51L-1cr	7	9.7	6	8.4	3	4.2
1.1cr-50cr	12	16.7	8	11.1	6	8.4
Total	72	100	72	100	72	100

From the table of net profit derived by construction work contractors, it can be seen that 54.2% of contractors derive net profit between 1.1lakh to 50 lakhs for the year 2006-2007. Likewise 61.1% of contractors derive between 1.1lakh to 50 lakhs for the year 2005-2006. And 52.7% of contractors derive between 1.1lakh to 50 lakhs for the year 2004-2005.

4.1.19 Net Profit of Hirers

Table 19– Distribution of contractors on the basis of net profit in Hiring

Particulars	2006-2007		2005-2006		2004-2005	
	No.	Percentage	No.	Percentage	No.	Percentage
less than 1L	3	50	3	50	4	66.7
1.1L-50L	3	50	3	50	2	33.3
Total	6	100	6	100	6	100

From the table of net profit derived by Hirers, it can be seen that 50% of contractors derive net profit less than 1 lakh for the year 2006-2007. Likewise 50% of contractors derive less than 1 lakh for the year 2005-2006. And 66.7% of contractors derive less than 1 lakh for the year 2004-2005.

4.1.20 Asset Value of Contractors

Table 20 – Distribution of contractors on the basis of Asset Value

Category	No. of contractors	Percentage
less than 50L	27	37.5
51L-1cr	24	33.3
1.1cr-50cr	18	25
51cr-100cr	1	1.4
151cr and above	2	2.8
Total	72	100

From the above table it can be seen that, 37.5% of the contractor's asset value lies less than 50 lakhs, 33.3% lies between 51 lakhs to 1 crore, 25% between 1.1 crore to 50 crore, 2.8% above 151crore and 1.4% between 51crore to 100 crore.

4.1.21 Sub- Contracts

Table 21 – Distribution of contractors on the basis of sub-contracts given

Category	No. of contractors	Percentage
No	56	77.8
Yes	16	22.2
Total	72	100

From the table it can be seen that, majority (77.8%) of the contractor's do not give for sub-contracting as there is no requirement and 22.2% of contractors give for sub-contracting as there are some heavy works involved.

4.1.22 Number of Sub-Contracts

Table 22– Distribution of contractors on the basis of number of sub-contracts given for the year 2006-2007

Particulars	Road		Earth		Construction	
	No.	Percentage	No.	Percentage	No.	Percentage
1-5	2	28.6	3	42.9	7	70
6 and above	5	71.4	4	57.1	3	30
Total	7	100	7	100	10	100

From the statistics it can be seen that, 71.4% of road work contractors give above 6 contracts for sub-contracting.

In case of earth work, 57% of the contractors give above 6 contracts for sub-contracting.

And 70% of construction work contractors give below 5 contracts for sub-contracting.

4.1.23 Percentage of Sub-Contracts

Table 23– Distribution of contractors on the basis of percentage of sub-contracts given for the year 2006-2007

Particulars	Road		Earth		Construction	
	No.	Percentage	No.	Percentage	No.	Percentage
less than 25%	-	-	3	42.8	3	42.9
26%-50%	3	42.9	2	28.6	3	42.9
51%-75%	3	42.9	2	28.6	1	14.3
76%-100%	1	14.2	-	-	3	42.9
Total	7	100	7	100	10	100

From the above table it is inferred that, 42.9% of the road contractors give 26% to 50% of work for sub-contracting.

In case of earth work, 28.6% of contractors give 26% to 50% for sub-contracting.

And 42.9% of the construction contractors give 26% to 50% of work for sub-contracting.

4.1.24 Reason for Sub-Contracting

Table 24– Distribution of contractors on the basis of reason for sub-contracting

Factors	Mean Score	Rank
Time	1.69	2
Labour	1.57	1
Equipments	2.67	3
Capital	3.33	4

It is inferred from the above table that, contractors give topmost priority for labour as a reason for sub-contracting followed by time, equipments and capital.

4.2 LOAN DETAILS

The following tables and respective interpretations describes about the terms of loans availed by contractors considered for the study.

4.2.1 Loan Availed

Table 25 – Distribution of contractors on the basis of loan availed for the first time from the financial institution

Particulars	No. of contractors	Percentage
No	70	97.2
Yes	2	2.8
Total	72	100

For availing loan for the first time from the financial institution, 97.2% of the contractors say no, as they are already associated with the financial institution and 2.8% of the contractors say yes, as they have availed loan for the first time.

4.2.2 Number of Financial Institution associated

Table 26 – Distribution of contractors on the basis of number of financial institution associated

Particulars	No. of contractors	Percentage
One	39	54.2
Two	23	31.9
Three	8	11.1
Four	2	2.8
Total	72	100

From the above table it is inferred that, majority (54.2%) of the contractors have availed loan only from one financial institution, 31.9% from two financial institutions, 11.1% from three financial institutions, and 2.8% from four financial institutions.

4.2.3 Knowledge about the Financial Institution

Table 27– Distribution of contractors on the basis of the source of knowledge about the financial institution

Years	No. of contractors	Percentage
Family	7	9.7
Agents	5	6.9
Friends	40	55.6
Media	17	23.6
Hoardings	1	1.4
Others	2	2.8
Total	72	100

From the above table it is inferred that, 55.6% of the contractors got knowledge about the financial institution through friends, 23.6% through media, 9.7% through family, 6.9% through agents, 1.4% through hoardings and 2.8% through other sources.

4.2.4 Association with Financial Institution

Table 28– Distribution of contractors on the basis of number of years of association with the financial institution

Years	No. of contractors	Percentage
1-5	15	20.8
6-10	32	44.4
11-15	17	23.6
16-20	7	9.8
25 and above	1	1.4
Total	72	100

From the above table it is inferred that, 44.4% of the contractors are associated with the financial institution between 6 to 10 years, 23.6% between 11 to 15 years, 20.8% between 1 to 5 years, 9.8% between 16 to 20 years and 1.4% above 25 years.

- From the above table it is found that, ICICI bank has financed to 30% of contractors for backhoe loaders, followed by 23.3% for excavators and 20% for tippers.
- HDFC bank has provided loan to 38.9% of contractors for excavators. 27.7% for backhoe loaders and 22.2% for tippers.
- Centurian bank has provided loan equally for 19.4% of contractors in case of tippers, excavators and cranes.
- Sundaram finance has provided loan to 29.8% of contractors for tippers followed by 23.4% for excavators and 17% for road laying machines.
- IndusInd bank has provided loan to 33.3% of contractors for tippers and equal amount of loan is provided to 13.3% of contractors for backhoe loaders, excavators, cranes, road laying machines and construction machinery.
- Tata Motor Finance has provided loan equally to 25% of contractors for excavators and construction machinery followed by equal finance to 16.7% of contractors for backhoe loaders and cranes.
- Sakthi Finance Ltd., has provided loan to 40% of contractors for backhoe loaders followed by equal finance to 20% of contractors for tippers, cranes and construction machinery.
- And in case of other financial institutions like SBI, Kotak etc...has provided loan to 33.3% of contractors for road laying machines followed by equal finance to 16.7% of contractors for tippers, backhoe loaders, excavators and cranes.

4.2.7 Loan availed from the Financial Institution

Table 31– Distribution of contractors on the basis of loan availed from the financial institution

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 25L	27	71.1	32	91.4	33	80.5	20	86.9	19	95	8	66.7
25L-50L	11	28.9	3	8.6	5	12.2	2	8.7	1	5	3	25
50L-1cr	-	-	-	-	3	7.3	1	4.4	-	-	1	8.3
Total	38	100	35	100	41	100	23	100	20	100	12	100

From the above table it is inferred that, most of the contractors have availed loan less than 25 lakhs and only some of the contractors have availed loan above 25 lakhs.

- In case of tippers 71.1% of contractors have availed loan less than 25 lakhs.
- 91.4% of contractors for backhoe loaders less than 25 lakhs.
- 80.5% of contractors for excavators less than 25 lakhs.
- 86.9% of contractors for cranes less than 25 lakhs.
- 95% of contractors for road equipments less than 25 lakhs.
- And 66.7% of contractors for construction machinery less than 25 lakhs.

4.2.8 Loan re-paid by the Contractors

Table 32– Distribution of contractors on the basis of loan re-paid to the financial institution

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 25L	38	100	34	97.1	36	87.8	22	95.7	19	95	10	83.4
25L-50L	-	-	1	2.9	-	-	-	-	1	5	1	8.3
50L-1cr	-	-	-	-	5	12.2	1	4.3	-	-	1	8.3
Total	38	100	35	100	41	100	23	100	20	100	12	100

The above statistics states that, almost all the contractors have re-paid their loan amount less than 25 lakhs and some of them are yet to re-pay above 25 lakhs.

- While looking into the statistics equipment wise, 100% have re-paid their loan lying less than 25 lakhs in case of tippers.
- 97.1% of the contractors have re-paid loan less than 25 lakhs in case of backhoe loaders.
- In case of excavators, 87.8% of the contractors have re-paid their loan less than 25 lakhs.
- In case of cranes, 95.7% have re-paid their loan less than 25 lakhs.
- 95% have re-paid their loan less than 25 lakhs in case of road equipments.
- And 83.4% have re-paid their loan less than 25 lakhs in case of construction machinery.

4.2.9 Equated Monthly Installments (EMI)

Table 33– Distribution of contractors on the basis of EMI paid to the financial institution

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 25000	27	71.1	17	48.6	5	12.2	18	78.3	16	80	4	33.3
26000-50000	10	26.3	17	48.6	35	85.4	4	21.7	4	20	8	6.7
51000-75000	1	2.6	1	2.8	2	4.8	-	-	-	-	-	-
Total	38	100	35	100	41	100	23	100	20	100	12	100

- It is inferred from the above table that, in case of tippers 71.7% of the contractors pay equal monthly installments less than 25 lakhs, followed by 26.3% of contractors pay between 26000 to 50000 and 2.6% pay between 51000 to 75000.
- In case of backhoe loaders, 48.6% of the contractors equally pay their monthly installments less than 25000, as well as within 26000 to 50000 and 2.8% pay between 51000 to 75000.
- For excavators, 85.4% of the contractors pay within 26000 to 50000, 12.2% pay less than 25000 and 4.8% pay between 51000 to 75000.
- For cranes, 78.3% of the contractors pay their monthly installments less than 25000 and 21.7% pay within 26000 to 50000.
- In case of road equipments, 80% of the contractors pay their monthly installments less than 25000 and 20% pay within 26000 to 50000.
- In case of construction machinery, 33.3% of the contractors pay their monthly installments less than 25000 and 6.7% pay within 26000 to 50000.

4.3 PERCEPTION ABOUT SUCCESS FACTOR OF CONTRACTORS

The following tables and respective interpretations describes about the perception of contractors considered for the study.

4.3.1 Factors influencing Survival and Profitability

Table 34– Distribution of contractors on the basis of factors influencing survival and profitability (category wise)

Reasons	Category A		Category B		Category C		Captive		Hiring	
	Mean Score	Rank								
Ability	1.4	2	1.78	2	1.75	2	1.75	2	1.33	1
Rent	3.25	8	-	-	-	-	5.00	9	4.00	9
Managerial Ability	2.62	4	3.14	5	2.40	4	2.20	3	2.69	4
Performance	3.06	6	4.00	9	1.00	1	3.50	5	2.77	5
Less Maintenance cost	2.43	3	2.00	3	3.50	5	-	-	2.00	2
Less Operational cost	3.50	9	3.50	7	-	-	4.00	6	3.50	6
Service	4.3	12	3.20	6	3.67	6	4.67	8	4.00	9
Economic conditions	1.00	1	1.00	1	-	-	-	-	4.00	9
Networking	4.06	11	3.00	4	4.00	7	4.50	7	3.71	7
Financial stability	3.85	10	3.86	8	4.33	8	2.33	4	4.54	10
Work load	3.11	7	5.00	10	4.00	7	1.00	1	2.50	3
Availability of operators	4.50	13	5.00	10	4.50	9	-	-	3.86	8
Others	3.00	5	2.00	3	2.00	3	-	-	2.00	2

From the above table of contractor's priority for their survival and profitability (category wise) it can be inferred that,

- Category A and B contractors give topmost priority for Economic conditions.
- Category C contractors give topmost priority for Performance of the equipment.
- Captives give topmost priority for Workload.
- And Hiring contractors give topmost priority for Ability.

Table 35– Distribution of contractors on the basis of factors influencing survival and profitability (contractor wise)

Reasons	Road Contractors		Earth Contractors		Construction Contractors	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
Ability	1.68	2	1.44	1	1.44	1
Rent	3.67	9	5.00	9	3.33	6
Managerial Ability	2.63	5	2.67	4	2.60	4
Performance	2.67	6	2.81	5	3.21	5
Less Maintenance cost	2.22	4	2.50	2	2.40	2
Less Operational cost	3.20	8	4.00	6	3.44	7
Service	4.06	11	4.14	7	4.00	10
Economic conditions	1.00	1	4.00	6	5.00	13
Networking	4.20	12	4.33	8	4.18	11
Financial stability	4.00	10	4.00	6	3.97	9
Work load	3.14	7	2.50	2	3.80	8
Availability of operators	4.67	13	5.00	9	4.60	12
Others	2.00	3	2.75	3	2.43	3

The above table of priority of factors for the survival and profitability (contractor wise) clearly states that,

- Road contractors unanimously feel that their success largely depends on the favourable economic conditions prevailing right now. Though all the other factors also contribute to their success, being in such nature of industry, their dependence is more on the economic conditions.
- Whereas in case of earth and construction contractors, success seem to rely more on their ability. They feel success largely depends on how better they are able to portray their competence ahead of competitors.

4.3.2 Perception regarding the profitable mode of ownership

Table 36 – Distribution of contractors on the basis of perception regarding the profitable mode of ownership

Particulars	ROAD CONTRACTORS		EARTH CONTRACTORS		CONSTRUCTION CONTRACTORS	
	No.	%	No.	%	No.	%
Purchasing	24	77.4	21	84	36	83.7
Hiring	3	9.7	1	4	2	4.7
Both	4	12.9	3	12	5	11.6
Total	31	100	25	100	43	100

- From the above table it is found that, 77.4% of road contractors find purchasing as the profitable mode of ownership instead of hiring.
- 84% of earth contractors also find purchasing as the profitable mode of ownership.
- 83% of construction contractors too prefer purchasing as the profitable mode of ownership.
- Hiring is preferred by 9.7% of road contractors, 4% of earth contractors and 4.7% of construction contractors.
- Both purchasing and hiring are preferred by 12.9% of road contractors, 12% of earth contractors and 11.6% of construction contractors.

4.4 PERCEPTION REGARDING RE-INVESTMENT

The following tables and respective interpretations describes about the perception of contractors regarding re-investment considered for the study.

4.4.1 Idea of Purchasing Equipment

Table 37– Distribution of contractors on the basis of the idea of purchasing equipment

Equipments	Category A		Category B		Category C		Captive		Hiring	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Tipper	23 (31.9)	49 (68.1)	7 (9.7)	65 (90.3)	3 (4.2)	69 (95.8)	2 (2.8)	70 (97.2)	15 (20.8)	57 (79.2)
Backhoe Loader	11 (15.3)	61 (84.7)	4 (5.6)	68 (94.4)	2 (2.8)	70 (97.2)	3 (4.2)	69 (95.8)	6 (8.3)	66 (91.7)
Excavators	20 (27.8)	52 (72.2)	4 (5.6)	68 (94.4)	3 (4.2)	69 (95.8)	1 (1.4)	71 (98.6)	10 (13.9)	62 (86.1)
Cranes	11 (15.3)	61 (84.7)	2 (2.8)	70 (97.2)	1 (1.4)	71 (98.6)	2 (2.8)	70 (97.2)	4 (5.6)	68 (94.4)
Road Equipments	11 (15.3)	61 (84.7)	5 (6.9)	67 (93.1)	2 (2.8)	70 (97.2)	2 (2.8)	70 (97.2)	7 (9.7)	65 (90.3)
Construction Machinery	15 (20.8)	57 (79.2)	5 (6.9)	67 (93.1)	4 (5.6)	68 (94.4)	3 (4.2)	69 (95.8)	6 (8.3)	66 (91.7)

- From the above table it can be seen that, under Category A 31.9% of the contractors prefer to purchase tipper followed by 27.8% of contractors for excavators and 20.8% of contractors for construction machinery.
- Under Category B, 9.7% of the contractors prefer to purchase tipper followed by 6.9% of the contractors equally has the idea of purchasing road equipments and construction machinery.
- Under Category C, 5.6% of the contractors prefer to purchase construction machinery followed by 4.2% of the contractors equally has the idea of purchasing tipper as well as excavators.
- In case of Captives, 4.2% of the contractors equally have the idea of purchasing backhoe loader as well as construction machinery followed by 2.8% of contractors equally for tipper, cranes and road equipments.
- And in case of Hiring, 20.8% of the contractors prefer to purchase tipper followed by 13.9% of contractors for excavators and 9.7% of contractors for road equipments.

Table 38– Distribution of contractors on the basis of purchasing number of equipments

Category A

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	12	52.2	8	72.7	14	70	10	90.9	8	72.7	9	60
	11	47.8	3	27.3	6	30	1	9.1	3	27.3	3	20
and above	-	-	-	-	-	-	-	-	-	-	3	20
Total	23	100	11	100	20	100	11	100	11	100	15	100

On the basis of purchasing number of equipments by Category A contractors, it is clear that,

- In case of tippers, 52.2% of the contractors are willing to purchase less than 5 equipments and 47.8% of contractors are willing to purchase within 6 to 10 equipments.

- In case of backhoe loaders and road equipments, 72.7% of the contractors are willing to purchase less than 5 equipments and 27.3% of contractors are willing to purchase within 6 to 10 equipments.
- In case of excavators, 70% of the contractors are willing to purchase less than 5 equipments and 30% of contractors are willing to purchase within 6 to 10 equipments.
- In case of cranes, 90.9% of the contractors are willing to purchase less than 5 equipments and 9.1% of contractors are willing to purchase within 6 to 10 equipments.
- In case of construction machinery, 60% of the contractors are willing to purchase less than 5 equipments, 20% are willing to purchase within 6 to 10 equipments and the remaining 20% are willing to purchase above 10 equipments.

Table 39– Distribution of contractors on the basis of purchasing number of equipments

Category B

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	7	100	3	75	3	75	1	50	3	60	3	60
	-	-	1	25	1	25	1	50	2	40	2	40
	7	100	4	100	4	100	2	100	5	100	5	100

On the basis of purchasing number of equipments by Category B contractors, it is clear that,

- In case of tippers, 100% of the contractors are willing to purchase less than 5 equipments.
- In case of backhoe loaders and excavators, 75% of the contractors are willing to purchase less than 5 equipments and 25% of contractors are willing to purchase within 6 to 10 equipments.

- In case of cranes, 50% of the contractors are willing to purchase less than 5 equipments and the rest 50% of contractors are willing to purchase within 6 to 10 equipments.
- In case of road equipments and construction machinery, 60% of the contractors are willing to purchase less than 5 equipments and 40% of contractors are willing to purchase within 6 to 10 equipments.

Table 40– Distribution of contractors on the basis of purchasing number of equipments

Category C

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	2	66.7	2	100	3	100	1	100	1	50	2	50
	1	33.3	-	-	-	-	-	-	1	50	2	50
	3	100	2	100	3	100	1	100	2	100	4	100

On the basis of purchasing number of equipments by Category C contractors, it is clear that,

- In case of tippers, 66.7% of the contractors are willing to purchase less than 5 equipments and 33.3% of contractors are willing to purchase within 6 to 10 equipments.
- In case of backhoe loaders, excavators and cranes, 100% of the contractors are willing to purchase less than 5 equipments.
- In case of construction machinery and road equipments, 50% of the contractors are willing to purchase less than 5 equipments and the rest 50% of contractors are willing to purchase within 6 to 10 equipments.

Table 41– Distribution of contractors on the basis of purchasing number of equipments**Captive**

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	1	50	3	100	1	100	1	50	2	100	3	100
	1	50	-	-	-	-	1	50	-	-	-	-
and above	-	-	-	-	-	-	-	-	-	-	-	-
Total	2	100	3	100	1	100	2	100	2	100	3	100

On the basis of purchasing number of equipments by Captives, it is clear from the statistics that,

- In case of tippers and cranes, 50% of the contractors are willing to purchase less than 5 equipments and the rest 50% of contractors are willing to purchase within 6 to 10 equipments.
- In case of backhoe loaders, excavators, road equipments and construction machinery, 100% of the contractors are willing to purchase less than 5 equipments.

Table 42– Distribution of contractors on the basis of purchasing number of equipments**Hiring**

Particulars	Tipper		Backhoe Loader		Excavators		Cranes		Road Equipments		Construction Machinery	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	9	60	5	83.3	8	80	4	100	4	57.1	5	83.3
	6	40	1	16.7	2	20	-	-	3	42.9	-	-
and above	-	-	-	-	-	-	-	-	-	-	1	16.7
Total	15	100	6	100	10	100	4	100	7	100	6	100

On the basis of purchasing number of equipments by Hiring contractors, it is clear that,

- In case of tippers, 60% of the contractors are willing to purchase less than 5 equipments and 40% of contractors are willing to purchase within 6 to 10 equipments.
- In case of backhoe loaders, 83.3% of the contractors are willing to purchase less than 5 equipments and 16.7% of contractors are willing to purchase within 6 to 10 equipments.
- In case of excavators, 80% of the contractors are willing to purchase less than 5 equipments and 20% of contractors are willing to purchase within 6 to 10 equipments.
- In case of cranes, 100% of the contractors are willing to purchase less than 5 equipments.
- In case of road equipments, 57.1% of the contractors are willing to purchase less than 5 equipments and 42.9% of contractors are willing to purchase within 6 to 10 equipments.
- In case of construction machinery, 83.3% of the contractors are willing to purchase less than 5 equipments, and the remaining 16.7% are willing to purchase above 10 equipments.

4.4.2 Preference for Re-investing

**Table 43– Distribution of contractors on the basis of preference of re-investing
(contractor wise)**

Equipments	Road Contractors		Earth Contractors		Construction Contractors	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
Tipper	1.57	1	2.00	2	1.80	1
Backhoe Loader	2.33	3	2.13	3	2.00	2
Excavators	1.90	2	1.94	1	2.00	2
Cranes	3.36	7	2.78	4	3.06	6
Road Equipments	2.93	4	3.29	7	2.65	4
Construction Machinery	2.95	5	2.94	5	2.93	5
Others	3.00	6	3.00	6	2.50	3

- From the above table it is inferred that, Road contractors give topmost priority to re-invest in tippers followed by Excavators, Backhoe Loaders, and Road Equipments.
- In case of Earth contractors they prefer to re-invest in Excavators followed by tippers, Backhoe Loaders and Cranes.
- Likewise Construction contractors prefer to re-invest in tippers followed by Excavators and Backhoe Loaders.

**Table 44– Distribution of contractors on the basis of preference for re-investing
(category wise)**

Equipments	Category A		Category B		Category C		Captive		Hiring	
	Mean Score	Rank								
Tipper	1.52	1	1.86	2	1.67	1	2.50	3	2.25	3
Backhoe Loader	2.08	4	1.75	1	3.00	5	1.25	1	2.00	2
Excavators	1.84	2	2.17	3	2.00	2	3.00	4	1.50	1
Cranes	3.00	7	3.25	6	2.50	3	2.00	2	3.33	5
Road Equipments	2.79	6	2.83	4	2.50	3	3.50	5	2.40	4
Construction Machinery	2.65	5	2.83	4	2.60	4	2.50	3	3.33	5
Others	2.00	3	3.00	5	-	-	-	-	-	-

- It is clear from above that, Category A give topmost priority to re-invest in tippers followed by Excavators and in other equipments.
- Category B gives topmost priority to re-invest in backhoe loaders followed by tippers and excavators.
- Category C prefers to re-invest in tippers followed by excavators and equal importance is given for re-investing in cranes and road equipments.
- Captives prefer to give topmost priority to re-invest in backhoe loaders followed by cranes and equal importance is given for re-investing in tippers and construction machinery.
- Hiring contractors prefer to re-invest in Excavators then in backhoe loaders and tippers.

4.4.3 Reasons for Re-investing

**Table 45– Distribution of contractors on the basis of reasons for re-investing
(contractor wise)**

Reasons	Road Contractors		Earth Contractors		Construction Contractors	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
Demand	2.22	2	2.14	2	2.14	2
More Income	1.76	1	1.94	1	2.11	1
Expansion	2.27	4	1.94	1	2.45	4
Low maintenance cost	3.00	5	3.20	4	3.00	5
Availability of finance	3.25	6	3.22	5	3.15	6
Project requirement	2.23	3	2.83	3	2.18	3
Others	-	-	4.00	6	3.50	7

- It is clear from the statistics that, road contractors prefer to give topmost priority for more income as the earning potential is high in the road contracts.
- In case of earth contractors, they seem to give topmost priority for more income as well as for expansion; because they feel that there is wide scope for generating income as well as to expand their business.
- Likewise construction contractors too feel that there is chance to earn more income so they have given topmost priority to it.

Table 46– Distribution of contractors on the basis of reasons for re-investing (category wise)

Reasons	Category A		Category B		Category C		Captive		Hiring	
	Mean Score	Rank								
Demand	2.16	3	2.11	3	2.00	1	1.50	1	2.21	3
More Income	2.12	2	1.71	1	2.00	1	2.00	2	2.00	1
Expansion	2.55	5	2.83	4	2.33	3	2.00	2	2.07	2
Low maintenance cost	2.38	4	3.33	5	3.00	4	3.00	4	3.00	5
Availability of finance	3.00	6	3.33	5	3.50	5	3.00	4	3.00	5
Project requirement	1.89	1	2.00	2	2.25	2	2.75	3	2.36	4
Others	3.00	6	-	-	-	-	-	-	4.00	6

- From the above table it is inferred that, Category A contractors state ‘Project requirement’ as the main reason for re-investing followed by ‘More income. Demand and Low maintenance cost’.
- In case of Category B, ‘More income’ is the main reason for re-investing followed by ‘Project requirement, Demand and Expansion’.
- Category C contractor’s main reason for re-investing is both ‘Demand and More income’ followed by ‘Project requirement and Expansion’.
- Captives state the main reason as Demand followed by More income and Expansion etc
- And Hiring contractors give topmost priority to more income followed by Expansion and Demand as the main reason for re-investing.

4.5 SATISFACTION LEVEL

The following tables and respective interpretations describes about the satisfaction level of contractors regarding the dealings with financial institution considered for the study.

4.5.1 Satisfaction level with Financial Institution

**Table 47– Distribution of contractors on the basis of satisfaction level with the financial institution
Category A**

FACTORS	ICICI		HDFC		Centurian Bank		Sundaram Finance		IndusInd		Tata Motor Finance		Sakthi Finance Limited		Others	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
EMI	2.00	1	1.83	1	2.00	1	1.50	1	1.00	1	2.25	3	2.50	2	2.00	1
Customer Service	2.00	1	2.00	2	2.14	2	3.00	4	1.67	3	1.75	1	2.00	1	2.33	2
Interest Rate	2.80	4	2.17	3	3.00	5	3.50	5	1.33	2	2.50	4	3.00	3	2.33	2
Security	2.40	2	2.33	4	2.14	2	3.50	5	2.00	4	2.50	4	2.00	1	2.33	2
Re-payment time	2.60	3	2.17	3	2.00	1	3.50	5	1.67	3	2.25	3	2.00	1	2.33	2
Sanctioning time	2.80	4	2.33	4	2.14	2	3.50	5	3.00	7	2.00	2	2.00	1	2.67	3
Procedures	3.00	5	2.50	5	2.86	4	2.50	3	2.67	6	2.50	4	2.50	2	2.67	3
Updating Customers	3.00	5	2.50	5	2.14	2	1.50	1	2.33	5	2.00	2	2.50	2	2.67	3
Discount schemes	3.20	6	2.50	5	3.00	5	3.00	4	3.00	7	2.67	5	3.50	4	2.67	3
Other formalities	3.00	5	2.17	3	2.29	3	2.00	2	2.67	6	2.67	5	3.50	4	2.67	3

The above table shows the satisfaction level of Category A contractors with the following financial institutions.

- In case of ICICI bank, category A contractors give equal priority for EMI facility as well as to customer service followed by re-payment time, sanctioning time and interest rate.
- In case of HDFC bank, topmost preference is given to EMI facility followed by customer service, interest rate and re-payment time.
- For Centurian bank, equal preference is given to EMI facility and re-payment time followed by customer service, security, sanctioning time and updating customers.
- For Sundaram finance, equal preference is given to EMI facility and updating customers followed by other formalities and procedures.
- In case of IndusInd, topmost preference is given to EMI facility followed by interest rate, customer service and re-payment time.
- In case of Tata Motor Finance, topmost preference is given to customer service followed by sanctioning time and updating customers.
- In case of Sakthi finance limited, equal preference is given to customer service, security, re-payment time and sanctioning time followed by EMI facility, procedures and updating customers.
- And in case of other financial institutions like SBI, Kotak finance etc... topmost preference is given to EMI facility followed by customer service, security, interest rate and re-payment time.

Table 48– Distribution of contractors on the basis of satisfaction level with the financial institution

Category B

FACTORS	Centurian Bank		Sundaram Finance		IndusInd		Tata Motor Finance		Sakthi Finance Limited	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
EMI	1.50	1	2.50	2	1.00	1	3.00	2	2.00	1
Customer Service	2.00	2	2.00	1	2.00	2	2.00	1	2.00	1
Interest Rate	2.50	3	2.00	1	1.00	1	3.00	2	3.00	2
Security	2.50	3	2.50	2	2.00	2	3.00	2	3.00	2
Re-payment time	2.50	3	2.00	1	2.00	2	3.00	2	3.00	2
Sanctioning time	2.50	3	3.00	3	3.00	3	2.00	1	3.00	2
Procedures	2.50	3	3.50	4	3.00	3	3.00	2	3.00	2
Updating Customers	2.00	2	2.00	1	3.00	3	3.00	2	3.00	2
Discount schemes	2.00	2	3.00	3	3.00	3	3.00	2	3.00	2
Other formalities	2.00	2	3.00	3	3.00	3	3.00	2	3.00	2

The above table shows the satisfaction level of Category B contractors with the following financial institutions.

- In case of Centurian bank, topmost priority is given to EMI facility followed by customer service, updating customers, discount schemes and other formalities.
- In case of Sundaram finance, equal preference is given to customer service, interest rate, re-payment time and updating customers followed by EMI facility and security.
- For IndusInd, equal preference is given to EMI facility and interest rate followed by customer service, security and re-payment time.
- For Tata Motor Finance, equal preference is given to customer service and sanctioning time followed by EMI facility, interest rate, security and so on.
- And in case of Sakthi finance limited, equal preference is given to EMI facility and customer service followed by interest rate, security, re-payment time and so on.

Table 49– Distribution of contractors on the basis of satisfaction level with the financial institution

Category C

FACTORS	ICICI		HDFC		Sundaram Finance		IndusInd		Others	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
EMI	2.00	1	4.00	3	2.00	2	1.00	1	2.00	1
Customer Service	2.00	1	2.00	2	1.00	1	2.00	2	2.00	1
Interest Rate	2.00	1	4.00	3	2.00	2	1.00	1	3.00	2
Security	3.00	2	2.00	2	2.00	2	2.00	2	2.00	1
Re-payment time	3.00	2	2.00	2	2.00	2	2.00	2	2.00	1
Sanctioning time	3.00	2	1.00	1	2.00	2	3.00	3	2.00	1
Procedures	3.00	2	2.00	2	2.00	2	3.00	3	3.00	2
Updating Customers	3.00	2	1.00	1	2.00	2	3.00	3	2.00	1
Discount schemes	3.00	2	4.00	3	2.00	2	3.00	3	3.00	2
Other formalities	3.00	2	-	-	-	-	3.00	3	2.00	1

The above table shows the satisfaction level of Category C contractors with the following financial institutions.

- In case of ICICI bank, Category C contractors give equal priority EMI facility as well as to customer service and interest rate followed by security, re-payment time, sanctioning time and so on.
- In case of HDFC bank, equal preference is given to sanctioning time and updating customers followed by customer service, security, re-payment time and so on.
- For Sundaram finance, topmost preference is given to customer service followed by EMI facility, interest rate, security and so on.
- In case of IndusInd, equal preference is given to EMI facility and interest rate followed by customer service, security and re-payment time.
- And in case of other financial institutions like SBI, Kotak finance etc... equal preference is given to EMI facility, customer service, security and so on.

Table 50– Distribution of contractors on the basis of satisfaction level with the financial institution Captives

FACTORS	Centurian Bank		IndusInd		Tata Motor Finance	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
EMI facility	2.00	1	2.00	1	2.00	1
Customer Service	2.00	1	2.00	1	2.00	1
Interest Rate	2.50	2	3.50	4	3.00	2
Security	2.00	1	2.00	1	2.00	1
Re-payment time	2.00	1	2.00	1	2.00	1
Processing time	2.00	1	2.50	2	2.00	1
Procedures	2.50	2	3.00	3	2.00	1
Attracting Customers	2.00	1	3.50	4	2.00	1
Discount schemes	2.50	2	3.50	4	3.00	2
Other formalities	2.00	1	3.00	3	3.00	2

The above table shows the satisfaction level of Captives with the following financial institutions.

- For Centurian bank, equal preference is given to EMI facility, customer service, security, re-payment time etc.
- In case of IndusInd, equal preference is given to EMI facility, customer service, security, re-payment time etc.
- In case of Tata Motor Finance, almost all the factors like EMI facility, customer service, security, re-payment time etc are given topmost preference.

Table 51– Distribution of contractors on the basis of satisfaction level with the financial institution Hiring

FACTORS	ICICI		HDFC		Sundaram Finance		IndusInd		Tata Motor Finance		Sakthi Finance Limited		Others	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
EMI	3.25	4	2.50	2	2.29	3	1.00	1	2.50	2	2.00	1	2.00	1
Customer Service	2.00	1	2.50	2	2.00	1	2.00	2	2.00	1	2.00	1	3.00	2
Interest Rate	3.25	4	2.50	2	2.71	6	1.00	1	2.50	2	3.00	2	2.00	1
Security	2.25	2	2.50	2	2.43	4	2.00	2	2.50	2	3.00	2	3.00	2
Re-payment time	2.25	2	2.00	1	2.14	2	2.00	2	2.50	2	3.00	2	2.00	1
Sanctioning time	2.25	2	2.00	1	3.00	8	3.00	3	2.00	1	2.00	1	3.00	3
Procedures	2.50	3	2.00	1	2.57	5	3.00	3	2.50	2	3.00	2	3.00	3
Updating Customers	2.00	1	2.00	1	2.57	5	3.00	3	2.50	2	3.00	2	4.00	4
Discount schemes	3.50	5	2.00	1	2.71	6	3.00	3	2.50	2	3.00	2	3.00	3
Other formalities	2.50	3	2.50	2	2.75	7	3.00	3	2.50	2	3.00	2	3.00	3

The above table shows the satisfaction level of Hiring contractors with the following financial institutions.

- In case of ICICI bank, Hiring contractors give equal priority for customer service as well as to updating customers followed by security, re-payment time and sanctioning time.
- In case of HDFC bank, equal preference is given to re-payment time, sanctioning time, procedures etc followed by EMI facility, customer service, and interest rate etc.
- For Sundaram finance, topmost preference is given to customer service followed by EMI facility, re-payment time and security.
- In case of IndusInd, equal preference is given to EMI facility and interest rate followed by customer service, security and re-payment time.
- In case of Tata Motor Finance, equal preference is given to customer service and sanctioning time followed by EMI facility, interest rate and security etc.
- In case of Sakthi finance limited, equal preference is given to EMI facility, customer service and sanctioning time followed by interest rate, security and re-payment time etc.
- And in case of other financial institutions like SBI, Kotak finance etc... equal preference is given to EMI facility, interest rate and re-payment time followed by customer service and security.

**FINDINGS, RECOMMENDATIONS
& CONCLUSION**

CHAPTER 5

FINDINGS AND SUGGESTIONS

The chapter deals with the findings and recommendations of the study.

5.1 Results and discussions

The results of the study are given below:

5.1.1 Profile of the respondents and Business

- The age profile of the contractors reveals that most of the contractors i.e., (45.2% of the road contractors, 44% of earth contractors and 32.6% of construction contractors) belong to the age group of 31-40.
- Under the nature of business, most (45.9%) of the contractors are Sole proprietors.
- There are 43.2% of Category A contractors, 14.8% of Category B contractors, 6.8% of Category C contractors and Captives, 27% of Hiring contractors and 1.4% of other contractors.
- In Roadwork category 42% of the contractors undertake volume of road work between 6km to 10km. 38.7% of them complete the work ranging from 6 to 10 months. The expenses in road work for 42% of the contractors lie above 1.1 crore and the income for about 54.8% of contractors lies between 1.1 lakh to 50 lakhs.
- In Earthwork category 60% of the contractors undertake volume of work less than 10000m³. 54.2% of them complete the work ranging from 11 to 15 months. The expenses in earth work for 48% of the contractors lay less than 1 lakh and 48% of income lays less than 50000.
- In Construction work category, majority (86%) of the contractors undertake volume of work less than 50000 Sq.ft. 39.6% of them complete the work ranging from 6 to 10months. The expenses in construction work for 46.6% lie within 1.1crore to 50crore and 46.6% income lies between 1.1 lakh to 50 lakhs category.
- In case of net profit for road work category, 62.5% of contractors earn a net profit between 1.1lakh to 50 lakhs for the year 2006-2007.
- In case of net profit for earth work category, it can be seen that 75% of contractors earn a net profit between 1.1lakh to 50 lakhs for the year 2006-2007.

- In case of net profit for construction work category, 54.2% of contractors earn a net profit between 1.1lakh to 50 lakhs for the year 2006-2007.
- In case of net profit for Hirers, 50% of contractors earn a net profit less than 1 lakh for the year 2006-2007.
- In case of asset value, 37.5% of the contractor's asset value is less than 50 lakhs.
- 77.8% of the contractors do not give for sub-contracts as there is no requirement and 22.2% of contractors give for sub-contracting as there are some heavy works involved.
- 71.4% of road work contractors give above 6 contracts for sub-contracting. In case of earth work, 57% of the contractors give above 6 contracts for sub-contracting. And 70% of construction work contractors give below 5 contracts for sub-contracting.
- 42.9% of the road contractors give 26% to 50% of work for sub-contracting. In case of earth work, 28.6% of contractors give 26% to 50% for sub-contracting. And 42.9% of the construction contractors give 26% to 50% of work for sub-contracting.
- In case of reason for sub-contracting, contractors give topmost priority for labour followed by time, equipments and capital.

5.1.2 Loan detail

- 97.2% of the contractors have taken loan from the financial institution and only 2.8% of the contractors have availed loan for the first time.
- 54.2% of the contractors have availed loan only from one financial institution, 31.9% from two financial institutions, 11.1% from three financial institutions, and 2.8% from four financial institutions.
- 55.6% of the contractors came to know about the financial institution through friends.
- 44.4% of the contractors are associated with the financial institution between 6 to 10 years, 23.6% between 11 to 15 years, 20.8% between 1 to 5 years, 9.8% between 16 to 20 years and 1.4% above 25 years.
- 36.1% of the contractor's have availed loan from financial institution and 76.4% have pooled their own funds.
- ICICI bank has financed to 30% of contractors for backhoe loaders, HDFC bank has provided loan to 38.9% of contractors for excavators, Centurian bank has provided loan equally for 19.4% of contractors in case of tippers, excavators and cranes, Sundaram finance has provided loan to 29.8% of contractors for tippers, IndusInd bank has provided loan to 33.3% of contractors for tippers, Tata Motor Finance has provided loan equally to 25% of contractors for excavators and construction machinery, Sakthi Finance Ltd., has provided loan to 40% of contractors for backhoe loaders, and in case of other financial institutions like SBI, Kotak etc...has provided loan to 33.3% of contractors for road laying machines.
- In case of loan availed by contractors for different equipments, 71.1% of contractors have availed loan less than 25 lakhs for tippers, 91.4% of contractors for backhoe loaders less than 25 lakhs, 80.5% of contractors for excavators less than 25 lakhs, 86.9% of contractors for cranes less than 25 lakhs, 95% of contractors for road equipments less than 25 lakhs, and 66.7% of contractors for construction machinery less than 25 lakhs.

- In case of loan re-paid by the contractors, 100% have re-paid their loan lying less than 25 lakhs in case of tippers, 97.1% have re-paid less than 25 lakhs in case of backhoe loaders, 87.8% of the contractors have re-paid less than 25 lakhs for excavators, 95.7% have re-paid less than 25 lakhs for cranes, 95% have re-paid less than 25 lakhs in case of road equipments, and 83.4% have re-paid less than 25 lakhs in case of construction machinery.
- In case of EMI paid by the contractors, 71.7% pay their installments less than 25000 for tippers, 48.6% of the contractors equally pay their monthly installments less than 25000, as well as within 26000 to 50000 for backhoe loaders, 85.4% pay within 26000 to 50000 for excavators, 78.3% pay their installments less than 25000 for cranes, 80% pay less than 25000 in case of road equipments, and 33.3% pay less than 25000 in case of construction machinery.

5.1.3 Perception about success factor of Contractors

- In case of contractor's priority for their survival and profitability (category wise). Category A and B contractors give topmost priority for Economic conditions; Category C contractors give topmost priority for Performance of the equipment; Captives give topmost priority for Workload; and Hiring contractors give topmost priority for Ability.
- In case of contractor wise priority for their survival and profitability, Road contractors unanimously feel that their success largely depends on the favourable economic conditions prevailing right now. Whereas in case of earth and construction contractors, success seem to rely more on their ability.
- In case of perception regarding the profitable mode of ownership, 77.4% of road contractors, 84% of earth contractors and 83% of construction contractors prefer purchasing as the profitable mode of ownership; Hiring is preferred by 9.7% of road contractors, 4% of earth contractors and 4.7% of construction contractors. Both purchasing and hiring is preferred by 12.9% of road contractors, 12% of earth contractors and 11.6% of construction contractors.

5.1.4 Perception regarding Re-investment

- In case of idea of purchasing equipment, 31.9% of Category A contractors, 9.7% of Category B contractors and 20.8% of Hiring contractors prefer to purchase tipper. And in case of Captives, 4.2% of the contractors equally have the idea of purchasing backhoe loader as well as construction machinery.

Plan of purchasing equipment- Category wise:

- On the basis of purchasing number of equipments in case of tipper, backhoe loaders, excavators, cranes, road equipments and construction equipments by Category A, Category B, Category C, Captives and Hiring contractors, most of them are willing to purchase less than 5 equipments and some of the contractors have the requirement of purchasing above 6 equipments.
- In case of preference for re-investing, road and construction contractors give topmost priority to re-invest in tippers, whereas earth contractors prefer to re-invest in Excavators.
- On the basis of preference for re-investing (category wise), Category A and Category C contractors give topmost priority to re-invest in tippers, likewise Category B and Captives give topmost priority to re-invest in backhoe loaders and in case of Hiring contractors they prefer to re-invest in excavators.
- On the basis of reasons for re-investing, road and construction contractors give topmost priority for more income, whereas earth contractors seem to give topmost priority for more income as well as for expansion.
- On the basis of reasons for re-investing (category wise), Category A contractors state the main reason as project requirement, whereas Category B and Hiring contractors give topmost priority to more income, likewise in case of Category C contractors, their main reason for re-investing is both 'Demand and More income', and in case of Captives, their main reason is Demand.

5.1.5 Satisfaction Level with the financial institution- Category wise:

Looking at the different factors offered by the financial institution, there are only minor changes found in the opinion of the contractors.

- On the basis of satisfaction level with the financial institution, contractors are very much satisfied with customer service followed by re-payment time in case of ICICI bank and Tata motor finance. Likewise in case of HDFC bank, contractors are very much satisfied with customer service followed by security, re-payment time and sanctioning time. In case of Centurian bank and other banks like SBI, Kotak finance etc... contractors are very much satisfied with the EMI facility offered followed by customer service. In case of Sundaram finance and Sakthi finance limited, contractors are very much satisfied with customer service followed by EMI facility. And in case of IndusInd, contractors are very much satisfied with the EMI facility offered followed by interest rate offered.

5.2 Recommendations

Some of the recommendations given to the financiers are as follows:

- It is envisaged that in future the boom in the infrastructure industry is expected to continue. Hence the loan seekers for construction equipments like Crushers, Compressors, and Cranes etc...will be more. The financial institutions may concentrate on this area.
- As 31.9% of the contractors are associated with two financial institutions and some of the contractors even above two, its hightime that the financiers make proper referral marketing to withhold the existing customers as well as to attract new customers to expand their market share.
- Every financial institution can carve their own niche by funding for specific equipments. This enables the financiers to protect themselves from competition and also to approach the customers easily.
- Considering the perception of success factors of different category of contractors. they feel that their success factor mainly depends on the economic conditions. performance of the equipment, workload and their ability to get contracts. So in that case, financiers are asked to consider all such factors before financing for any equipment.
- As most of the contractors prefer purchasing as the profitable mode of ownership. the market for construction industry is likely to expand. So the financiers can equip themselves to deploy more funds in the construction equipment industry.
- Looking at the preference and reason for re-investing, almost all the contractors are willing to re-invest greater part of their funds in tippers and excavators as a reason of more income, expansion and demand for projects in future. So the financiers are suggested to consider the contractor's preference level and their reason behind re-investing in planning their scheme of operation.
- Considering the satisfaction level with the financial institutions, almost all the category of contractors are highly satisfied with the customer service, EMI facility, sanctioning time offered by the financial institution. Though the contractors are satisfied with the above mentioned factors, some of the contractors are even dissatisfied with the discount schemes offered. So it is suggested to provide some

attractive discounts to grab the attention of the contractors ahead of the competitors.

Conclusion :

The Infrastructure Projects in India is growing highly to a great extent because of Liberalization, Privatization and Globalization. This study gives a clear understanding about the profile, terms of loans availed, perception, re-investment and satisfaction level of the contractors. The study would enable the financiers to have some insight regarding the strategies to be adopted to expand their market.

ANNEXURE

8. If yes, give the number and percentage of sub-contracts?

Contracts	Number	Percentage
Road work contractors		
Earth work contractors		
Construction		
Hiring		
FTU/ FTB		

9. Rank the reasons for sub-contracting?

Reasons	Rank
Shortage of time	
Shortage of labour	
Shortage of Equipments	
Shortage of capital	
Others	

10. Is this the first time you are availing loan from financial institution?

Yes

No

11. Mention the name of the financial institution and also the number of years you have been associated with the institution?

12. How did you come to know about the financial institution?

Family

Friends

Hoardings

Agents

Media

Others

13. Sources of loan in %

Institution	%
Financial institution	
Own funds	
Others	

14. Mark your satisfaction level regarding your dealings with the financial institution:

Factors	Very much satisfied	Satisfied	Neutral	Dissatisfied	Very much dissatisfied
EMI					
Customer service					
Interest rates					
Securities					
Repayment time					
Sanctioning time					
Procedures					
Updating customers					
Discount schemes					
Other formalities					

15. Rank the key factors behind the survival and profitability of your business? (Top 5)

Factors	Rank	Factors	Rank
Ability to get contracts		General economic conditions	
Rent of the equipment/EMI		Networking	
Managerial ability		Financial stability	
Performance of the equipment		Continuous work load	
Less maintenance cost		Availability of operators	
Less operational cost		Others	
Service Availability			

16. From whom you got loan for purchase of equipments?

	JCB's	Excavators	Tippers	Road laying machines	Crushers	Cranes	Compressors
ICICI							
HDFC							
Centurian bank							
undaram finance							
IndusInd							
ata motor finance							
kthi Finance Ltd.,							

17. Which of the following mode of ownership is more profitable?

Purchasing Hiring Both

18. Furnish the required detail

	Tippers & Dumpers	Backhoe loaders	Excavators	Cranes	Road Equipments	Construction machinery	Others
financed by							
Status (in Rs./mach							
Loan							
ailed							
Loan paid							
EMI							

19. Do you have any idea of purchasing new equipments in future?

Equipments	Yes	If yes, Number	No
Tipplers & Dumpers			
Backhoe Loaders			
Excavators			
Cranes			
Road Equipments			
Construction machinery			
Others			

20. When it comes to reinvesting which equipment do you prefer? Please rank. (Top 3)

	Tipplers & Dumpers	Backhoe loaders	Excavators	Cranes	Road Equipments	Construction machinery	Others
Rank							

21. Rank the reasons for re-investing? (Top 3)

Factors	Rank	Factors	Rank
Demand		Availability of finance	
More income		Project requirement	
Expansion		Others	
Low maintenance cost			

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