



GOVERNMENT OF KERALA
KERALA STATE PLANNING BOARD

**THIRTEENTH FIVE-YEAR PLAN
(2017-2022)**

**WORKING GROUP ON
PUBLIC SECTOR UNDER TAKINGS
REPORT**

INDUSTRY AND INFRASTRUCTURE DIVISION

KERALA STATE PLANNING BOARD
THIRUVANANTHAPURAM

MARCH 2017

PREFACE

In Kerala, the process of a Five-Year Plan is an exercise in people's participation. At the end of September 2016, the Kerala State Planning Board began an effort to conduct the widest possible consultations before formulating the Plan. The Planning Board formed 43 Working Groups, with a total of more than 700 members – scholars, administrators, social and political activists and other experts. Although the Reports do not represent the official position of the Government of Kerala, their content will help in the formulation of the Thirteenth Five-Year Plan document.

This document is the report of the Working Group on Public Sector Enterprises. The Chairpersons of the Working Group were Sri. Paul Antony IAS, Additional Chief Secretary, Industries Department and Dr. M.P. Sukumaran Nair, Chairman, RIAB. The Member of the Planning Board who coordinated the activities of the Working Group was Dr. Jayan Jose Thomas. The concerned Chief of Division was Sri. Joy N.R.

Member Secretary

FOREWORD

Industrial development is crucial for the growth of any nation. It is also linked to the modernization of agriculture, development of science and technology, entrepreneurship, self-reliance in defense production, success in international trade, efficient utilization of natural resources, alleviation of poverty and unemployment and increase in per capita income and standard of living of the people. Expansion of industry and Services is essential for economic development and growth, as these are major enablers of productivity increases. Kerala has succeeded in creating the right environment for the flow of private capital, into industrial sector.

As part of formulation of 13th Five Year Plan, State Planning Board constituted 43 Working Groups under different development sectors with experts/ academicians/administrators from different fields. Accordingly a Working Group on Public Sector Enterprises was constituted with Shri. Paul Antony IAS, ACS to Government, Industries Department and Dr. Sukumaran Nair, Chairman, RIAB as Co-Chairpersons for evolving suitable approaches for Public Sector Enterprises during 13th Five Year Plan.

The committee met twice and conducted a review of Twelfth Plan Programme and made detailed deliberations on issues, present situation, strategies and prospects of Public Sector Enterprises of Kerala and delivered thoughts for a scientific, concrete and realistic plan to be pursued in 13th plan period.

We are very grateful to all members of the Committee for their participation and valuable contributions and suggestions/recommendations in the Working Group. I am very grateful for the invaluable contribution rendered by Dr. Jayan Jose Thomas, Member, State Planning Board in drafting and formulating the report. Special reference is mentioned for the valuable services received from Er. Joy N.R, Chief (I&I Division) (Convenor), Smt Prasanna Kumari. N, Deputy Director (Co-Convenor), Smt. Deepa Chandran, Assistant director and Smt. Dhanya Chandrasekhar, Research Assistant, Industry & Infrastructure Division and officers of State Planning Board for conducting meetings and co-ordinating the materials from the different members for the preparation of the report.

Co- Chairperson(1)
Shri. Paul Antony IAS, ACS to Government,
Industries Department

Co- Chairperson(2)
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ABBREVIATION

AB Cable	- Ariel Bunched Cable
ABC HT	-Ariel Bunched Cable High Tension
ACSR	- Aluminum Conductor Steel Reinforced
BHEL	- Bharat Heavy Electricals Limited
BSES	- Bombay Suburban Electricity Supply
CCI	- Cement Corporation of India Limited
CGMP	-Current Good Manufacturing Practice
CMD	-Centre for Management in Development
CRZ	- Coastal Regulation Zone
CSR	-Corporate Social Responsibility
DCS	- Distribution Control System
GDP	- Gross Domestic Product
GMP	- Good Manufacturing Practice
GSDP	- Gross State Domestic Product
HLWG	- High Level Working Group
IT	- Information Technology
IV Fluid	-Intravenous Fluid
JV	- Joint Venture
KCCP Ltd.	-Kerala Clays and Ceramics Products Limited
KEL	- Kerala Electrical and Allied Engineering Company Limited
KFC	- Kerala Financial Corporation
KMSCL	-Kerala Medical Services Corporation
KSEB	- Kerala State Electricity Board
KSIDC	-Kerala State Industrial Development Corporation
KSIE	- Kerala State Industrial Enterprises
KvA	-Kilovolt Ampere
LED	-Light Emitting Diode
LNG	- Liquefied Natural Gas
LT	- Low Tension
MCL	- Malabar Cements Limited
MCL	- Malabar Cements Limited
MNCs	- Multi National Companies
MNRE	- Ministry of New and Renewable Energy
MoEF	-Ministry of Environment and Forest
MT	-Metric tone
MVA	-Mega Volt Ampere
NABL	-National Accreditation Board for testing and Calibrations Laboratories
NSDP	-Net State Domestic Product
NTPC	- National Thermal Power Corporation
ORS	-Oral Rehydration Solution
PF	- Provident Fund
PSEs	-Public Sector Enterprises
PSUs	- Public Sector Undertakings

R&D	- Research and Development
SSI	- Small Scale Industries
TPD	-Tons Per Day
XLPE Cables	- Cross Linked Poly Ethylene Cable

CHAPTER 1
*AN OVERVIEW OF INDUSTRIAL SECTOR IN KERALA WITH A SPECIAL FOCUS ON PUBLIC
SECTOR ENTERPRISES*

1. It is well known that Kerala has made spectacular achievements in land reforms, education, and health over the years after the formation of the State in 1957. With respect to economic growth, Kerala has surged ahead from being a laggard to a frontrunner among Indian States by the early 2000s. Given such a context, it is indeed a paradox that Kerala's industrial sector is relatively backward. This report aims to examine the current status, challenges and opportunities in regard to State public sector units (PSUs) in Kerala engaged in modern manufacturing.
2. A striking feature of Kerala's economy is the relatively low size of its manufacturing sector. The share of manufacturing in gross state domestic product (GSDP) of Kerala was only 7.5 per cent in 2011-12. This was considerably less than the contributions made by manufacturing sectors to gross domestic products (GDP) in India as a whole (15.8 per cent in 2011-12) and in China (31 per cent in 2012).
3. In fact, the goods-producing sectors (that is, agriculture and industry) have strikingly low shares in the overall incomes generated in Kerala. In 2011-12, agriculture and allied activities had a share of only 9.5 per cent in Kerala's GSDP while they accounted for 13.9 per cent in India's GDP. In contrast, construction and the services sectors contribute relatively large shares to Kerala's NSDP. In 2011-12, construction and the services sectors, together, accounted for a share of 81.4 per cent in Kerala's NSDP and 66.6 per cent in India's GDP (See Table 1).
4. Although manufacturing contributed only 7.5 per cent to Kerala's GSDP, this sector employed approximately 14.0 per cent of the State's total workforce in 2011-12 (see Table 2). In comparison, the manufacturing sector's shares in GDP and employment were 15.8 per cent and 13.0 per cent respectively at the national level. This points to some degree of lopsidedness in the structure of Kerala's manufacturing sector.
5. In 2011-12, out of a total manufacturing workforce of 18 lakhs in Kerala, only 3.9 lakh workers were employed in the factory sector. The factory sector, or broadly the registered manufacturing sector, refers to factories that employ more than 10 workers and operate with the aid of electric power as well as factories that employ more than 20 workers without the aid of electric power. The rest of the manufacturing workers in Kerala were engaged in the unorganized or unregistered sector. Coir and cashew processing, two major traditional industries, employed 3.8 lakh and 2.5 lakh workers respectively in Kerala.¹ Workers engaged in cashew processing accounts for a large share of employment even within the factory sector in Kerala. Most of the workers in coir and cashew processing in Kerala are women.

¹ *Source: Government of Kerala's Economic Review 2015*

6. The size of the registered manufacturing sector (which is roughly equivalent to the factory sector) is notably low in Kerala. This sector contributed only 3.5 per cent to Kerala's NSDP in 2011-12, much less than its share in India's GDP (11.2 per cent) in the same year. It is also striking that the size of registered manufacturing is lower than that of unregistered manufacturing in Kerala (See Table 1).
7. The share of registered manufacturing in Kerala's NSDP has declined from around 6 per cent in the late 1990s to 3.5 per cent in 2011-12. During the same period, the share of Kerala's registered manufacturing sector in total value added by India's registered manufacturing declined from 2 per cent to 1.3 per cent.

Table 1 Shares (in per cent) of various sectors in Kerala's gross state domestic product (GSDP) and India's gross domestic product (GDP) (both at constant 2004-05 prices), 2011-12

Sl. No	Sectors	Share in Kerala's GSDP	Share in India's GDP
1	Agriculture & allied activities	9.5	13.9
2	Mining and quarrying	0.4	2
3	Manufacturing	7.5	15.8
3a	Registered Manufacturing	3.5	11.2
3b	Unregistered manufacturing	4.1	4.5
4	Electricity, gas and water supply	1.2	1.88
Sum of sectors 2, 3 and 4	Industry	9.2	19.6
5	Construction	12.2	7.8
6	Services	69.2	58.8
	GDP/GSDP	100	100

Source National Accounts Statistics

Table 2 Kerala's Workforce, by Sectors, 2011-12

Sector	Number of workers, in million, Kerala	Share (per cent) in total workforce, Kerala	Share (per cent) in total workforce, India
Agriculture and allied activities	2.6	20.5	47.5
Manufacturing	1.8	14.2	13.0
Construction	2.1	16.5	10.6
Services	6.1	48.0	27.9
Non-agricultural activities, total	10.1	79.5	52.5
Total Workforce	12.7	100	100

Source National Sample Survey report on Employment and Unemployment in India, 68th Round, 2011-12

The Emergence of a Modern Industrial Sector in Kerala: A Review

8. The major event in Kerala's modern industrial history occurred in 1944, when Fertilizers and Chemicals Travancore Limited (FACT) established facilities for the production of ammonium sulphate in Alwaye. FACT became the first major fertilizer-manufacturing unit in India. Several new industrial units were established in Kerala during the 1940s, most of them producing chemicals and related products. These units include Travancore Electrochemical Industries Limited (TECIL), manufacturing calcium carbide; Travancore Titanium Products (ITP), manufacturing titanium dioxide; and Travancore Cochin Chemicals (TCC), manufacturing caustic soda.
9. The next major phase of investments in industry in Kerala occurred in the 1960s. FACT and many other industrial units that were begun in the private sector in the 1940s were taken over by the Central and State Governments in the 1950s. The Central Government also set up a few new industrial units, including Hindustan Insecticides Limited (HIL), Indian Rare Earths Limited (IRL), and Kochi Refineries Limited (KRL). These industrial units, like the industrial units established in the 1940s, were largely chemicals-producing units and were located in the Alwaye-Kochi region.
10. In the early 1960s, a large area in Edayar near Alwaye was earmarked for industrial expansion. With encouragement from State Governments, several chemicals-producing private sector industrial units were established here. In the 1970s, the Government of Kerala invested in new factories manufacturing drugs and pharmaceuticals, detergents, and several other chemical-based industrial products. There were no major fresh investments in the chemical industry by the public sector during the 1980s and 1990s.
11. Kerala does not have natural reserves of the minerals required for the production of basic metals and alloys like iron, steel or aluminium. However, the first aluminium smelter in India was located in Alwaye in Kerala in 1943 by the Indian Aluminium Company (IAL). Later, in 1962, a zinc metal manufacturing unit was started in Edayar near Alwaye. Kerala also has two major cement factories -- Travancore Cements Limited (TCL), established in 1946, and Malabar Cements Limited, established in 1978. Both these factories are, at present, owned by the Government of Kerala.
12. The machinery or capital goods manufacturing industry, which generally has an important role in technology diffusion, does not have a large presence in Kerala.
13. Direct investment by the Central Government in the machinery industry in Kerala is limited to a production unit of Hindustan Machine Tools in Alwaye in 1958, and to two other manufacturing units, one for the manufacture of electronic equipment and another for instrumentation, in Palakkadu in the mid-1970s. Direct investment by the State Government in the machinery industry included a unit to produce heavy electrical machinery, established in 1964, and a development corporation (Keltron) to encourage electronics industry, established in 1973.

CHAPTER 2
MAJOR STATE PSUs ENGAGED IN MANUFACTURING IN KERALA

14. Given below is a short profile of major State PSUs engaged in manufacturing in Kerala, prepared by Public Sector Restructuring and Internal Audit Board (RIAB).

The Kerala Minerals and Metals Ltd

1. Year Incorporated : 1972
2. Products : Titanium Dioxide Pigment, Magnesium Chloride, Nano Titanium Dioxide Pigment , Titanium Tetra Chloride, Illmenite, Monazite, Sillimenite, Zircon, Leucoxene, Titanium Sponge
3. Uses : Paints, Printing Inks, Plastic, Paper, Rubber, Textiles, Rare earth industry, Ceramic industry
4. Installed capacity : 40000 MT (Titanium dioxide)
5. Capacity utilization : 84%
6. Employees : 1304

15. In all tables 2015-16 figures are provisional and 2016-17 figures relate to April-October period, Turnover is without Tax & Excise Duty and. Net Profit is before Tax and extraordinary expenses (*CSR, arrears, write-off of loans*).

Working Results for Last 5 Years (` Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	573.02	547.63	652.19	538.01	516.57	392.62
Net Profit	154.08	73.12	26.41	-24.78	21.15	20.71

Current Status

16. Loss during 2014-15 due to
1. Major break down in distillation column
 2. Gas leakage and consequent environmental issues.
17. Beach sand ready availability is only for two yearRs. Steps for taking possession of block of land allotted for mining not yet started.
18. Capital expansion projects of Rs.82 Cr is proposed during the year
19. By-product Iron Oxide is classified as a hazardous waste under Hazardous Waste Management Rules. Hence difficult to dispose.

Suggested Course of Action

1. Proposed Projects for optimization of existing operations
 1. Replacement of old 50 TPD oxygen plant with new 70 TPD plant. Investment Rs 35 Cr.
 2. Tickle pre-heaters- Rs 10 Cr
 3. LNG Conversion- Rs 6.15 Cr
 4. DCS - Rs 12 Cr
 5. New Fire hydrant system-Rs 6 Cr
2. Long term availability of Beach sand to be ensured
3. Company may go for capacity enhancement of pigment production from 40000 TPA to 60000 TPA.
4. MOEF clearance for Mineral Separation plant to be obtained
5. A package for implementation of mining in land allotted is to be initiated.
6. Necessary steps to be taken to de-categorise iron oxide from the list of hazardous substance under Hazardous Waste Management Rules.
7. Company has initiated steps for imposing anti-dumping duty

Kerala State Drugs & Pharmaceuticals Ltd

1. Year Incorporated : 1971
2. Products : Medicines, Tablets, Capsules, Liquids, Powders, Dry Powders
3. Uses : Health Department, Hospital, Open market
4. Installed Capacity : Tablets- 100 crore nos
Capsules- 45 crore nos
Liquid- 20 lakh bottles
Powder ORS- 72 lakh nos
Dry Syrup- 24 lakh nos
5. Employees :126

Working Results for last 5 years (Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	33.25	13.43	20.00	22.54	26.75	16.75
Net Profit	2.52	-1.89	-10.05	-7.14	-3.34	-2.24

Current Status

1. Losses since 2012-13 as sufficient orders for supply of medicines not received from KMSCL.
2. Has cGMP license only for beta-lactum medicines.
3. Rs.250 lakhs sanctioned for non-betalactum project lying idle in treasury account.
4. Debtors: Rs.445 lakhs; due mainly from Health Department and KMSCL for more than 1-2 years
5. Govt. loan: Rs.140.54 Cr (principal + interest)
6. Huge accumulated loss of Rs.11360.78 lakhs which is more than 10 times the paid up capital

Suggested Course of Action

1. Direct KMSCL to procure the products of KSDP at mutually agreed rates.
2. Conversion of Government loan to equity.
3. Government approval for manufacture of IV fluids
4. Direction to all Govt. Departments/ institutions to make use of the testing facility of KSDP.
5. Sanction for use of idle funds in treasury for purchase of equipment for NABL
6. Sanction for improving ORS manufacturing facility to obtain GMP certification.
7. Improving facilities of Liquid section to meet cGMP standards
8. Disposal of equipment of defunct Vitamin A plant and old injection unit.
9. Diversification to food supplements, hospital disposables

Malabar Cements Ltd

1. Year Incorporated : 1978
2. Products : Grey Cement
3. Uses : Construction
4. Installed capacity : Walayar- 660000 MT (PPC)
Cherthala- 200000 MT
5. Capacity utilization : 85%
6. Employees : 809 regular + 250 on society contract

Working Result for last 5 years (Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	231.59	222.08	203.11	261.77	338.79	162.39
Net Profit	50.80	45.25	9.88	19.87	39.36	14.03

Current Status

1. MCL meets 10% of Kerala demand for cement
Unit operating profitably for more than 12 years
2. Cherthala grinding unit operating at 50%
3. Rs.160 Crores Bulk Cement Unit in Cochin Port Trust (CPT) is being implemented by which market share will be increased to 24%.
4. Scope for expansion is high. Land belonging to Instrumentation Ltd if taken over by Govt. of Kerala can be used for MCL expansion

Future Course of Action

1. Packaging Plant Modernization Rs.6 Cr
2. Wagon tippler and Conveyor System: 20- Cr
3. Operate Cherthala cement grinding unit in 2 shifts

4. Capacity expansion of cement mills from CCI in Palakkad (Walayar & the premises of Instrumentation Ltd), Southern and Northern Districts using unused land of Public Sector Units which owe around Rs.27 crores to MCL
5. Overcome Risk factors
 1. Limestone Resources get depleted
 2. Restrictions imposed by the HLWG report (Mr Kasthurirangan) on mining in the Western Ghats area
 3. Laterite shortage due to stoppage of mining by KCCP Ltd
6. Explore bringing Fly ash to Walayar and CPT by rail
7. Consider inland water transport for moving cargo and raw material to and from Cherthala unit
8. Settlement of Contract labour related matters and promotion policy for workers and officers
9. Filling up of vacancies through internal promotions and through ongoing recruitment process for Khalasis and Mazdoors
10. Strengthening required at senior managerial level in Finance & Production by
11. recruitment

Travancore Cochin Chemicals Ltd

1. Year Incorporated : 1951
2. Products : Caustic Soda, Chlorine, Sodium Hypochlorite
3. Uses : Chemical industry, paper, pulp, mineral processing, aluminum, water treatment
4. Installed capacity : 175 TPD
5. Capacity utilization : 95-98%
6. Power cost is 56% in cost of production
7. Employees : 566

Working results for last 5 years (Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	153.74	163.27	163.75	156.56	165.69	111.27
Net Profit	0.98	1.73	-3.23	0.63	-5.87	1.41

Current Status

1. Losses since 2014 due to high power tariff; Monthly power bill Rs 6 Cr
2. Company is seeking Open Access purchase of power to save around Rs.2 Cr per month. Govt/ KSEB denied request demanding transfer of BSES leased land to KSEB
3. Power cost current dues to KSEB Rs.48Cr: arrears mounting. Old KSEB dues in dispute since 2004
4. KSIE lease rent in arrears since April 2015; Dues Rs.1.1 Cr
5. KFC loan used to swap KIRF loan; Dues to KFC Rs.30.8Cr

6. Govt. loan: Rs.9.72 Cr (principal + interest)
7. Modernisation Programme approved by Government with an investment of Rs.65 Crores is in progress.

Suggested Course of Action

1. Urgent Permission to Open Access Power purchase may be given
2. Allow TCC to settle current electricity dues in instalments without interest
3. Reconcile old dues to KSEB and pay it in installments
4. To make balance sheet bankable for project financing Government loan and interest may be converted as equity
5. Lease of land between KSEB and BSES is expiring in 2017
6. Strengthen marketing of products
7. Go ahead with the expansion/ modernisation project without delay

Travancore Titanium Products Ltd

1. Year Incorporated : 1946
2. Products : Titanium Dioxide (Anatase Gr)
3. Uses : Textiles, Ink, Cosmetics,
Rubber, Paper, Leather, Paints, Chemicals, Plastics, Electronic Industries
4. Installed capacity : 15000 MT
5. Capacity utilization : 66-70%
6. Employees : 718

Working results for last 5 years (Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	180.20	163.00	149.25	114.19	113.38	68.84
Net Profit	24.15	1.24	(0.34)	(2,4.25)	(4.47)	1.94

Current Status

1. Losses since 2013-14 due to fall in selling price of TiO₂ due to low demand and shortage of ilmenite
2. Severe working capital erosion due to huge loss of Rs.24.25 Cr in 2014-15.
3. Unable to produce above breakeven quantity due to working capital shortage
4. Excise duty pending Rs.3.28 Cr; PF dues: Rs.6.72 Cr
5. Govt. loan Rs.21 Cr outstanding
6. Request for converting 50 acres of land on lease as freehold is pending with Govt.
7. Neutralisation plant yet to be commissioned.
8. Accounts finalised only up to 2010-11.

Suggested Course of Action

1. Urgent Working Capital support of Rs.10 Cr
2. Urgent investments for capacity expansion- Rs.15 crores for Completion of Copperas Recovery plant and Rs.5 crores for equipment replacement for Acid Plant.
3. Lease hold of land may be converted as free hold.
4. To make balance sheet bankable for project financing Government loan and interest may be converted as equity.
5. Steps to be taken to clear the audit arrears within six months
6. Excess manpower in the administrative and other departments may be redeployed in plant.

Travancore Cements Ltd.

1. Year of incorporation :1947
2. Products : White cement, wall putty
3. Raw material : lime shell from Vembanad lake
4. Uses : Painting / construction
5. Installed Capacity :36000 MT/annum
6. Capacity Utilisation : 35-40 %
7. Employees : 372 nos

Working results for 5 years (`Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	23.91	23.14	27.98	29.15	27.52	13.77
Profit/Loss (PBT)	(8.72)	(3.43)	(6.18)	(10.91)	(5.69)	(4.95)

Current Situation

1. Incurring loss since 2001 due to raw-material shortage (lime-shell), increase in the price of furnace oil, tough competition from MNCs
2. As per CRZ notification in 2011 and RAMZAR protocol, extraction of lime-shell from Vembanad Lake has been prohibited.
3. Currently white cement is produced by importing white clinker
4. Shortage of working capital for import of white clinker
5. Engaged in desilting of reservoirs/ dam
6. Reluctance of financial institutions for funding due to accumulated loss & sub-optimal performance
7. Statutory Audit: only up to 2012-13

Suggested course of action

1. Explore the possibility to establish a grey cement grinding unit in association with other grey cement manufactures.
2. Considering the expertise of TCL, the company may be appointed as a nodal agency for de-siltation of reservoirs in the State, as part of diversification of activities.
3. Construction of dry dock and spillway for repair and maintenance of marine vessels in the premises of TCL
4. Financial restructuring to convert the Government loan to equity and fresh working capital support for Rs.10 Crores.
5. Strengthen marketing of products in & outside-Kerala.
6. Being a unit operating at low capacity, merger with MCL may be thought of.

Kerala Electrical & Allied Engineering Company Ltd

1. Year Incorporated : 1964
2. Product/ Unit/ Installed capacity/ Capacity Utilization
3. Manpower : 487

Products with Unit	Uses	Branches	Installed capacity per annum	Achievable capacity per annum	Capacity Utilisation (%)
Distribution transformer (kVA)	Power Transmission	Mamala	500000	420000	105.15
Steel structures (MT)	Bridges, dam shutters, civil structures	Mamala	1200	600	15.00
Alternator (KW)	Train lighting	Kundara	15900	14976	46.27
Electrical Accessories (Nos)	Power Distribution	Olavakode	446723	97500	6.10

Working Results for Last 5 years (`Crore)

2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
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Turnover	73.36	64.32	94.06	95.44	104.11	70.40
Profit/Loss (PBT)	-6.28	-6.49	-3.80	-16.56	-7.58	-6.70

Current Status

1. The Mamala unit doing well with its transformer production.
2. KSEB is giving more orders to private players than KEL
3. The structural division has proven designs and implements works related to bridges, dam shutters, civil structures etc on time . Still private parties are given more work orders from Government than KEL
4. Being disqualified by Departments/ KSEB stating untenable conditions like poor balance sheet and net worth
5. The Kundara unit incurs a cash loss of Rs.50 lakhs per month even at its full capacity
6. The Olavakkode Unit with 18 staff is in a very dilapidated condition and idling
7. Working capital support needed

Suggested Course of Action

1. A decision has to be taken at the highest level in Government on the operations of Kundara and Olavakode units of KEL
2. Government intervention is required to encourage KSEB to place orders to KEL matching L1. Waiver of certain prohibitive tender conditions on existing financial situations of the company is needed
3. Government intervention is required to encourage Irrigation Department to place orders on structural work to KEL considering their expertise in the area
4. Extend financial support for bridging working capital gap against firm ord

Traco Cable Company Ltd

1. Year Incorporated : 1960
2. Production Units : Thiruvalla, Irimpanam and Pinarayi
3. Products : AB Cables, ACSR Conductors, XLPE Cables,
House Wiring Cables
4. Uses : Power Transmissions Overhead and Underground
5. Installed capacity
XLPE UG 11KV : 120 km /year
ABC HT : 240 km /year
LT : 720 km /year
House wiring cables: 39420 km of 1, 1.5, 2.5, 4 sq mm
6. Capacity utilization
XLPE UG 11KV : 0

ABC HT : 37.27%
LT : 17%

House wiring cables: 12.82%
7. Manpower : 501 nos

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	53.70	47.48	111.24	121.85	120.72	63.58
Profit/Loss (PBT)	-2.79	-7.74	-4.06	-9.61	-2.19	-2.30

Working Results for last 5 years (^Crore)

Current Situation

1. TRACO is getting only 50% of order of KSEB requirement through tender process after competing with private parties in SSI sector.
2. House Wiring Cables are not positioned properly in a highly competitive market in the absence of a proper promotional activities
3. Need Working capital Support
4. Long term and short term financial liabilities, which stand at INR 30.63 (Government and MCL) crores and INR 37.76 crores (Banks & Fis) respectively (including interest)

Suggested Course of Action

1. Government shall direct KSEB to place orders to TRACO for a reasonable portion of their requirement of products falling under the TRACO's product range
2. Explore the possibilities for Setting up facilities for manufacturing Solar plants with much lower investment, in the context of increasing demand on alternate source of energy.
3. TRACO brand of cables may be insisted for procurement in Government projects
4. Working Capital Support required after discussion with Banks
5. Traco Cable company may be designated as the nodal agency for stringing of Aerial Bunched Cable (LT & HT) and laying of Under Ground cable on turn-key basis

Transformers & Electricals Kerala Ltd JV with NTPC

1. Year Incorporated : 1963
2. Product, Installed capacity and capacity utilization
3. Use : Power Generation & distribution
4. Manpower : 647 Nos
5. Statutory Audit Completed : 2014-15

Product	Installed Capacity	Capacity Utilization
Power Transformers	4500 MVA	80%
Current / Potential Transformers	1000 Nos	Less than 10%

	Shares	
	Rs. Lakhs	%
State Government	2,344	54.55
Public including employees	36	0.84
NTPC	1,917	44.61
Total	4,297	100.00

Working Results for Last 5 years (₹Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	196.86	148.45	166.07	130.02	150.62	39.17
Profit/Loss (PBT)	19.27	2.33	0.14	-33.16	-9.90	-16.41

Current Status

1. Outdated technology
2. No purchase preference from NTPC
3. Poor order book for this year– only about 73 Cr confirmed order. Another 130 Cr orders in various stages of negotiation, bulk of which may go into next year.
4. Getting orders through open tenders is becoming more and more difficult due to stiff competition - many new entrants in the market
5. Weakening pricing leverage; consequently getting orders with very thin margin.
6. TELK do not have Vapour Phase Drying (VPD) and 3-phase high frequency generator which are becoming mandatory as per customer requirement as well as standards.
7. No access to higher technology. Technology tie up was tried with M/s Toshiba, ZTR, Xian, Elektrozavod etc , but did not succeed

Suggested Course of Action

1. Intervention at highest level in central and state ministries are required for streamlining the relations between NTPC and TELK as envisaged in the JV agreement.
2. Government intervention is required to encourage KSEB to place orders to TELK for
 1. replacement, repair and refurbishment orders through nomination route.
 2. purchase of Power transformer on nomination basis matching with L1.
 3. giving life extension orders of all aged Transformers of KSEB.

Kerala State Electronics Development Corporation (KSEDC) Year Incorporated: 1972

Manufacturing divisions :

<i>Keltron Equipment Complex,</i> Thiruvananthapuram	UPS Systems, Battery chargers, solar power projects, Security & Surveillance Systems, strategic electronic products for Defence, especially Indian Navy, ID card Projects,
<i>Keltron Communication Complex,</i> Thiruvananthapuram	Traffic Enforcement Systems and Intelligent Traffic system
<i>Keltron Controls,</i> Ernakulam	Defence Electronics products , Control & Instrumentation projects NTPC, BHEL etc
<i>Keltron Lighting Division,</i> Kozhikode	LED Lights
<i>Keltron Tool Room cum Training,</i> Kuttipuram, Malappuram	Tool room job work & training activities

Subsidiary companies :

1. Keltron Component Complex Ltd (KCCL), Kannur
2. Keltron Electro Ceramics Ltd (KECL), Kuttippuram, Malappuram

Marketing Offices

1. Mumbai, Delhi, Kolkata, Chennai, Bangalore, Ahmedabad, Hyderabad and Thiruvananthapuram.

1. Employees : 1347

Working Results for last 5 years (`Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Turnover	296.32	306.43	311.81	295.23	409.79	184.05
Profit/Loss (PBT)	14.37	5.37	1.35	(5.33)	1.03	-12.74

Current Status

1. Market segment spread across Strategic electronic products for Defence and Space Applications; IT Products and Custom solutions; Power Electronics systems; Security & Surveillance Systems; Process automation systems; Intelligent Transportation Systems and IT facility management services
2. Regular supplier of custom products to the Department of Defense and Space
3. MNRE approved Programme Administrator in the Govt. Sector for implementing Solar Power projects and successfully commissioned first grid tie type Solar Power System for KSEB
4. Shortage of manpower at managerial / technical levels
5. Delay in payment on Governmental projects (*Around Rs.145 crores*) Statutory Audit completed : 2013-14

Suggested Course of Action

1. Identify innovative products and new technology areas for expansion in future
2. Conduct a brainstorming workshop involving industry experts, R&D institutions and academia in Electronics & IT to develop ideas and strategies for improving technical competence
3. Initiate recruitment process after assessing exact requirement of manpower.

CHAPTER 3
A SUMMARY OF MAJOR ISSUES

Finance-Related Issues

20. *Working capital shortage.* Several State PSUs suffer from shortage of working capital. They include TTP, TCL, KAL, AUTOKAST, KSTC, TEXFED & Co-op Mills, KSBC, HANTEX, and TKCL. In some cases, shortage of working capital arises partly due to the delay in payments (to these units) that are due from the government. There have been instances in which the shortage of working capital has resulted in stoppage of work in these units.
21. Here is a summary of the major finance-related issues faced/demands made by various State PSEs in Kerala (as on November 2016).
22. Units that:
 - Require project financing.* TCL, KSDP, AUTOKAST, TTP, TKCL, KSIE
 - Need to clear dues to KSEB.* TCC, AUTOKAST, TKCL
 - Need support for payment of salaries to its employees.* SCL-SAIL, KAL
 - Have asked for conversion of their government loans into equity held by the government.* TTP, TCL, KSDP, AUTOKAST, SILK, KSEDC,
 - Need waiver of accumulated interest on Government loans.* TCL
 - Waiting to receive dues from Government departments/ agencies.* TCC, FIT, TRACO, KEL, KEMDEL

Issues Related to Products, Processes and Technologies

23. Many of the State PSUs in Kerala are operating at levels in which they are not able to exploit economies of scale. These include TCC, MIL, AUTOKAST, UIL, KAL, KELPAM and TRACO.
24. There are several reasons for the low scales of operation of these units. TCC, for instance, has only a limited market for its products (mainly caustic soda) within Kerala (Within Kerala, KMML is the major customer for TCC's products). At the same time, selling products outside the State is not easy for TCC because of the difficulties in transporting heavy chemicals and the competition it faces from other competitors.
25. In fact, industry experts say that the cost of transport of chemicals from Kerala is particularly high. Cost of transport of chemicals between Kochi and Mumbai is much higher than the cost of transport between, say, Singapore and Mumbai. As a result, freight charges as a proportion of total costs increases considerably for industries in Kerala.
26. It is notable that many of the chemical producing units Kerala do not have strong linkages with the State's economy.

27. Labour costs as a share of turnover is very high in the case of a number of State PSUs in Kerala. This is also a consequence of low scale of operation in these PSUs.
28. Some of the units need to urgently upgrade their technologies. They include TTP, Spinning Mills, UIL, MCL, KSTC, TEXTFED.
29. Units that face environment related issues: KCCL, SIFL, MCL, KMML, TCL

CHAPTER 4
WAY FORWARD

Building Synergies: Recommendations Related to Organization of PSUs

30. It is important that Central and State PSUs in Kerala build synergies with each other and with private sector units in the State. These firms should find ways in which they can make use of each other's products. Currently, there are linkages between KMML, TCC and TPP. Similarly there are possibilities for mutual co-operation between other firms. KSEB should try to procure transformers produced by KEL and TELK, and cables produced by TRACO Cables. The government should try to procure medicines produced at KSDP for distribution through the public health system.
31. State and Central PSEs in Kerala should nurture the growth of small and medium firms. There are possibilities for setting up a hub of small and medium firms in the Alwaye-Kochi region. These firms should work closely with, and produce ancillaries and components for, chemical and engineering PSEs in that region.
32. Some of the PSEs are involved in similar lines of production. Both KEL and TELK are producing transformers. KMML and TTP produce titanium dioxide. These firms should try to achieve greater integration between each other's activities. This can be in the form of exchange of technologies and skilled workers (including engineers), and through common marketing strategies.
33. Units that are engaged in similar areas of production -- MIL, KAL, UIL, KADCO – should consider the possibility of merging their operations.
34. A major constraint to sharing workers between units is that the salary and incentive structures are not uniform across the various PSUs. Some of the experts associated with the field feel that the government should consider the creation of a body of professional managers and skilled workers who can move easily between the various State PSUs (at least between PSUs engaged in similar lines of production).
35. It was felt that some form of categorization of PSUs based on their performance would be desirable.
36. PSUs (both Central and State) in the State may explore all options for building forward and backward linkages.
37. Joint ventures have been formed between some Central and State PSUs: Thus joint ventures have been formed between: TELK and NTPC; Hi-Tech and BrahMos; SCL and SAIL; and KEL Kasaragod and BHEL. There is a need to strengthen these joint ventures.

38. Some of the PSUs (for instance, *KCCL and FIT*) have large areas of land with them, some of which they are not using at present for their operations. There should be a policy to make effective use of surplus land available with the PSUs.

Recommendations Related to Products, Processes and Technologies

39. A long-term revival of manufacturing PSUs in Kerala will require many of these units to rethink their product lines and technologies.
40. Some of the units engaged in the manufacture of inorganic chemicals in Kerala should try to diversify their production into specialty chemicals and biochemicals. Chemical-based PSUs in Kerala should try to benefit from the latest advances in biotechnology, biomedical sciences and biochemical engineering. With biotechnology and biochemical engineering, it is possible to create high value added products from Kerala's agricultural and natural resources.² PSUs should also act as facilitators for private sector units who like to enter into research or manufacturing in the areas of biotechnology, biomedical sciences and biochemical engineering.
41. Keltron will have to find some niche areas for itself in industrial, power and defence electronics.
42. PSUs in Kerala should try to gain from the likely expansion of energy generation from non-renewable sources (such as solar power) in the coming years. They should try to enter into research and production of components for solar power plants. Keltron can be a major beneficiary in this sector.
43. TTP should try to diversify into the production of value-added products, such as fibre grade, food grade, and nano anatase Titanium dioxide. Titanium metal has the advantages of high rates of heat dissipation and high thermal conductivity. It has useful applications in nuclear reactors. TTP should try to benefit from these applications.
44. There is good demand for steel castings produced by Autokast Limited.

Recommendations Related to Nature of Government Support

45. PSUs should be given greater autonomy in decision-making, especially on issues involving production and technology. TCC, for instance, has been demanding that it should be given greater independence in power purchase decisions.
46. The interest rates charged by governmental agencies on loans they give to State PSUs have been high (sometimes rising as high as 16 per cent). Many State PSUs are of the view that governmental assistance to them should be in the form of equity, and not as loans

² Biochemical engineering deals with chemical processes that involve biological organisms or molecules.

47. State PSUs feel that the government should provide assistance to firms that run into losses. As of now, when a firm finds it difficult to pay its dues to KSEB, KSEB stops supplying electricity to the firm. This makes the firm's situation even worse.
48. Our public health system should purchase the medicines produced by KSDP. This will be a big boost to the revival plans of KSDP.
49. State PSUs should try to enter into collaborations with each other, with Central PSUs and other organizations to improve their technological and manufacturing capabilities.
50. Directors and Board members of PSUs could be persons who are involved in the operations of these units. There can be functional Directors at the operational level as well as in the areas of finance. An analysis of the composition of the Board of Directors across PSUs will be useful.
51. Some level of monitoring has been done for only 38 State PSUs engaged in manufacturing, and coming under the Industries Department. There is no regular or effective monitoring system for the rest of the State PSUs. Existing institutions such as CMD and RIAB can play an important role in devising a review system for these PSUs.
52. State PSUs should play a role in promoting entrepreneurship in Kerala. KSIDC has already launched the YES (Young Entrepreneurship Summit) programme. Under this programme, 37 incubators and 40 seed funds have been created, with special focus on the non-IT sectors. Funding was provided to selected number of students from engineering colleges across the State.
53. State and Central PSEs in Kerala should nurture the growth of small and medium firms. There are possibilities for setting up a hub of small and medium firms in the Alwaye-Kochi region. These firms should work closely with, and produce ancillaries and components for, chemical and engineering PSEs in that region.

Future Plans of Central PSUs in Kerala

54. In addition to State PSUs, Kerala also has a number of Central PSUs. They include Fertilizers & Chemicals Travancore Limited (FACT) in Kochi, Kochi Refineries Limited (of Bharat Petroleum Corporation Limited (BPCL)), Hindustan Newsprint Limited (HNL) in Kottayam, Hindustan Latex Limited In Trivandrum, Cochin Shipyard Limited (CSL) in Kochi, Hindustan Organic Chemicals (HOC) Limited in Kochi, and Instrumentation Limited (IL) in Palakkad.
55. In recent years, Government of India (GOI) has indicated its plans to disinvest from some of its PSUs in Kerala, including HNL, HOC, and IL. Further, GOI indicated that it would disassociate itself from the 3 Joint Ventures it had formed with the State PSUs (BHEL-KEL, NTPC-TELK and SAIL Steel Complex)

56. Nevertheless, two of the Central PSUs in Kerala (BPCL-KR and CSL) have major expansion plans, which offer significant opportunities for Kerala's economy.

Petrochemical Projects in the Public Sector

57. Bharat Petroleum Corporation Limited (BPCL)'s Kochi Refinery is undertaking expansion projects worth Rs.24,000 crores: expansion of the Refinery at Rs.16,500 crores, petrochemical complex of Rs.4,800 crores, and Upgrading Fuels to Bharat Stage IV at Rs.3,500 crores.
58. Two by-products of the Refinery expansion are polypropylene and ethylene. Both have potential to be used as the base for a petrochemical complex. The Kochi Refinery expansion project will generate 5 lakh tonnes per annum of propylene.
59. It has been suggested that the Petrochemical complex is located in the vicinity of Kochi Refinery so that the polypropylene can be conveyed through pipelines.
60. KINFRA intends to develop a Petrochemical Park of international standards at Ambalamughal, in Ernakulam District Kerala. The Petrochemical Park is proposed in 450 acres of land owned by FACT in Ambalamughal, Kochi. This region already has a large refinery, fertiliser and chemical factories, an LNG Terminal, and a Bulk Terminal and International Container Transshipment Terminal (ICTT) (in Vallarpadam). The Gas Authority of India is laying a pipeline network to transport the gas from the LNG terminal to other parts of the State and beyond.
61. This Propylene Derivatives Petrochemical Complex will offer investment opportunities of around Rs.5,000 crores. Such a project will help the country end its import dependence for specialty propylene derivatives-based products, such as acrylic acids and acrylates used in plastics, paints, coatings, adhesives, inks and textiles.
62. BPCL and TCC are planning a joint venture where the ethylene currently being flared away by the Refinery, will be captured and combined with chlorine to make ethylene chloride and PVC. This, in turn, will pave way for the setting up of a PVC based complex. At the same time, FACT is drawing up plans to use the proceeds from the sale of its land to invest in an LNG-based Urea production facility/ NPK Plant / Ammonia-Urea Unit.

Expansion Plans of Cochin Shipyard

63. Cochin Shipyard Ltd (CSL) is raising funds through an IPO for two major projects with a combined investment outlay of Rs. 2770 crores (Rs.1800+Rs.970=Rs.2770 crores). These projects have the potential to offer generate approximately 3000 (1500+1500) jobs.
1. CSL plans to set up a Dry Dock facility to augment its shipbuilding/ ship repair capacity to tap the market potential of building specialized and technologically advanced large vessels such as Liquefied Natural Gas ("LNG") vessels, indigenous aircraft carriers of

higher capacity, jack up rigs, drill ships, large dredgers, and for the repair of offshore platforms and larger vessels. The expected cost of the project is around Rs.1800 crores.

2. CSL also plans to set up an International Ship Repair Facility (ISRF), comprising a shiplift for vessels, a transfer system, six work stations, approximately eight afloat berths (depending on the availability and size of vessels for repair), jetties, administrative buildings and allied facilities. The existing workshops on Willingdon Island, Cochin Port will be upgradaded. The shiplift is designed for vessels up to a length of 130 metre with a lifting capacity of 6,000 tonnes. The cost of development of the ISRF, including the main technological equipment required for shipyard repair process, is estimated to be Rs.970 crores.

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ANNEXURE 1

Key Aspects of State-level public Sector Units in Kerala, 2014-15

Nature of firm	Number of Units	Employment, numbers	Capital invested, in Rupees crores	Average capital invested per firm, in Rupees crores	Net Profits, in Rupees crores
Development & Infrastructural agencies	20	8696	13194	660	327.8
Ceramics and refractories	2	400	62	31	-6.48
Chemical industries	10	5014	364	36	-31.24
Electrical industries	4	1822	279	70	-49.64
Electronics industries	3	2300	473	158	-5.36
Engineering industries	9	2027	335	37	-1.03
Agro-based industries	12	9208	151	13	18.19
Textiles	2	1397	361	180	-28.76
Traditional industries	7	13618	969	138	-41.09
Trading units	3	9233	174	58	128.39
Welfare agencies	11	1044	870	79	33.9
Public utilities	6	87914	23228	3871	-2373.36
Others	7	221	97	14	-1.38
All units	96	142894	40557	422	-2030.05

Source CMD

ANNEXURE 2

Major State-level Public Sector Enterprises in Kerala engaged in Manufacturing

Name of Enterprise	District of location	Employment in numbers	Capital invested, in Rupees crores	Main products
Kerala State Electronics Development Corporation Limited	Thiruvananthapuram	1811	43.0	Various IT/ Electronic Products/systems as well as training and education.
The Kerala Minerals & Metals Limited	Kollam	1419	70.2	Titanium dioxide (rutile grade) pigment
Oil Palm India Limited	Kottayam	868	11.8	Crude palm oil, palm kernel and kernel oil (extraction)
Malabar Cements Limited	Palakkad	856	37.6	Cement
Travancore Titanium Products Limited	Thiruvananthapuram	731	74.0	Titanium dioxide (anatase grade) pigment
The Pharmaceutical Corporation Kerala Limited	Thrissur	698	34.7	Ayurvedic medicines
The Travancore-Cochin Chemicals Limited	Kochi	605	58.1	Caustic soda, chlorine and allied chemicals
Kerala Electrical & Allied Engineering Company Limited	Ernakulam Kollam, Palakkad	576	143.0	Transformers, Train Lighting Alternator, LT Switchgear Division
Transformers and Electricals Kerala Limited	Angamaly	575	43.0	Transformers

Traco Cable Company Limited	Ernakulam Pathanamthitta	566	74.0	Electric cables and wires
Kerala Agro Machinery Corporation Limited	Ernakulam	544	2.0	Power tillers, diesel engines and power reapers.
Keltron Component Complex Limited	Kannur	421	45.2	Aluminum electrolytic capacitors, MPP capacitors, resistors and crystals
The Travancore Cements Limited	Kottayam	380	24.6	Cement
Autokast Limited	Alappuzha	370	98.9	Grey iron and S.G iron castings
Kerala Clays & Ceramic Products Limited	Kannur	281	3.6	China clay and aluminous laterite (mining), refractory bricks
Steel and Industrial Forgings Limited	Thrissur	271	37.1	Forgings
Kerala Automobiles Limited	Thiruvananthapuram	237	43.5	Three-wheeler automobiles
Kerala State Drugs & Pharmaceuticals Limited	Alappuzha	197	48.6	Pharmaceuticals (tablets, capsules, liquid orals, external preparations, powders, ORS, injectables)
SAIL-SCL Limited	Kozhikode	127	80.7	Steel billets & TMT rods
The Kerala Ceramics Limited	Kollam	119	58.5	China clay (mining and processing)
United Electrical Industries Limited	Kollam	105	19.3	Energy Meters

Keltron Electro Ceramics Limited	Malappuram	68	8.0	Ceramics capacitors, NTC thermistors, piezo ceramic buzzers and transducers
The Metal Industries Limited	Palakkad	57	13.4	Agricultural implements
The Travancore Sugars & Chemicals Limited	Pathanamthitta	54	1.7	Alcoholic beverages (blending and Bottling)

**PROCEEDINGS OF THE MEMBER SECRETARY
STATE PLANNING BOARD**

(Present: Sri. V. S. Senthil IAS)

Sub: Formulation of XIII Five Year Plan (2017-2022) – Constitution of Working Group –
PublicSector Enterprises-reg.

Ref: Note No. 260/2016/PCD/SPB dated 06.09.2016 of the Chief (i/c),PCD, SPB

ORDER NO.SPB/295/2016/I&I (WG-3) Dated: 20.09.2016

As part of formulation of XIII Five Year Plan, the State Planning Board has decided to constitute Working Groups to formulate draft proposals in the various major development sectors and sub sectors. Resource persons including Professionals, Administrators and Experts connected with the sectors were identified as members of the Working Groups. Accordingly, the **Working Group on Public Sector Enterprises** is hereby constituted with the following members.

Co-Chairperson

Sri. Paul Antony IAS, Additional Chief Secretary to Government, Industries Department,
Government Secretariat, TVPM

Co-Chairperson

Dr. M. P. Sukumaran Nair, Chairman, Public Sector Restructuring and Internal Audit Board
(RIAB), Government of Kerala

Members

1. Dr. M. Beena IAS, Managing Director, Kerala State Industrial Development Corporation (KSIDC), Keston Road, Kowdiar. P.O, TVPM
2. Dr. G. Suresh, Director, Centre for Management Development (CMD), Thycadu. P.O, TVPM
3. Prof.T. R. Sreekrishnan, Department of Biochemical Engineering and Biotechnology, Indian Institute of Technology, Delhi
4. Dr. Ramachandran K.B., Professor, Department of Biotechnology, Indian Institute of Technology, Chennai
5. Dr. P. L. Beena, Associate Professor, Centre for Development Studies, Thiruvananthapuram
6. K. O. Habeeb, Shahina, Kodunganoor, Vattiyoorkavu, Thiruvananthapuram
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Convener

Er. Joy N.R., Chief, Industries & Infrastructure Division, State Planning Board, TVPM

Co- Convener

Deputy Director, (Medium and Large Industries Sector), Industry and Infrastructure
Division, State Planning Board

Terms of Reference

1. To review the development of public sector enterprises with emphasis as to progress, achievements, present status and problems under its jurisdiction during the 11th and 12th Five Year Plan periods.

2. To evaluate achievements with regard to the plan projects launched in the public sector, both by the State Government and by the Central Government in the State during these plan periods.
3. To list the different sources of data in regard to public sector enterprises and provide a critical evaluation of these data sources, including measures for improvement.
4. To identify and formulate a set of output and outcome indicators (preferably measurable) for public sector enterprises and base the analysis of the previous plans on these indicators.
5. To outline special problems pertaining to public sector enterprises.
6. To suggest, in particular, a set of projects which can be undertaken during the 13th Plan period in the public sector.

Terms of Reference (General)

1. The Chairperson is authorised to modify Terms of Reference with the approval of State Planning Board. The Chairperson is authorised to invite, on behalf of the Working Group, experts to advise the Group on its subject matter. These invitees are eligible for TA and DA as appropriate.
2. The Working Group will submit its draft report by 1st December 2016 to the State Planning Board
3. The non- official members of the Working Group will be entitled to travelling allowances as per existing government norms. The Class I Officers of GOI will be entitled to travelling allowances as per rules if reimbursement is not allowed from Departments.

Sd/-

MEMBER SECRETARY

To

The Members concerned

Copy to:-

The Accountant General, Kerala (A&E) with C/L

The Sub Treasury Officer, Vellayambalam.

The PS to the Hon. Vice Chairman, State Planning Board.

PA to Member Secretary

CA to Member (JJT)

All Divisions, State Planning Board.

The Sr. Administrative Officer, State Planning Board.

Forwarded by Order

(Sd/-)

Chief (Industry & Infrastructure Division)